

THE RELEVANCE OF INTERNATIONAL LAW TO  
THE TACTICAL USE OF HELICOPTERS IN WARFARE

A Thesis

Presented To

The Judge Advocate General's School

The opinions and conclusions expressed herein are those of the individual student author and do not necessarily represent the views of either The Judge Advocate General's School or any other governmental agency. References to this study should include the foregoing statement.

by

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#### SCOPE

A study of helicopter warfare and the relevance of international law as it pertains to the tactical use of armed helicopters.

## FOREWORD

During the last decade, the helicopter came of age on the battlefields of Vietnam. Its successes in military operations have firmly established the importance of its role in modern warfare. Future wars, whether conventional or otherwise, will undoubtedly utilize the helicopter as a vehicle of war.

Although technology has rapidly advanced helicopter capabilities, both as troop carriers and as devastating weapons of war, too little concern has been paid to the law governing tactical operations. Incidents such as the alleged "My Lai massacre," however, furnish loud reminders of the law which silently lords over the combatant.

As an ex-armed helicopter pilot and a lawyer, I am fearful that the law governing helicopter operations is not always well understood by the men involved in the planning and execution of airmobile operations. This is due in part to the fact that the present regulations governing hostilities are stated in broad, general prohibitions, without clearly stating the underlying principles which give depth and usefulness to these rules. This thesis is offered as caveat to the bravest men I

know and as guidance to those men who may have occasion  
to sit in judgment of their actions.

James F. Price  
April 1970

## PREFACE

"Since the right of the Parties to the conflict to adopt means of injuring the enemy is not unlimited, they shall confine their operations to the destruction of his military resources, and leave the civilian population outside the sphere of armed attacks." International Committee of the Red Cross, Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Times of War, 1956, Article 1. (Emphasis Supplied.)

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## I. INTRODUCTION

### A. THE PROBLEM

The primary objective of the law of war is to confine destruction to military objectives and resources, so that the civilian populace is left as much outside the combat arena as possible.<sup>1</sup> The problem is how to meaningfully apply the law so as to fulfill this objective within the context of helicopter warfare. Past experience dictates that this objective is difficult to meet. For example, it is estimated that the Vietnamese civilian population has suffered one million casualties since 1965, 300,000 of which are dead.<sup>2</sup> What part of these casualties is due to armed helicopter operations is impossible to determine.

Some of the underlying causes of civilian casualties due to armed helicopter operations, however, are detectable.

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1. International Committee of the Red Cross, Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Time of War, at Article 1 (1958) (Hereinafter referred to as ICRC Draft Rules); cf. U.S. Dep't of Army Field Manual No. 27-10, The Law of Land Warfare, at para. 2 (1956) (Hereinafter referred to as FM 27-10).
  2. The Washington Post, December 3, 1969, Section A at A20, cols. 1-2.



First and foremost is the fact that neither Hague law nor the Geneva Conventions have expressly prohibited attacks on non-combatants. The vagueness of the law in this matter insufficiently protects the human person, who is in fact left to the mercy of his attacker's conscience which varies with the individual, depending upon his education, experience, training and surroundings. For example, one psychiatrist, while commenting on the "Mylai massacre," has explained that, "some men can withstand stress and restrain their killings to acceptable targets. Others cannot....under battle stress, you will often find a minority filled with generalized, overwhelming hate and rage...."<sup>3</sup> It is submitted that international law must be implemented to provide definitive standards and guidelines to fighting men.

Second is the fact that armed helicopters are capable of mass destruction and killing. Their firepower, high speeds and maneuverability make them the most imposing weapons in the Army arsenal. This weapon of war is entrusted to a few select men to use appropriately

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3. The Washington Post, December 7, 1969, Section A at A14, col. 1, quoting Dr. Harvey Resnik, State University of New York at Buffalo.

within the law. When the law is vague, these men are left to make rational, objective and instantaneous decisions without overstepping the norms of humanity. Some men are capable of doing so, and some men are not.

Third is the fact that guerilla warfare is fought on a battlefield without frontlines, where it is impossible to tell friend from foe. Although this is a common problem in modern warfare,<sup>4</sup> the Vietnam war is perhaps the first war where the American fighting man has had to squarely face this problem. This problem has bred infinite fear and frustration, which results in combatants being unable to distinguish the killing of innocent civilians from the killing of the enemy.

Fourth is the fact that since 1961, enemy gunners have shot down over 1,335 helicopters,<sup>5</sup> and total helicopter losses number nearly 3,500.<sup>6</sup> In 1969, one helicopter was downed on the average of once in every 3,600 hours flown.<sup>7</sup> These facts have produced an atmosphere

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4. Id., (citing the use of women and children by Israelites against the British, the Algerians against the French, and the Yemeni against the Saudi Arabians).

5. The Daily Progress, October 24, 1969, Section A at A1, col. 1.

6. Id., March 21, 1970, Section A at A10, cols. 3-4.

7. The Army Times, September 17, 1969, at 10, cols. 1-5.

where pilots are prone to overreact to battlefield confrontations.

These factors have resulted in a situation in which violations of the laws of war are difficult to separate from lawful acts, thereby rendering the laws of war relatively unenforceable. For example, a finder of fact may know that a number of civilians have been killed by armed helicopters; but he may be unable to adequately determine whether, under the law of war, they were killed as a result of lawful or unlawful action, or by accident.<sup>8</sup>

The difficulty of properly classifying these incidents can be illustrated by two incidents which occurred in the fall of 1969, resulting in the deaths of twenty-one civilians and the wounding of twenty-two others, because, according to the gunship pilots, they were "dressed in black and green clothes similar to those worn by the Vietcong," and were "attempting to evade."<sup>9</sup> Such incidents are commonplace in Vietnam and generally are

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8. The Daily Progress, March 15, 1970, Section A at A1, cols. 4-6, (citing two incidents of American gunships accidentally killing and wounding U.S. troops and Vietnamese civilians because of an "apparent failure in the firing system").

9. The Washington Post, September 26, 1969, Section A at A1, cols. 3-5.

punished, if at all, by non-judicial punishment.<sup>10</sup> Other reported acts are so abhorrent and despicable that they are unlikely to be dealt with by any action short of a general court-martial, as, for example, the throwing of prisoners of war from airborne helicopters in order to intimidate other witnessing prisoners into providing intelligence information or suffer a similar fate. Such a violation of international law was recently alleged against an unidentified helicopter crew.<sup>11</sup>

Finally, it bears mentioning that helicopter operations are complex, complicated maneuvers which provide ample opportunity for human error. For this reason, responsible commanders, judge advocates and investigating officers must be thoroughly familiar with the facets of armed helicopter operations which have a bearing on the problem of separating a violation of the law of war from a lawful act or tort. Some of these factors will be briefly examined in the remainder of Part I.

#### B. THE EVOLUTION OF THE ARMED HELICOPTER

The armed helicopter is perhaps the most versatile and devastating weapon in the Army arsenal. Its enviable

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10. This information is based on interviews with United States judge advocates who have been in Vietnam.

11. The Daily Progress, November 30, 1969, Section A at A1, cols. 7-8.

record of performance in Vietnam has conclusively established its military value in guerilla warfare - a factor which no doubt will lead to its use in the defense of new emerging nations, which are most susceptible to terrorist activities and counter-insurgency operations.

Most astounding, though, is the fact that the helicopter has reached its present peak of military importance in a short span of ten years. Although airmobility existed as a concept in the 1950's, it failed to stir the active interest of military planners until the latter part of that decade; and the result of their planning was not fully realized until the early 60's.

Due credit for the armed helicopter must be given to the French, who pioneered its use in North Africa in the mid-50's. Their success evidently roused the imagination of many high-ranking military personnel, who had the foresight to form an experimental company in 1956.<sup>12</sup>

The initial armament systems were then improvised from weapons in the existing military inventory, which could be affixed to the helicopters. They were, at best, awkward and primitive by today's standards. As an example, the OH-13 helicopters, of Korean War fame, affixed

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12. B. Lockwood, Evolution of the Armed Helicopter, U.S. Army Aviation Digest, 33 (Nov. 1968).

two .30 caliber machine guns to their skids. The machine guns had to be cocked before they could fire, and re-cocked when they misfired. This was accomplished by using small oxygen bottles, which emitted compressed air charges through a hose, forcing the machine gun to cock itself. Besides fighting the system to get it to work, the pilot used a grease pencil mark on the plexiglas bubble as a front sight. His eyes and head acted as the rear sight. When everything was working perfectly, firing accuracy was mediocre at best.

Other nations became interested in armed helicopters in the 50's, notably U.S.S.R. and West Germany. It was the advent of the United States' participation in Vietnam, however, that vaulted the United States to the top as a helicopter power. By 1961, cargo helicopters were utilized in Vietnam. They were outfitted with machine guns and rockets, which afforded a slight degree of self-protection. After suffering extensive helicopter losses, the concept of gun escort helicopters for troop assaults was developed to curb the danger to cargo ships. By October, 1962, the now famous Utility Tactical Transport companies (UTT) were deployed to Vietnam to assume this role.<sup>13</sup>

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13. Id. at 34.

In order to supply pilots for the armed helicopters, the Army devised the so-called "Tiger" program at its primary helicopter school at Fort Wolters, Texas. Throughout 1962 and 1963, beginning flight classes were divided into either the tactical or cargo programs. The tactical program amounted to a limited, accelerated course of training in low-level flying and machine gun firing.

In 1963, the Army began its first major move to airmobility by activating the 11th Air Assault Division. For nearly two years, the division was trained and tested in airmobile concepts. In 1965, it was renamed the First Cavalry Division, Airmobile, and deployed to South Vietnam, where it has compiled one of the finest combat records in military history.

In the years since 1965, the 101st Airborne Division has been converted to an airmobile division, and numerous helicopter companies have been formed and become part of the First Aviation Brigade. These units have brought the total number of combat helicopters in Vietnam to around 3,500.<sup>14</sup>

The addition of these helicopters has significantly changed the complexion of the Vietnam war. Effective vertical envelopment, resupply, med-evac, command and

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14. The Daily Progress, supra note 3.

control, intelligence gathering, and close fire-support have all been phenomenally improved. This has been made possible through the rapid response of technology and industry to provide a satisfactory machine, and the outstanding performance and courage of the men who fly the machines into combat.

### C. THE PILOT

"The Army aviator flying the Vietnam skies today is the youngest in the history of the war, but perhaps more impressive is the fact that in spite of his youth, he is careful and he is good."<sup>15</sup> Many of the pilots are in their late teens and early twenties who are sent directly from flight school to Vietnam. The great majority of them spend two of their first three years out of flight school in combat.

Gunship pilots are trained either at specially established gunnery schools or by their unit instructor pilots, although some familiarization training is conducted during flight school. Besides flying the machine, the gunship pilot must be the master of several other talents.

The most important of these talents is marksmanship. The pilot must be a master at firing machine guns,

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15. The Army Times, November 12, 1969, at 17, cols. 4-5.



grenades and rockets. He must understand the characteristics of the various rounds and the effect of range determination, altitude, airspeed, relative wind, cross-wind dispersion, and turning errors on his firing accuracy. He must constantly be aware that even minute errors in these adjustments will result in target misses and the possibility of killing friendly or civilian personnel.

A second important skill which must be mastered is the ability to expertly read a map, and positively identify and separate friendly and civilian forces from the enemy. Finding and orienting himself on the map and ground at speeds in excess of 100 knots is only part of his job. A pilot must additionally know the position of friendly personnel on the ground, their mission, and the position of adjacent friendly personnel. This information will usually be available to him in the mission briefing; but when it is not, he must make these determinations with the aid of the supported unit, or risk striking the wrong targets.

A third important skill to master is the ability to continuously monitor and effectively communicate on several radio channels simultaneously. Besides the air-to-ground channel with the supported ground unit, the gunship pilot may also monitor an air-to-

ground channel with his company operations, and an air-to-air channel with the members of his fire team. Additionally, he will monitor and give instructions to his crew over the inter-com. In the heat of battle, it is extremely easy to be confused by the unending chorus of call-signs and instructions pouring through his headset. Confusion, however, is not a luxury afforded him.

A fourth skill which must be developed by the pilot is the ability to quickly adapt and orient himself to a constantly changing tactical situation. Often, for example, he will be only one of the supporting elements. He will be forced to fit himself in-between supporting artillery, mortars, and jet strikes, not to mention enemy fires such as rockets and mortars. Additionally, the pilot must constantly adjust to changing weather, such as rain and fog, and the limitations placed on his effectiveness by the terrain and night. Even at night, though, when the difficulty of his job is compounded immeasurably, a pilot must remain cool-headed and objective. Obviously, self-control is no easy task when things begin to go wrong. Without self-control and discipline, however, he is completely ineffective.

#### D. THE "GUNSHIP"

The most highly armed gunship in the Army is the AH-1G (Huey-Cobra). Unlike its predecessors, the UH-1 A, B, and C model "Huey's", the Cobra was purposely designed as a gunship. Its configuration is a sleek 36-inch wide fuselage, and it features tandem seating with the pilot sitting behind and above the gunner. It can attain speeds of up to 190 knots in a firing pass.

Affixed to the Cobra's chin turret, is the XM-28 armament system, which can mount either two high rate of fire machine guns (mini-guns), or two high velocity grenade launchers, or one of each. Armament racks are affixed on either side of the aircraft. They carry either 7.62 mm automatic gun pods capable of firing 4,000 rounds per minute, or a seven- or nineteen-pod rocket launcher capable of firing 2.75-inch rockets.<sup>16</sup> The characteristics of each weapons system studied separately is awesome.

##### 1. The Grenade Launchers

The grenade launchers fire a 40 mm round at the

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16. Cobra Firepower Bolstered, U. S. Army Aviation Digest, 64 (Aug. 1968).

rate of 425-450 rounds per minute. Each round is made of rectangular wire wrapped around an explosive. On impact, the wire breaks into several hundred fragments.<sup>17</sup> The rounds are extremely effective against massed, entrenched, or bunkered personnel. Their effective casualty radius is five meters. The system is extremely accurate and has been known to have been accurately fired into enemy trenches within 15 feet of besieged friendly troops.

## 2. The Rocket Launchers

These launchers fire 2.75-inch rockets electronically. Rockets can be fired singularly, in pairs, or in salvos. They explode on impact or, in the air, when a proximity fuse is used. The rocket propels three basic types of warheads. The standard round is a ten- or twelve-pound high-explosive warhead. It has an effective casualty radius of ten meters. A second type warhead carries a white phosphorus explosive. The white phosphorus provides both an incendiary effective on buildings and bunkers, and is extremely demoralizing against enemy personnel. The third and newest warhead is the beehive. It contains small flechettes, which

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17. E. Prokosch, "Conventional" Killers, The New Republic, 18 (Nov. 1, 1969).

look similar to inch-long finishing nails, with four fins welded on its blunt end.<sup>18</sup> The flechettes are extremely effective in dense undergrowth and can reportedly rip off tree branches and literally nail a victim to a tree.<sup>19</sup>

Rockets are subject to many ballistic variables and are therefore not as reliable as either grenades or mini-guns. They are seldom fired in extremely close proximity to friendly troops.

A newly developed multi-weapon fire system, designated as the stabilized optical sight (SOS), was recently accepted by the Army to use in conjunction with the firing of the mini-guns and the grenade launchers. It enables "the helicopter gunner to track and accurately zero in his weapons on stationary and moving targets."<sup>20</sup> The fire control system utilizes a ruby laser range-finder, helmet sight, digital computer, and weapons panel.<sup>21</sup> For night firing, another new system contains an image intensification unit which presents an image to

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18. Id.

19. Id.

20. The Army Times, November 12, 1969 at 36, cols. 1-5.

21. Id.

the cockpit which is almost "as bright as day."<sup>22</sup> These systems are a far cry from the grease mark on the cockpit windshield, which, incidentally, still remains for use as an emergency sight.

#### E. THE TACTICAL USE OF GUNSHIPS

##### 1. General

The first documented use of gunships in Vietnam occurred on 22 July 1963 at Pho Binh.<sup>23</sup> In the battle, the newly arrived UTT platoon was utilized to disrupt an enemy ambush of the 33rd Vietnamese Ranger Battalion. Seventy-five enemy losses were attributed to the gunships, which engaged the enemy at close range and in close proximity to the friendly troops. The enemy had previously "hugged" close to the friendly troops during airstrikes and artillery barrages, usually going unscathed; but this tactic failed to hamper the effectiveness of the devastating gunship firing.

Thousands of similar battles have since been fought, but the basic tactics have generally remained unchanged. Generally, two gunships work together as a fire team.

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22. The Army Times, September 17, 1969, at 36, cols. 1-2.

23. K. Mertel, Direct Fire Support, (Helicopter Style), U.S. Army Aviation Digest, 2 (Aug. 1968).

Larger numbered teams are employed when the mission requires them. Single gunships are seldom, if ever, used on pre-planned fire missions.

## 2. The Fire Team

The simple fire team consists of a lead ship and a wingman. All command decisions are made by the lead ship, although the wingman assists in navigation and target identification. The wingman acts as "insurance" for the lead ship as the firing passes begin. He is primarily responsible for firing under the lead ship at the bottom of the firing run, thereby pinning the enemy down and preventing them from shooting at the lead ship as it turns away from the target. The lead ship then makes a rapid turn to do the same for his wingman.

## 3. Aerial Rocket Artillery

The two airmobile divisions, the First Cavalry and the 101st Airborne, each have a battalion of aerial rocket artillery (ARA). The battalion consists of 39 helicopters, twelve of which are Cobra's, and 27 of which are UH-1C's (the Huey predecessor to the Cobra).<sup>24</sup> Basic armament for the Huey's is the

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<sup>24</sup>. W. Mullen, Aerial Rocket Artillery, U.S. Army Aviation Digest, 18 (Dec. 1968).

XM-3 rocket system, which carries forty-eight 2.75-inch rockets per system, which gives each ship the approximate firepower equivalent to a battalion of 105 mm howitzers.<sup>25</sup>

Depending upon the size and nature of the target, from two to twelve ARA gunships are employed in a manner similar to the simple fire team; but they have the versatility with the larger formations to attack abreast, in trail, singularly, or on multiple targets at the same time.

#### 4. Target Identification

The most difficult part of the fire mission is finding and positively identifying the target. Rice paddies have a way of all looking alike, as does dense jungle undergrowth and wooded areas. Many methods have been devised to find and fix the enemy, and they vary from unit to unit. One method which has proven extremely effective, especially when the enemy is in close proximity to the friendly troops, is as follows: As the lead aircraft nears the friendly position, the ground commander throws out a smoke grenade, and the lead pilot verbally identifies the color. Then, the

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25. Id.



ground commander directs the lead aircraft from the smoke to the enemy position by direction and distance. The lead pilot then overflies the target and drops a smoke grenade on what he believes to be the target. If the ground commander verifies the smoke as being on target, the wingman opens fire. Because of the configuration of the Cobra or the danger involved, many units have substituted a single marking rocket on target, in preference to overflying it. Overflying the target, however, provides additional safety to the friendly forces and civilians. The lead ship can also be furnished fire support on the initial pass by the ground troops, and his wingman is in a position to immediately fire on the target. UH-1C "Huey" gunships have the additional protection of door gunners, who sit on either side of the helicopters in open doorways. They are extremely effective at detecting enemy positions and providing suppressive machine gun fire.

#### 5. The Target

The Vietnam countryside is divided into military sectors for control and the designation of military responsibility. These areas are important to the armed helicopter pilot, because he must know what commanders can give him clearance to fire. Commanders are assigned clearance authority over tactical areas of responsibility

(TAOR) or within an area of operations (AO). Clearance may be granted in advance of a planned mission, or by request. When the clearance is granted in advance, the target area is designated as a specified strike zone.

Other areas may be assigned a status by the commander. For example, he may designate an area as a no fire zone, or a pre-cleared firing zone, which until recently had been called a free fire zone. Pre-cleared firing zones are areas exclusively occupied by the enemy, because the civilian populace has been removed, or because they have never occupied the area. Helicopter pilots are generally free to fire in these areas at suspicious activity, without receiving prior permission, as, for example, smoke appearing out of the trees from probable cooking fires, or the actual sighting of campfires or armed personnel.

The most strenuous controls are placed on armed helicopter fire into populated areas. For all practical purposes, helicopters may not fire on populated areas unless they become legitimate military objectives.<sup>26</sup> Even then, extreme caution has to be exercised. The

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26. The subject of military objectives is presented later in this thesis under the heading of THE MILITARY OBJECTIVE TEST.

site of the Mylai incident, for example, was a military objective and was classified as a "permanent free fire zone."<sup>27</sup> Intelligence reports had estimated that the 48th Vietcong Battalion, numbering from 250-280 men, was in the hamlet known as Mylai 4.<sup>28</sup> The attack was ordered at a time when it was thought that the women and children would be gone to a nearby market. Subsequent events have proved that the intelligence information concerning the presence of the enemy and the absence of the women and children was erroneous. The lesson to be learned by the military from this incident is that intelligence information is as infallible as the human beings who deduce it. Moreover, the Mylai incident will long remain a frustration to military decision makers, including armed helicopter pilots, because it represents the potential result of any assault on a populated area.

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27. The Washington Post, December 6, 1969, Section A at A3, col. 2, quoting the then Company Commander, Cpt. Ernest L. Medina, who was in charge of the March 16, 1968, assault on Mylai 4.

28. Id., at col. 3.

II. THE RULES OF INTERNATIONAL LAW  
APPLIED TO ARMED HELICOPTER OPERATIONS

A. GENERAL

International law is "the body of legal rules which apply between sovereign states and such other entities as have been granted international personality."<sup>29</sup> When hostilities break out between sovereign states, the law of war controls the conduct of the warring parties. Codified international law is the formal expression of world customs. When the codification is formalized by a treaty or convention which the United States is a party to, the treaty becomes the supreme law of the land, as long as it is not contrary to the Constitution, and is not later modified by congressional action. As the supreme law of the land, it is operative without a declaration of war.

The law of land warfare, as expressed by Field Manual 27-10,<sup>30</sup> originates from the Hague Convention IV of October 18, 1907.<sup>31</sup> The regulations annexed to this

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29. G. Schwarzenberger, A Manual of International Law, 3 (3rd ed. 1952).

30. FM 27-10, supra note 1.

31. Hague Convention IV, Respecting the Laws and Customs of War on Land and Annex, 18 October 1907, 36 Stat. 2277, 2295, T.S. No. 539 (Annex hereafter cited as HR).

this convention are an expression of the principles of warfare. These underlying principles have been expressed as follows: First, is the principle of military necessity, which is defined as the "right to apply the amount and kind of force which is necessary to compel the submission of the enemy with the least possible expenditure of time, life, and money."<sup>32</sup> A second principle is humanity, "which forbids the employment of all such kinds and degrees of violence as are not necessary for the purpose of war."<sup>33</sup> Third is the principle of chivalry, "which represents a quality of forbearance, a holding back from the ultimate in warfare, which has enabled the restraint of law to be clamped on the practices of civilized warfare, in contradistinction to the unrestrained excesses of sheer savagery."<sup>34</sup> Fourth is the doctrine of proportionality which requires that "loss of life and damage to property must not be out of proportion to the military advantage to be gained."<sup>35</sup> These principles are

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32. M. Greenspan, *The Modern Law of Land Warfare*, 314 (1959).

33. *Id.* at 315

34. *Id.* at 316.

35. FM 27-10, supra note 1, at para. 41.

incorporated by Articles 22 through 28 of the regulations, which make up the section on hostilities. The articles which are directly applicable to the tactical use of armed helicopters are Articles 22, 23(c),(e),(g), 25, 26, and 27.

In 1923, a commission of jurists attempted to codify rules to govern air warfare. The rules were not formally adopted, but they are a significant reference for any future attempt to codify separate air warfare rules.

Without a separate body of rules to govern the conduct of air warfare, it is generally asserted that, since air warfare is only a separate means of conducting hostilities, as opposed to a separate activity in and of itself, it is subject to the general rules of warfare.<sup>36</sup> Field Manual 27-10 apparently accepts this view, in that it states that it "concerns itself with the rules peculiar to naval and aerial warfare only to the extent that such rules have some direct bearing on the activities of land forces."<sup>37</sup> It is submitted that

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36. J. Spaight, *Air Power and War Rights*, 220 (3rd ed. 1947).

37. FM 27-10, supra note 1 at para. 1.

armed helicopter operations are governed by the rules of land warfare, since they are conducted almost exclusively in direct or general support of land forces.

The general rule governing the conduct of hostilities is stated in Article 22:

The right of belligerents to adopt means of injuring the enemy is not unlimited.<sup>38</sup>

From this basic rule are derived the rules which protect the enemy combatants and the civilian population from indiscriminate warfare. The general principle expressed by Article 22 is that sovereign states may only use accepted means of warfare, as established by general customs. These customs are formally expressed in the remaining mentioned articles.

In addition to the expressed regulations, the Preamble of Hague Convention IV provides,

....in cases not included in the regulations....the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples from the laws of humanity, and from the dictates of the public conscience.<sup>39</sup>

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38. HR, supra note 31, at Article 22.

39. Id., at Preamble. (Emphasis added.)

This provision, known as the de Martens-Clause, arguably subjects combatants to the full force and sanction of the laws of humanity.<sup>40</sup> If in fact the authors of the convention intended the clause to constitute a source of law, rather than merely providing for the retention and preservation of any pre-existing rules of warfare, one is still left to determine what the laws of humanity permit or prohibit.<sup>41</sup> Despite this inherent difficulty of attempting to ascertain what is or is not a war crime by laws of humanity which are ever changing, and which are formulated in the elusive public conscience, the de Martens-Clause adds great strength and depth to the laws of warfare.

In the remainder of Part II, the laws of warfare will be individually examined.<sup>42</sup> Although particular emphasis has been placed on the application of these laws to armed helicopter operations in Vietnam, similar

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40. Roling, The Law of War and the National Jurisdiction Since 1945, II Hague Reueil 350 (1960).

41. Id. at 352.

42. This author wishes to recognize and recommend Raby, Bombardment of Land Targets--Military Necessity and Proportionality Interpellated, April 1968, (unpublished thesis presented to the Judge Advocate General's School, U.S. Army), which thoroughly examines the existing laws of war as they pertain to the bombardment of land targets.



situations will no doubt be faced in more conventional warfare.

B. ARTICLE 23(c), HAGUE REGULATIONS

This article provides for the protection of the wounded and surrendering personnel. It incorporates the principles of humanity and chivalry in expressly providing that,

....it is especially forbidden to kill or wound an enemy who, having laid down his arms, or having no longer the means of defence, has surrendered at discretion.<sup>43</sup>

An armed helicopter pilot is often directly confronted with the application of this rule, particularly when he is involved in search and clear operations in or near villages and hamlets. Usually, ground forces are flown into positions surrounding these villages. Part of the troops remain fixed in blocking positions, and part move into and through the populated area searching for enemy personnel. Armed helicopters are utilized in a reconnaissance and security role. They fly in orbit around the ground personnel and attempt to detect enemy activity.

Invariably, some village personnel will attempt

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43. HR, supra note 31, at Article 23(c).

to evade the search and clear force. Armed helicopter crews usually detect them running through cleared areas, swimming rivers, or attempting an escape by boat. They are generally visibly unarmed, not in uniform, and will stop only temporarily when warning shots are fired across their path by the gunship.

If the individual does raise his arms or indicate that he chooses to surrender, Article 23(c) requires that he must be allowed to do so. However, if he continues to evade, as is usually the case, the pilot must determine whether his suspicious activity is the act of a civilian who is outside the sphere of armed attack, or if he is, in fact, an enemy guerilla who may legitimately be shot. It is submitted that the shooting of unarmed, evading personnel in these situations would constitute a violation of the principles of humanity and chivalry, as well as Article 23(e), which prohibits the use of weapons to cause unnecessary suffering. Such action is also expressly prohibited by Article 23(c) when the individuals are temporarily stopped.

The principle of humanity would mandate that firing on the escapees be necessary to the purpose of war. The purpose served by their deaths, in this instance, is to prevent escape and curtail them, if they are in fact

Vietcong, from causing future harm to friendly troops. If, in fact, the individuals were positively identified as enemy personnel, the use of force to prevent their escape would be justified; but here, positive identification is lacking. All the pilot knows is that usually evading personnel are Vietcong, and that the personnel are dressed like Vietcong, and that they fail to stop when warned. If the pilot shoots them, and they are later identified as civilians, he has violated the principle of humanity, for he has used force to kill persons whose deaths did not serve a legitimate purpose of war.

Similarly, the principle of chivalry requires a measure of soul-searching. It requires that the pilot's actions be honorable. Killing the individuals when there is a possibility that they may be civilians would be dishonorable, whereas capturing them would not. If no means of capture are available, then the individuals must be allowed to escape.

The obvious argument is that such a rule allows the enemy to take advantage of his adversary's forbearance in these types of situations. This argument overlooks the full scope of international law. By requiring that the individuals either be captured or allowed to escape, the law compels the commander to plan for and provide

a means of capture to avoid losing this military advantage. If the commander chooses to lose this advantage by failing to provide the means for capture, then gunship crews can do no more than fire warning shots at the individuals. This result removes the burden and danger of making the wrong decision from the helicopter pilot, and accomplishes the purpose of the laws of war by preventing the spread of abusive practices and indiscriminate killings.

Probably the most difficult test of this rule would occur when an armed helicopter spots one or several enemy troops standing in a clearing, indicating an intent to surrender. The pilot is both aware of the government program encouraging enemy troops to surrender or defect without consequence, and the fact that the surrendering personnel may be a decoy for an ambush. It is submitted that the pilot may not fire on the surrendering enemy personnel, unless he determines for certain that he is flying into a trap. If he has any doubts, his only alternative, if he is unable to effect capture, is to let the personnel go unharmed and settle for a report to his headquarters.

The rule expressed by Article 23(c) "lays down the dividing line beyond which violence may not be offered

to an enemy."<sup>44</sup> Its application is less meaningful when applied to air warfare than it is in close combat, but it remains a forceful reminder that armed helicopter crews cannot exercise a right to kill which is any greater than land forces.

C. ARTICLE 23(e), HAGUE REGULATIONS

This article provides that,

....it is especially forbidden to employ arms, projectiles, or material calculated to cause unnecessary suffering.<sup>45</sup>

This rule, based on humanitarian principles, has a dual effect. It not only forbids the use of illegal weapons, it forbids the use of legal weapons in a manner which causes unnecessary suffering as well.

No armament system employed by helicopters has been declared an illegal weapon. Field Manual 27-10 states that Article 23(e) does not apply to explosives used in "...rockets....and hand grenades,"<sup>46</sup> although the International Committee of the Red Cross has taken the view that high-velocity rockets should

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<sup>44</sup>. M. Greenspan, supra note 32, at 317.

<sup>45</sup>. HR, supra note 31, at Article 23(e).

<sup>46</sup>. FM 27-10, supra note 1, at para. 34(b).

be prohibited.<sup>47</sup> Without question, rockets, grenades and flechettes inflict great suffering, but Department of Army policy is to interpret this rule "in light of the practice of states in refraining from the use of a given weapon."<sup>48</sup> No effective weapons of war are included in the short list of illegal weapons, which include "lances with barbed heads, irregular-shaped bullets, projectiles filled with glass, the use of any substance on bullets that would tend unnecessarily to inflame a wound inflicted by them, and the scoring or the filing off of ends of the hard cases of bullets."<sup>49</sup>

It is submitted that Department of Army policy in determining what are and what are not illegal weapons relieves the helicopter crew from similar responsibility. Certainly, in this age of nuclear warfare, it is extremely difficult to conceive of a helicopter weapons system which would be illegal per se, if, in fact, atomic weapons are not illegal under international law.

The pilot is very much involved, however, in the

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47. International Committee of the Red Cross, Memorandum on "Protection of Civilian Populations against the Dangers of Indiscriminate Warfare", Annex at para. 3, 19 May 1967 (with Annex).

48. FM 27-10, supra note 1, at para. 34(b).

49. Id.

question of whether or not he has used a legal weapon in an illegal manner, or, in other words, to cause unnecessary suffering. Since unnecessary suffering is undefined, the pilot is once again forced to turn to the underlying principles of war for guidance, namely the principle of military necessity and the doctrine of proportionality.

The principle of military necessity recognizes the combatant's right to use necessary force, and limits this right to force which will compel the submission of the enemy, without causing excessive expenditures in time, life, or money. Basically it requires that the pilot act reasonably.

The doctrine of proportionality mandates a similar requirement by demanding that loss of life and property destruction not be disproportionate to the expected military results. For example, it would be disproportionate for a pilot to assault an entire village or hamlet for the sake of killing one enemy soldier.

The force of these principles and Article 23(e), therefore, is to cause the pilot to pre-consider his use of weapons to determine whether unnecessary suffering may result. As a practical matter, however, the pilot is seldom in a position to properly adjudge these considerations. It is nearly impossible for him to

accurately judge the effectiveness of his marksmanship while flying at great speeds in tight maneuvers. Further, he usually only sees the trees, bunker, or natural objects which make up the target, and not the enemy personnel. This is not to say, however, that circumstances do not arise when a pilot can accurately measure his effectiveness.

Similarly, the pilot faces a nearly impossible problem in trying to select weapons to cause the least amount of suffering. The weapons systems are designed for rapid fire and maximum dispersion, and are all equally destructive quantitatively. Because of load limitations and weight capabilities, only a limited amount of each type ammunition may be carried. Often, it is necessary to expend the entire load. For these reasons, the pilot usually has limited selectivity over the type weapons to employ.

Nevertheless, Article 23(e) is meaningful in mission planning and execution because of its insistence that weapons be used only in a reasonable manner. By so doing, it effectively limits wanton destruction and killing.

#### D. ARTICLE 23(g), HAGUE REGULATIONS

This article expressly provides for the safeguarding of enemy property, both public and private. It expressly



states,

....it is especially forbidden to destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war.<sup>50</sup>

This article is further extended by Article 53 of Geneva Convention IV, 1949, which expresses a similar prohibition governing the conduct of occupying forces.

Field commanders are left with the determination of what property must be destroyed or seized. This determination is guided by the Field Manual 27-10 definition of military necessity, which is stated as being,

....that principle which justifies those measures not forbidden by international law, which are indispensable for securing the submission of the enemy as soon as possible.<sup>51</sup>

The standard which governs military necessity is reasonableness.<sup>52</sup> In other words, when enemy property is seized or destroyed, when it was unreasonable or unnecessary to do so, Article 23(g) is violated. The standard of reasonableness is applied to prevent the willful and wanton destruction of property when it is not required

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50. HR, supra note 31, at Article 23(g).

51. FM 27-10, supra note 1, at para. 3a.

52. M. Greenspan, supra note 32, at 279.

to secure the "submission of the enemy as soon as possible."<sup>53</sup> This standard was judicially tested at Nuremberg, where many war criminals were convicted of the "wanton destruction of cities, towns, or villages."<sup>54</sup>

Clearly, property which lies outside the scope of Article 23(g) is that which constitutes a military objective. This view was supported by Article 24 of the unadopted Hague Rules of Air Warfare, which listed specific military objectives which were subject to aerial bombardment. For example, military forces, military works, and military establishments or depots were listed as legitimate objectives.<sup>55</sup> The Hague Rules of Air Warfare further defined a military objective as being "an object of which the destruction or injury would constitute a distinct military advantage to the belligerent."<sup>56</sup>

Armed helicopter crews are in very little danger of violating Article 23(g) as long as they engage military objectives such as hostile forces, enemy positions,

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53. FM 27-10, supra note 1, at para. 3a.

54. M. Greenspan, supra note 32, at 279.

55. Hague Rules of Air Warfare, at Article 24(2), (1923) (hereafter cited as HRAW).

56. Id. at Article 24 (1).

bunkers or encampments, wherever found, with those "measures....which are indispensable for securing the submission of the enemy as soon as possible."<sup>57</sup> This principle recognizes the basic limit placed on the belligerent by Article 22, as reinforced by Article 23(g); "that belligerents refrain from employing any kind or degree of violence which is not actually necessary for military purposes and that they conduct hostilities with regard for the principles of humanity and chivalry."<sup>58</sup> Further, the doctrine of proportionality applies to prevent acts of destruction which are out of proportion with the object of the assault, that is, to capture, wound, or kill the enemy.

Collectively, these principles act to prevent wanton killing and destruction. For example, an unwarranted use of incendiary rockets or grenades might occur when mini-gun fire would have sufficed to cause the submission of the enemy. Similarly, a violation of Article 23(g) might occur when the enemy is located in one section of a village, and the entire village is assaulted. As long as the helicopter pilot has good reason to

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57. FM 27-10, supra note 1, at para. 3a.

58. Id.

believe that the enemy is spread around the entire village, or that the use of incendiaries or grenades is reasonably or imperatively necessary, he cannot be faulted.<sup>59</sup> Only his wanton destruction of enemy property is blameworthy. The penalty for wanton destruction of enemy property is the payment of compensation.<sup>60</sup>

#### E. THE MILITARY OBJECTIVE TEST

The military objective test embodies a subjective thought process whereby commanders evaluate the essential characteristics of the object they intend to assault or destroy to determine if it belongs to the category of objectives generally recognized to have military importance. If it does, and its destruction or injury furnishes a military advantage to the attacker, it qualifies as a military objective. Classification as a military objective does not give free rein to the attacker, however, since the conduct of the assault is still governed by the rules and principles of the law of war.

The military objective test is generally derived

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59. Cf., Downey, The Law of War and Military Necessity, 47 Am. J. Int'l L. 262 (1953).

60. HR, supra note 31, at Article 3.

from Hague Convention IX, 1907,<sup>61</sup> the Hague Rules of Air Warfare, 1923,<sup>62</sup> and the general bombardment practices of World Wars I and II. Hague Convention IX prohibited the bombarding of undefended ports, villages, dwellings and buildings,<sup>63</sup> but it carved out an exception for "military works, military or naval establishments, depots of arms or war material, workshops or plants which could be used for the needs of the hostile fleet or army, and ships of war in the harbour."<sup>64</sup> These exceptions were considered necessary because naval forces, unlike land forces, are unable to occupy or destroy such objectives, unless they bombard them.<sup>65</sup>

The military objective test was applied to aerial warfare by the Hague Rules of Air Warfare, 1923, which, though never adopted, were probably instrumental in sponsoring its general, although controversial, use during World War II. Article 24 of the rules defines

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61. Hague Convention IX, The Land Warfare Regulations and the Naval Bombardment Convention, 1907. (Hereinafter cited as Hague IX).

62. HRAW, supra note 55, at Article 24.

63. Hague IX, supra note 60, at Article 1.

64. Id., at Article 2.

65. J. Spaight, supra note 36, at 220.

a military objective as "an object of which the destruction or injury would constitute a distinct military advantage to the belligerent." The article then sets out examples of specific objectives which qualify as type military objectives. With only slight modification, the Department of Army has adopted these examples of objectives in Field Manual 27-10, which provides;

Factories producing munitions and military supplies, military camps, warehouses storing munitions and military supplies, ports and railroads being used for the transportation of military supplies and other places devoted to the support of military operations or the accommodation of troops may also be attacked and bombarded, even though they are not defended.<sup>66</sup>

To illustrate the use of the military objective test, consider the following hypothetical situation. A military commander is assigned the mission to destroy an enemy force and its base of operations which lies within a small group of hamlets in Vietnam. The enemy force is estimated at several hundred men, and the area is defended with mines and booby-traps known to be set by women and children. Orders are given to burn houses, blow up bunkers and tunnels and kill the livestock. Intelligence further indicates that the

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66. FM 27-10, supra note 1 at para. 40.

area has been in the exclusive control of the enemy force for a considerable time, and they are not expected to give it up without a fight.

The military objective examples would equate such an area to a place "devoted to the support of military operations or the accommodation of troops." Therefore, the commander must objectively determine whether a military advantage will be gained by the destruction or injury of the place. If none is offered, the place is not a valid military objective. If, however, as here, the partial or total destruction of the objective provides the distinct advantage of eliminating the present and future threat of an area as an enemy haven, the object of the attack becomes a valid military objective.

The planning and conduct of the attack will be governed by the principles and rules of war. For example, although complete devastation has been ordered in order to deny the enemy a base of operations, a commander must make a good faith determination of whether the loss of life and property will be disproportionate to the expected military advantage.<sup>67</sup>

In the hypothetical, the complete devastation of enemy property and livestock has been ordered. In

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67. FM 27-10, supra note 1, at para. 41.

such a situation, there is limitless potential for harm to the civilian populace. Although there is evidence that customary international law recognizes the lawfulness of killing civilians who are within or are in close proximity to military objectives,<sup>68</sup> the commander should consider measures by which civilian losses can be reduced to a minimum, for example, the lack of preparatory fires, assaulting at a time when the women and children are usually at market or in school, giving a warning,<sup>69</sup> or issuing orders not to fire on or in the area of unarmed personnel.

Many Vietnam military operations have been planned and conducted on the basis of intelligence information similar to that stated in the hypothetical. On some occasions the expected enemy force has failed to materialize, and the military commander finds himself facing non-combatants.<sup>70</sup> When this occurs, the reason for using force vanishes with the ever elusive combatant.

As can readily be seen, the military objective test offers no panacea to the military commander, since

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68. ICRC Draft Rules, supra note 1, at Article 6.

69. See HR, supra note 31, at Article 26.

70. The Washington Post, supra note 27, at cols. 1-5.



it relies entirely on accurate and timely intelligence information. The test is even more difficult for helicopter pilots to apply, since they must rely on what the ground commander believes to be true about an objective, or evaluate the objective independently. When a pilot is involved in this latter course of action, he must intelligently evaluate all the circumstances known to him, and select the most reasonable course of action available to him. If it is later determined that he acted unreasonably, he runs the risk of being charged for indiscriminately killing civilians,<sup>71</sup> or causing wanton destruction of property, or both, for which he may suffer the imposition of military punishment.

F. ARTICLE 25, HAGUE REGULATIONS

This article provides that,

The attack or bombardment by whatever means of towns, villages, dwellings or buildings which are undefended is prohibited.<sup>72</sup>

This prohibition was designed to protect non-combatants, by removing them from the sphere of permissible armed attack in frontal warfare. A question arises as to what constitutes an undefended place. Traditionally,

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71. The Washington Post, supra note 9, at cols. 3-5.

72. HR, supra note 31, at Article 25.

"open cities" were considered to be undefended, that is, cities which could be freely entered by the enemy, without encountering opposition; but modern warfare has created a need to reconsider this position. This is due to the basic contradiction caused by the principles of war law and the modern concept of total war. For example, the principle of military necessity requires no violence be exercised unless it is necessary and serves a purpose of war. Obviously, the cities in an aggressor's homeland are not open cities, but their general destruction would not be in accordance with the principles of military necessity. On the other hand, the totality of modern warfare envisions the destruction of military objectives, wherever they are found. The obvious compromise is to modify Article 25 by the military objective test, which results in the present Department of Army policy to allow precision bombardment of defended places and military objectives irrespective of whether their locality has a means of defense.<sup>73</sup> In this regard, Field Manual 27-10 lists the following as defended places:

- a. a fort or fortified place,
- b. a city or town surrounded by detached defense positions which is considered

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73. FM 27-10, supra note 1, at para. 40.

jointly with such defense positions as an indivisible whole,  
c. a place which is occupied by a combatant military force or through which such a force is passing. The occupation of such a place by medical units alone is not sufficient to make it a defended place.<sup>74</sup>

Tactical helicopter operations in Vietnam typically present numerous occasions for considering the application of Article 25. Generally, all villages are considered to be undefended; but they are nevertheless mentally regarded as possible enemy locations. Many pilots have experienced the sound of small arms fire directed at them as they pass over "friendly" villages, even those close to United States encampments. For these reasons, the air space in which small arms fire is particularly effective has been labeled the "dead man's zone." When helicopters are forced into this zone, either to land, or because of bad weather conditions, they are often confronted by sniper fire.

Experience has taught that snipers often fire on helicopters in the attempt to provoke a return of fire onto innocent villagers. The sniper generally fires a short burst of fire and quickly disappears into a protective foxhole. Obviously, a decisive response by a

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74. Id.

helicopter crew can result in the deaths of many non-combatants, together with massive destruction of property.

The presence of an armed sniper causes the immunity of Article 25 to be lifted, thereby opening the entire village to attack or bombardment. By applying the military objective test, however, only the sniper's location becomes "a place devoted to the support of military operations," rather than the entire village. Under both Article 25 and the military objective test, then, the pilot may legitimately return fire; but his target is confined to the sniper's location under the military objective test. Further, his response is governed by the other rules and principles of the law of war. Since pilots must make an instantaneous decision in these situations, this writer recommends that they be advised that they may legitimately return sniper fire from "undefended" places when,

1. it is necessary for their own self defense, and
2. the sniper or snipers' position is positively identified, and
3. suppressive fire can be returned without disproportionately endangering the rest of the civilian population.

In other situations, when armed helicopter fire is utilized on towns, villages, dwellings, or buildings,

in direct support of ground assaults, gunship pilots must strictly observe the military objective test considerations, together with the rules and principles of the laws of war. In particular, they must take all available precautions to avoid causing unnecessary suffering, wanton destruction of property, and disproportionate harm.

G. THE DOCTRINE OF PROPORTIONALITY

This doctrine can be simply stated as the requirement that,

loss of life and damage to property must not be out of proportion to the military advantage to be gained.<sup>75</sup>

Its mandate is applicable when attacking or bombarding a defended place or a military objective.<sup>76</sup> Its purpose is to protect persons and property from excessive acts of violence, by requiring the attacker to refrain from acts which provide no corresponding military advantage.

The doctrine of proportionality is applicable both to the planning and execution phases of armed helicopter assaults. The planner is required to carefully consider whether the contemplated action is justified in light

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75. FM 27-10, supra note 1, at para. 41.

76. Id.

of the anticipated results, and whether the measures used are necessary to the accomplishment of the mission. After due consideration, he may decide to limit the use of certain armament systems, or to totally eliminate the use of gunships. He should consider the use of all possible alternatives which will accomplish the mission with less loss of life and property destruction. For example, if a combat assault is planned in the near proximity of a populated area, the planner might decide to use a smoke screen to shield the air landings of combat troops, or the use of temporary incapacitating agents such as tear gas, rather than using armed helicopter preparatory fire; or, he might decide to restrict the use of rockets to certain targets, or restrict the type warhead to be employed.

The mission commander can consider other alternatives, such as using gunships only for retaliation, or only to fly security. Whatever his decision, as long as it is made in good faith and conscientiously, he has complied with the doctrine of proportionality. This assumes, of course, that his good faith determination is reasonable in light of all the circumstances known to him at the time.

During the execution phase of the mission, gunship

pilots should constantly remain alert to changing conditions which will allow them to use less force and cause less loss of life and property destruction. The failure to so act could result in wanton destruction and a violation of the doctrine of proportionality.

#### H. ARTICLE 26, HAGUE REGULATIONS

This article provides that,

the officer in command of an attacking force must before commencing a bombardment, except in cases of assault, do all in his power to warn the authorities.<sup>77</sup>

This rule, as well as Article 25, reflects the justifiable concern of the framers of the Hague Convention for regulating war as it existed at the turn of the century, when armies faced off in limited areas, allowing a distinct separation between the civilian populace and the battlefield. By contrast, counter-insurgency is concerned with controlling the ideology of the civilian populace. Military operations necessarily must be conducted to separate the enemy from the civilians. These actions result in battles being fought at the civilian populace's doorstep, thereby causing it to be exposed to all the dangers of armed conflict, to include armed

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77. HR, supra note 31, at Article 26. (Emphasis supplied.)

helicopter fire.

The obvious purpose of Article 26 is to allow non-combatants to seek shelter or leave an area about to be bombarded. Because of the built-in exception in cases of assaults, however, the rule falls far short of its intended purpose of giving non-combatants sufficient time to vacate the battle area. Almost all gunship actions which create danger to non-combatants are connected with assaults against or near-to populated areas. It is submitted that, modern warfare, particularly in the counter-insurgency environment such as is found in Vietnam, can afford to give all the non-combatants the luxury of prior warning. The suggested method for providing this warning is through what this writer chooses to call a Standing Prior Warning system.

This system is very simple to implement. If it is properly understood by non-combatants, it could result in the saving of many lives. Basically, the plan calls for the use of intelligence information in order to classify all populated areas as either friendly or unfriendly. Friendly villages, then, would be classified as a "no fire" area, unless a warning was given in time to let the non-combatants leave the area, or in the event of an all-out enemy offensive.



Unfriendly villages would be classified as such, based on their military and political leanings. If it was determined that they were sympathetic to the enemy, they would receive a standing warning that an assault might be conducted against or near to their village at any time. This warning would give non-combatants the choice of staying, at their own risk, or removing themselves and their families to safer refuge.

The advantage of a standing prior warning system could be negated somewhat by the institution of a similar, but opposite, enemy system. It is submitted that such a disadvantage would be negligible since the insurgent typically is dependent upon the terrorization and coercion of the civilian populace for his continued existence, and the establishment of an enemy warning system would cause insignificant change in his usual practices. A United States warning system, on the other hand, might effectively neutralize the insurgent's coercive efforts. It is submitted that, despite variations in practical effect, the suggested warning system would result in the saving of human life.

#### I. ARTICLE 27, HAGUE REGULATIONS

This article provides that,

in sieges and bombardments all necessary measures must be taken to spare as far as

possible, buildings dedicated to religion art, science, or charitable purposes, historic monuments, hospitals and places where the sick and wounded are collected, provided they are not being used at the time for military purposes.<sup>78</sup>

Armed helicopter weapons, like artillery and jet aircraft bombardment, leave very little opportunity to avoid incidental damage, once the buildings are used for military purposes. In order for armed gunships to avoid either deliberate or incidental damage to protected places, they must be made aware of their presence.

Article 27 provides in this regard that,

it is the duty of the besieged to indicate the presence of such buildings or places by distinctive visible signs, which shall be notified to the enemy beforehand.<sup>79</sup>

Article 27 prescribes no form for the signs to take. Later conventions, however, have prescribed various different signs which are required to be visible both day and night.<sup>80</sup>

When a besieged party fails to notify the combatants of protected property, or fails to mark it in

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78. HR, supra note 31, at Article 27. (Emphasis supplied.)

79. Id.

80. M. Greenspan, supra note 32, at 346.

some obvious way, it is submitted that Article 27's requirement of taking "all necessary measures....as far as possible," implies an affirmative duty on the besieger to inform himself of the presence of such places and refrain from intentional assault on them, within the spirit of the law.

Counter-insurgency war provides a unique setting for fulfilling this implied duty. When United States military forces take part in guerilla warfare such as is fought in Vietnam, they have access to much information which they do not have in conventional warfare. It is quite easy for a commander to be well-informed of the exact location of all Article 27 protected places within his tactical area of operations, by simply requesting the information from the host country's local representative. The commander is also in a position to influence the marking of such places.

Even without markings, armed helicopter pilots should be able to recognize protected places and refrain from directly assaulting them, unless they become legitimate military objectives.

### III. CONCLUSION

The estimated one million Vietnamese civilian war casualties since 1965 forces the conclusion that present legal measures provide insufficient protection to non-combatants in wars in which modern weapons, even when used exclusively on military objectives, can devastate substantial areas. An armed helicopter represents one such weapon. It is submitted that the laws governing its tactical use must be comprehensively reinforced to insure maximum protection to the civilian population.

As a relatively new and impressively lethal weapon of war, the helicopter is historically, ideally suited to pioneer a reaffirmation of the existing laws of war in a manner which is more precise and more appropriate to modern military operations. As a practical matter, such pioneering would be accomplished by intelligent flight officers who daily act according to their own judgment. In their contacts with enemy forces, these men are often the first to observe the presence of civilian personnel in the proximity of military objectives. More importantly, they are equipped with communication with which to safeguard these personnel, even during the course of an assault.

This thesis has stressed the complicated analysis required to effectively apply the existing rules of warfare to tactical helicopter operations. This, in part, is due to the vagueness of Hague Convention IV, and also partially due to the fact that the regulations are dated. It is striking to consider that the regulations were written only three years after man's first flight and two years before the United States Army procured its first airplane from Orville and Wilbur Wright. The change in the complexion of warfare during the past half century, as caused by aerial bombardment, has been dramatic. Now, in Vietnam, aerial bombardment, in part represented by armed helicopters, lurks outside the civilian population's door, leaving it no safe haven on a battlefield without boundaries. Under these conditions, a change in the law is imperative. The question is, what and how should the United States proceed?

The International Committee of the Red Cross has arduously considered the problems of indiscriminate warfare practices against civilians and has proposed draft rules, which are annexed,<sup>81</sup> to meet these problems. This writer strongly urges the immediate incorporation of Articles 1-10 of these draft rules into armed helicopter

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81. See Annex, ICRC Draft Rules, supra note 1.

units' standing operating procedures, through Department of Army directives or regulations.

A brief survey of these rules indicates that the design of the draftsmen was to establish certain laws of humanity to which military necessity will be subordinate, in order to provide the maximum safety to the civilian population. This has skillfully been accomplished without unduly hampering the accomplishment of military missions.

The draft rules are divided into six chapters. Although only the first three are relevant to the present discussion, this writer is of the opinion that the remaining three chapters are best suited for consideration by a future international convention.

The first three chapters, as formed by Articles 1-10, are in essence a restatement of the existing laws of war as interrelated with the principles of the laws of war. In chapter one, the draftsmen set out the general applicability of the rules and define the civilian population. Although this chapter bans all direct attacks on civilians, Article 6, in Chapter Two, accepts the fact that civilians in close proximity to military objectives must suffer the consequences of an assault. It is submitted that in a war such as Vietnam, even this category

of potential casualties could be minimized by the establishment of a Standing Prior Warning System. Article 5 establishes the rules as being complementary to the Hague and Geneva Conventions.

The military objective test, together with an exhaustive categorization of military objectives, is established by Article 7. Provision is made for the continuing re-evaluation and characterization of the listed examples, in order to keep pace with modern concepts.

Chapter three concerns itself with those precautions to be taken in connection with attacks on military objectives. Article 8 provides for planning considerations, while Article 9 delineates those duties to be fulfilled prior to or during the assault. Throughout both of these articles, the principles of humanity, chivalry, military necessity and proportionality are affirmatively phrased in clear, direct wording. Article 10 prohibits assaults on areas separating two non-adjacent military objectives, thereby rendering the civilian population, which is typically caught in-between, a momentary safety zone.

The greatest advantage of the draft rules is that they are aimed at establishing law in areas in which it is now questioned, and reaffirming existing law in

precise modern terminology. The draftsmen have purposely designed the rules to be concise, easily understood and easily memorized. Further, the rules have great merit as a unilateral code of conduct even without an international convention.

It would be a mistake and extremely naive to say that, if these rules are implemented and receive maximum exposure, indiscriminate killing of civilians will cease for all time. This writer is all too aware of the many variables in intelligence gathering and evaluation, as well as in the conduct of hostilities, which prevent the complete exclusion of mistake, malice, and overwhelming necessity. These rules do provide the maximum possible protection to civilians, however, and provide the armed helicopter pilot the guidelines by which to conduct aerial warfare with honor.



## ANNEX

# DRAFT RULES FOR THE LIMITATION OF THE DANGERS INCURRED BY THE CIVILIAN POPULATION IN TIME OF WAR

### Preamble

All nations are deeply convinced that war should be banned as a means of settling disputes between human communities.

However, in view of the need, should hostilities once more break out, of safeguarding the civilian population from the destruction with which it is threatened as a result of technical developments in weapons and methods of warfare,

The limits placed by the requirements of humanity and the safety of the population on the use of armed force are restated and defined in the following rules.

In cases not specifically provided for, the civilian population shall continue to enjoy the protection of the general rule set forth in Article I, and of the principles of international law.

## CHAPTER I. OBJECT AND FIELD OF APPLICATION

### ARTICLE 1

Since the right of Parties to the conflict to adopt means of injuring the enemy is not unlimited, they shall confine their operations to the destruction of his military resources and leave the civilian population outside the sphere of armed attacks.

This general rule is given detailed expression in the following provisions:

### ARTICLE 2

The present rules shall apply:

- (a) In the event of declared war or of any other armed conflict, even if the state of war is not recognized by one of the Parties to the conflict.
- (b) In the event of an armed conflict not of an international character.

### ARTICLE 3

The present rules shall apply to acts of violence committed against the adverse Party by force of arms, whether in defence or offence. Such acts shall be referred to hereafter as "attacks".

### ARTICLE 4

For the purpose of the present rules, the civilian population consists of all persons not belonging to one or other of the following categories:

- (a) Members of the armed forces, or of their auxiliary or complementary organizations.
- (b) Persons who do not belong to the forces referred to above, but nevertheless take part in the fighting.

## ARTICLE 5

The obligations imposed upon the Parties to the conflict in regard to the civilian population, under the present rules, are complementary to those which already devolve expressly upon the Parties by virtue of other rules in international law, deriving in particular from the instruments of Geneva and The Hague.

## CHAPTER II. OBJECTIVES BARRED FROM ATTACK

### ARTICLE 6

Attacks directed against the civilian population, as such, whether with the object of terrorizing it or for any other reason, are prohibited. This prohibition applies both to attacks on individuals and to those directed against groups.

In consequence, it is also forbidden to attack dwellings, installations or means of transport, which are for the exclusive use of, and occupied by, the civilian population.

Nevertheless, should members of the civilian population, Article II notwithstanding, be within or in close proximity to a military objective they must accept the risks resulting from an attack directed against that objective.

### ARTICLE 7

In order to limit the dangers incurred by the civilian population, attacks may only be directed against military objectives.

Only objectives belonging to the categories of objectives which, in view of their essential characteristics, are generally acknowledged to be of military importance, may be considered as military objectives. Those categories are listed in an annex to the present rules.

However, even if they belong to one of those categories, they cannot be considered as a military objective where their total or partial destruction, in the circumstances ruling at the time, offers no military advantage.

### CHAPTER III. PRECAUTIONS IN ATTACKS ON MILITARY OBJECTIVES

#### ARTICLE 8

The person responsible for ordering or launching an attack shall, first of all:

- (a) make sure that the objective, or objectives, to be attacked are military objectives within the meaning of the present rules, and are duly identified.

When the military advantage to be gained leaves the choice open between several objectives, he is required to select the one, an attack on which involves least danger for the civilian population:

- (b) take into account the loss and destruction which the attack, even if carried out with the precautions prescribed under Article 9, is liable to inflict upon the civilian population.

He is required to refrain from the attack if, after due consideration, it is apparent that the loss and destruction would be disproportionate to the military advantage anticipated:

- (c) whenever the circumstances allow, warn the civilian population in jeopardy, to enable it to take shelter.

#### ARTICLE 9

All possible precautions shall be taken, both in the choice of the weapons and methods to be used,

and in the carrying out of an attack, to ensure that no losses or damage are caused to the civilian population in the vicinity of the objective, or to its dwellings, or that such losses or damage are at least reduced to a minimum.

In particular, in towns and other places with a large civilian population, which are not in the vicinity of military or naval operations, the attack shall be conducted with the greatest degree of precision. It must not cause losses or destruction beyond the immediate surroundings of the objective attacked.

The person responsible for carrying out the attack must abandon or break off the operation if he perceives that the conditions set forth above cannot be respected.

#### ARTICLE 10

It is forbidden to attack without distinction, as a single objective, an area including several military objectives at a distance from one another where elements of the civilian population, or dwellings, are situated in between the said military objectives.

#### ARTICLE 11

The Parties to the conflict shall, so far as possible, take all necessary steps to protect the civilian population subject to their authority from the dangers to which they would be exposed in an attack - in particular by removing them from the vicinity of military objectives and from threatened areas. However, the rights conferred upon the population in the event of transfer or evacuation under Article 49 of the Fourth Geneva Convention of 12 Aug. 1949 are expressly reserved.

Similarly, the Parties to the conflict shall, so far as possible, avoid the permanent presence of armed forces, military material, mobile military establishments or installations, in towns or other places with a large civilian population.

## ARTICLE 12

The Parties to the conflict shall facilitate the work of the civilian bodies exclusively engaged in protecting and assisting the civilian population in case of attack.

They can agree to confer special immunity upon the personnel of those bodies, their equipment and installations, by means of a special emblem.

## ARTICLE 13

Parties to the conflict are prohibited from placing or keeping members of the civilian population subject to their authority in or near military objectives, with the idea of inducing the enemy to refrain from attacking those objectives.

## CHAPTER IV. WEAPONS WITH UNCONTROLLABLE EFFECTS

## ARTICLE 14

Without prejudice to the present or future prohibition of certain specific weapons, the use is prohibited of weapons whose harmful effects - resulting in particular from the dissemination of incendiary, chemical, bacteriological, radioactive or other agents - could spread to an unforeseen degree or escape, either in space or in time, from the control of those who employ them, thus endangering the civilian population.

This prohibition also applies to delayed-action weapons, the dangerous effects of which are liable to be felt by the civilian population.

## ARTICLE 15

If the Parties to the conflict make use of mines, they are bound, without prejudice to the stipulations of the VIIIth Hague Convention of 1907, to chart the mine-fields. The charts shall be handed over, at the close of active hostilities, to the adverse Party, and

also to all other authorities responsible for the safety of the population.

Without prejudice to the precautions specified under Article 9, weapons capable of causing serious damage to the civilian population shall, so far as possible, be equipped with a safety device which renders them harmless when they escape from the control of those who employ them.

## CHAPTER V. SPECIAL CASES

### ARTICLE 16

When, on the outbreak or in the course of hostilities, a locality is declared to be an "open town", the adverse Party shall be duly notified. The latter is bound to reply, and if it agrees to recognize the locality in question as an open town, shall cease from all attacks on the said town, and refrain from any military operation the sole object of which is its occupation.

In the absence of any special conditions which may, in any particular case, be agreed upon with the **adverse** Party, a locality, in order to be declared an "open town", must satisfy the following conditions:

- (a) it must not be defended or contain any armed force;
- (b) it must discontinue all relations with any national or allied armed forces;
- (c) it must stop all activities of a military nature or for a military purpose in those of its installations or industries which might be regarded as military objectives;
- (d) it must stop all military transit through the town.

The adverse Party may make the recognition of the status of "open town" conditional upon verification of the fulfilment of the conditions stipulated above. All attacks shall be suspended during the institution and operation of the investigatory measures.

The presence in the locality of civil defence services, or of the services responsible for maintaining public order, shall not be considered as contrary to the conditions laid down in Paragraph 2. If the locality is situated in occupied territory, this provision applies also to the military occupation forces essential for the maintenance of public law and order.

When an "open town" passes into other hands, the new authorities are bound, if they cannot maintain its status, to inform the civilian population accordingly.

None of the above provisions shall be interpreted in such a manner as to diminish the protection which the civilian population should enjoy by virtue of the other provisions of the present rules, even when not living in localities recognized as "open towns".

#### ARTICLE 17

In order to safeguard the civilian population from the dangers that might result from the destruction of engineering works or installations - such as hydro-electric dams, nuclear power stations or dikes - through the releasing of natural or artificial forces, the States or Parties concerned are invited:

- (a) to agree, in time of peace, on a special procedure to ensure in all circumstances the general immunity of such works where intended essentially for peaceful purposes;
- (b) to agree, in time of war, to confer special immunity, possibly on the basis of the stipulations of Article 16, on works and installations which have not, or no longer have, any connexion with the conduct of military operations.

The preceding stipulations shall not, in any way, release the Parties to the conflict from the obligation to take the precautions required by the general provisions of the present rules, under Articles 8 to 11 in particular.



## CHAPTER VI. APPLICATION OF THE RULES

### ARTICLE 18

States not involved in the conflict, and also all appropriate organisations, are invited to co-operate, by lending their good offices, in ensuring the observance of the present rules and preventing either of the Parties to the conflict from resorting to measures contrary to those rules.

### ARTICLE 19

All States or Parties concerned are under the obligation to search for and bring to trial any person having committed, or ordered to be committed, an infringement of the present rules, unless they prefer to hand the person over for trial to another State or Party concerned with the case.

The accused persons shall be tried only by regular civil or military courts; they shall, in all circumstances, benefit by safeguards of proper trial and defence at least equal to those provided under Articles 105 and those following of the Geneva Convention relative to the Treatment of Prisoners of War of August 12, 1949.

### ARTICLE 20

All States or Parties concerned shall make the terms of the provisions of the present rules known to their armed forces and provide for their application in accordance with the general principles of these rules, not only in the instances specifically envisaged in the rules, but also in unforeseen cases.

## LIST OF CATEGORIES OF MILITARY OBJECTIVES

### ACCORDING TO ARTICLE 7, PARAGRAPH 2

I. The objectives belonging to the following categories are those considered to be of generally

recognized military importance:

- (1) Armed forces, including auxiliary or complementary organisations, and persons who, though not belonging to the above-mentioned formations, nevertheless take part in the fighting.
- (2) Positions, installations or constructions occupied by the forces indicated in sub-paragraph 1 above, as well as combat objectives (that is to say, those objectives which are directly contested in battle between land or sea forces including airborne forces).
- (3) Installations, constructions and other works of a military nature, such as barracks, fortifications, War Ministries (e.g. Ministries of Army, Navy, Air Force, National Defence, Supply) and other organs for the direction and administration of military operations.
- (4) Stores of arms or military supplies, such as munition dumps, stores of equipment or fuel, vehicle parks.
- (5) Airfields, rocket launching ramps and naval base installations.
- (6) Those of the lines and means of communication (railway lines, roads, bridges, tunnels and canals) which are of fundamental military importance.
- (7) The installations of broadcasting and television stations; telephone and telegraph exchanges of fundamental military importance.
- (8) Industries of fundamental importance for the conduct of the war:
  - (a) industries for the manufacture of armaments such as weapons, munitions, rockets, armoured vehicles, military aircraft, fighting ships, including the manufacture of accessories and all other war material;
  - (b) industries for the manufacture of supplies and material of a military character, such as

transport and communications material, equipment for the armed forces;

- (c) factories or plants constituting other production and manufacturing centres of fundamental importance for the conduct of war, such as the metallurgical, engineering and chemical industries, whose nature or purpose is essentially military;
  - (d) storage and transport installations whose basic function it is to serve the industries referred to in (a)-(c);
  - (e) installations providing energy mainly for national defence, e.g. coal, other fuels, or atomic energy, and plants producing gas or electricity mainly for military consumption.
- (9) Installations constituting experimental, research centres for experiments on and the development of weapons and war material.

II. The following, however, are excepted from the foregoing list:

- (1) Persons, constructions, installations or transport, which are protected under the Geneva Conventions I, II, III, of August 12, 1949;
- (2) Non-combatants in the armed forces who obviously take no active or direct part in hostilities.

III. The above list will be reviewed at intervals of not more than ten years by a group of Experts composed of persons with a sound grasp of military strategy and of others concerned with the protection of the civilian population.

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