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The Vulture and The Snake Counter-Guerrilla Air Warfare: The War in Southern Lebanon

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Introduction

In recent years there has been a growing interest in counter-guerrilla warfare, taking an ever more important place alongside the preparation for High Intensity Conflicts (HIC), though little theoretical discussion of the subject has taken place. Guerrilla strategy and tactics, however, have been thoroughly studied in all their aspects in the writings of Clausewitz, Lenin, Mao Tse-tung, Lawrence, Che Guevara, Giap and Debray.¹ Guerrilla warfare encompasses much beyond the purely military, and so does the struggle against it. This struggle integrates political activity, economic and social policy, ideological and religious confrontation, psychological warfare, the competition for public opinion and for the media. Thus, the results of a struggle between a state and a guerrilla movement are not necessarily decided on the battlefield. However, it is very important to address the military aspect of counter-guerrilla warfare, since, while military victories do not necessarily end the overall conflict, military failures in the struggle against guerrillas are conducive to a guerrilla victory.

The major part of the literature in this field concentrates on guerrilla warfare, while, strangely, despite the fact that intellectual centers and think-tanks are largely located in countries that have to fight guerrillas, the literature that addresses counter-guerrilla warfare is quite limited. However, there has been a more intensive preoccupation with counter-guerrilla and anti-terrorism warfare in recent years, deriving from three phenomena:

- * The growing number of 'small wars' - Low Intensity Conflicts (LIC);
- * The removal of the prominent threat with the dissolution of the Soviet Union;
- * The significant role played by guerrilla movements, international terror and LIC in the last decade.

LIC has become a major phenomenon in many countries. Air forces are playing an ever more important role in these wars, including counter-guerrilla wars, which lead to a growing interest in this field of air strategy. However, the literature on counter-guerrilla only slightly mentions the role of air power, and focuses mostly on airline hijacking. The relevant literature also deals with subjects such as special operations: peacekeeping operations, LIC, and Operations Other Than War (OOTW). All these are different classifications with certain areas of overlap, some of which are appropriate for the field of counter-guerrilla warfare. It is important to mention the American Integrated Forces, such as FM 100-23 and FM 100-20, which pay more attention to this field than others, and advance the development of doctrine, weapon systems, and operational units for this type of warfare.

The Israeli experience with guerrilla warfare began even before the establishment of the state, when the Palmach, an elite unit, aspired to adopt ideological, national and military

components from the guerrilla experience around the world. The legendary Palmach leader Yitzhak Sadeh often wrote on this issue.² A few years after the establishment of the state the struggle against the first stirrings of the Palestinian movement began. On the one hand it directed the focus of attention to the study of the Palestinian movement and its methods of warfare, and on the other, to a discussion of the ways to counter it. This discussion also addressed theoretical aspects, but dealt especially with the current aspects of the struggle. ³

Guerrilla warfare has undergone transformation in recent decades. For example, the character of the guerrilla and terrorist wars against Israel has changed several times over the years. It began with the primitive sabotage and raiding operations in the first half of the 1950s, continuing with the more organized activity of the 1960s. After the Six Days War, an attempt was made to organize a Palestinian uprising against the Israeli rulers. The external struggle was conducted largely from Jordan, and subsequently, from Lebanon, where the Palestinians built impressive infrastructures that were destroyed mostly in the War of Lebanon in 1982. The Intifada (which was not a typical guerrilla war) was a new facet of popular war that succeeded, despite its lack of military success, in spurring a process which brought the Palestinians limited autonomy. However, despite the fact that Israel has had to find new responses from time to time, the LIC challenge has not been addressed satisfactorily by analysts, due to insufficient focus on the characteristics of guerrilla warfare and terrorism, and on counter-warfare.

Counter-guerrilla air warfare is quite a new issue, and the potential of air power is growing due to technological advancements, doctrinal and tactical progress. Therefore, the main goal of this study is to analyze the air power roles, capabilities and doctrines in wars against guerrilla forces. Specifically, the discussion includes:

- * Analysis of the capability of air power to challenge guerrilla forces;
- * Development of a conceptual framework of operational doctrine for counter-guerrilla air warfare;
- * Analysis of the role of technology in counter-guerrilla warfare, and comparison of ground forces and air power in counter-guerrilla warfare;
- * Based on the findings of the Southern Lebanon War case study, proposal of a framework of operational doctrine for the Israel Air Force (IAF) counter-guerrilla warfare.

This study proposes strategy, concept of operations and organization of forces to successfully fight guerrilla forces and in particular, the Hizballah in southern Lebanon. This concept consists of some new guidelines:

- * Since aerial platforms play most of the main roles of counter-guerrilla warfare, the IAF should play a pivotal role in the Southern Lebanon War.

* The essential requirements for near-real-time response, high proficiency and unity of command, dictate the establishment of an IAF Task Force that would consist of intelligence, planning, and command elements. Another element would be the operational unit composed of attack helicopters, attack aircraft,

Unmanned Airborne Vehicles (UAV), assault helicopters and commando unit.

* The IAF Task Force would exploit the advantageous qualities of air power such as speed, quick response, accurate stand-off firepower, survivability, and concentration of force, to suppress the Hizballah offensive activities, and to significantly reduce the number of Israel Defense Forces (IDF) casualties.

The contributions of the study include:

* Application of the methodology and conclusions as a tool for policy makers to assess the role, capabilities and doctrine of air forces for counter-guerrilla warfare;

* Application of the conclusions to formulate strategies of developments of weapon systems and C3I systems;

* Application of the proposed operational doctrine framework for the contemporary situation in Lebanon;

* Enhancement of the intellectual discussion on the future of guerrilla threats and the means to prevent and suppress them.

The first chapter illustrates and analyzes the current situation in Southern Lebanon. The second chapter defines guerrilla warfare, its nature, characteristics, and goals and discusses its advantages and weaknesses, the affect of technology on guerrilla warfare, and describes modern counter-guerrilla warfare. The third chapter discusses the potential roles and capabilities of air power to meet the challenges of counter-guerrilla conflict and suggests a framework of doctrine for counter-guerrilla air warfare. The last chapter tries to verify the theory by implementing it within a plausible framework of doctrine for the IAF counter- guerrilla campaign. This study may thus contribute to the intellectual debate on the new horizons of air power and its application to counter-guerrilla.

Chapter 1: The Southern Lebanon War

1.1 Introduction

This chapter discusses the war between the IDF in Southern Lebanon and the Hizballah, which serves as a case study for the proposed model of counter- guerrilla air warfare.

Until recently, academic scholars, government officials, and military officers considered the Hizballah movement a terror group. However, the media and the IDF have begun referring to the Hizballah as a guerrilla organization, thus indicating a change in

perception, representing a significant development in the Southern Lebanon War and the growing threat that the Hizballah imposes on IDF troops.

This chapter is predominantly devoted to the survey of the military aspects of the Southern Lebanon War. The first part of the chapter discusses the characteristics and capabilities of the Hizballah. It provides some background on the Hizballah and analyzes its characteristics as a guerrilla movement. The chapter proceeds with a brief history of the conflict. The second and third parts delineate the SLA and UNIFIL forces. The next part presents the characteristics of the IDF and the development of IDF doctrine and warfare. Subsequently, the last part examines and proposes a framework of operational doctrine for the IAF role in the Southern Lebanon. The methodology used for analysis of the Hizballah, the IDF, and IAF will be developed and used in the coming chapters for the theoretical model. The same parameters and considerations are used to assess the Hizballah and the IDF as well.

1.1.1 The Area of Conflict

Southern Lebanon is comprised of several zones. One zone is formally under control of the Lebanese government, but is in fact controlled by the Hizballah. The second, the Beka Valley, is under control of the Syrian armed forces. The Israeli-controlled area (supported also by the Southern Lebanon Army - SLA), is called the Security Zone, and was established by the IDF in 1985 at the end of its withdrawal from Lebanon after the 1982 war. The security zone is bounded by the Israeli border on the south, the Syrian border on the east, the Mediterranean sea on the west, and an equivocal border on the northern side.

The Hizballah uses Lebanon for many purposes, such as infrastructure, training camps, leadership residences, etc. The Mediterranean Sea is used also by both sides as a route for operations and as a line of defense. IDF attacks are not limited to southern Lebanon; they also aim at Hizballah targets further north.

1.1.2 Topography and Layout

Topography is an important factor in guerrilla warfare. Usually, a mountainous area favors the guerrillas, while large flat surfaces help counter-guerrilla forces. The layout of the land is another important factor. Forests hide the guerrilla fighters, while facilitating their preparations and activities, such as ambushes. In general, the best terrain for guerrillas is such that hampers the movements and maneuvers of regular armed forces, and enables small teams to hide.

Southern Lebanon encompasses mountainous terrain on the east side, and low hills on the west side by the coast, divided by steep canyons and wadis, with ridges and wadis spreading from east to west. The Litani River is a natural border, barring the rapid movement of ground forces. The main north-south route is the coastal road. The area is mostly covered with thick scrub, which provides hiding places and posts for ambushes and patrols.

The area is considered to be highly useful for guerrilla warfare, and Hizballah teams, familiar with its routes and obstacles, are quick to exploit its advantages. Military convoys and vehicles are incapable of moving through the basalt ravines. They are limited to certain roads and narrow winding tracks and are under constant threat from guerrilla ambushes. The actual area of clashes is tiny, about 30 kms wide and 70 kms long, thus indicating that effective counter- guerrilla means can be put into use, including surveillance, targeting, and attacks of aerial platforms and airborne forces.

1.1.3 The Actors

There are several players with considerable influence on the existing situation in Southern Lebanon. The three militarily active actors are: 1) The Hizballah's military wing, aided by military groups belonging to Amal - another Shiite faction; 2) The IDF; 3) The Southern Lebanon Army (SLA). An additional existing force is the United Nations Interim Force in Lebanon (UNIFIL). The foremost political actors are Syria, Iran, Israel, the Lebanese government, the United States and France.

1.2 The Hizballah as a Guerrilla Movement

1.2.1 Background and Characteristics

The Hizballah began as a collection of terror groups that coalesced into a modern, well-organized guerrilla movement. Among guerrilla and terror organizations fighting Israel, the Hizballah is considered to be the best. Founded in Lebanon in 1982 by an assembly of several fundamentalist Shiite factions, the Hizballah's activities are not merely military but also include a wide range of civilian and welfare projects. The Hizballah consists of several wings, which support one another. For example, the social wing in southern Lebanon helped the military branch establish a recruitment network. The political wing took advantage of Lebanon's internal chaos and ran in the parliamentary elections in October 1992, winning eight seats in parliament. The leadership is comprised of a number of councils, headed and controlled by a central council of Shiite clerics that ensures the commitment of the Hizballah to Shiite and Iranian revolutionary principles, ideology, and contemporary policy. The military organization and some small activist factions are entirely subordinate to the central council, which maintains tight control over military operations, in accord with its own interests and that of its patrons, Iran and Syria.

From the very beginning the Hizballah embraced the Iranian revolution's ideology and militancy, as a result of Iranian initiative and involvement in the creation of this new movement.⁴ Since then, Iran has had a strong influence on the Hizballah leadership, and continues to be its main supplier of weapon systems and necessary means for other activities as well. The Hizballah is considered one of the spearheads of the Iranian revolution in the Islamic world and against the western world.

Syria is also a strong supporter, and serves as a transit route for materials from Iran. Iran and Syria benefit politically and diplomatically from their support of the Hizballah. Syrian political dividends became clear during the negotiation process to end the last two

IDF large-scale operations ('Operation Accountability' in July 1993 and the 'Grapes of Wrath' Operation in April 1996), in which Syria gained a senior position at the negotiating table and on the subsequent Supervising Committee.

1.2.2 Hizballah Goals

Hizballah's strategic goal with regard to Israel is to create an Islamic nation on the ashes of the State of Israel. At the end of 1997, Sheikh Nassrallah, the Hizballah's leader, declared that an Israeli withdrawal from Southern Lebanon and the Golan Heights, will not end the conflict: "There will not be peace as long as the Jewish enemy occupies Palestine. The Jewish entity is a terrorist nation. Palestine belongs to Palestinians, not to Jews. Only our weapons and martyrs will bring peace to the area."⁵ There have been frequent declarations by Hizballah leaders to the effect that they intend to conquer Israel step by step, and that the first step is defeating the IDF in southern Lebanon and 'liberating' that area. Considering these declarations as definitions of pragmatic and operative goals, they define (from the point of view of Israel) a military conflict. But there are some analysts, both in the academy and in the Israeli government, who consider such declarations to be propaganda or to be directed for domestic purposes, as part of the struggle for power within the organization. They believe - relying on some Hizballah statements and on logic - that the Hizballah leadership's pragmatic goal is to restore control over southern Lebanon as a first step toward taking control of the State of Lebanon. According to this school of thought, the Hizballah leaders employ military pressure, negotiation, and other political means to this end.

The debate regarding the Hizballah's pragmatic goals is profoundly important to Israeli decision-making groups, in the process of defining Israel's strategy. This study assumes that there is a process of development and change in the pragmatic goals. The ongoing conflict and its immediate situation and outcomes greatly influence the Hizballah leadership's perception. Current debate within Israel about IDF withdrawal from southern Lebanon; the Israeli diplomatic initiative aimed at achieving an agreement that will enable it to retreat from the security zone; and a situation in which Israel suffers growing numbers of casualties, reinforce Hizballah's assumption that Israel is weak and that conquering it is feasible.

1.2.3 Basic Motivation

The Hizballah is a small military organization made up of only a few hundred fighters, who have proved their quality, dedication, and motivation. The basic motivation of the Hizballah derives from religion, nationalism, and patriotism. Extreme Iranian Islamic ideology is the foundation of the Hizballah's religious motivation. The powerful Shiite Iranian regime has a strong influence on Shiite populations elsewhere, and the Shiites in Lebanon in particular.

Religious fundamentalism, as well as nationalistic, patriotic and racial factors have become power multipliers, enhancing the Hizballah motivation, aggressiveness, and provide the fortitude to suffer casualties and temporary defeats in combat.

1.2.4 Targets

The Hizballah military organization has developed a strategy and policy that changes targets, depending on circumstances. The main categories are military targets, civilian targets in Israel, and Jewish and Israeli targets abroad. Accordingly, the Hizballah leaders concentrate on military targets (Israeli and SLA units) in southern Lebanon. Only when the IDF escalates its activities, they launch rockets ('Katyushas') toward towns and villages beyond the border, into Israel. After serious losses following very successful IAF operations, Hizballah react by attacking Jewish and Israeli targets abroad, thus limiting the scope of local activities.[HW1]

The Hizballah's offensive approach has fundamental requirements for targets. These are satisfied by their intelligence section, which gathers information from various scattered field observation posts, with the help of a few Communication Intelligence (COMINT) means. They have many informers and observers of their own, and among the civilian population of the security zone, who supply real-time data on potential moving targets such as patrols and convoys, and information for immediate operations or retreat. Their foremost intelligence achievement is that "they learned the gathering capabilities of Israel intelligence, and know how to deny [us] essential information in real-time."

1.2.5 Doctrine and Tactics

Hizballah doctrine aims at weakening the civilian and military will and

motivation to fight by continuously bleeding the IDF. This doctrine is not unrealistic - there have been some recent signs of erosion of Israeli society's fortitude, such as the demonstrations conducted by mothers of combat soldiers, the 'Four Mothers' group, calling for a total and unilateral Israeli withdrawal from southern Lebanon. Similar demands were voiced in the Knesset and even in the Cabinet.

The Hizballah does not try to weaken the power of the IDF. Instead, it aims at what Israeli society is most sensitive to - the loss of human life. Initially, the Hizballah's main tactics were based on sporadic attacks by small teams and individual suicidal bombers, and these were responsible for most of the IDF casualties. These methods have changed significantly. Until recently, the Hizballah conducted attacks by company-sized units against IDF personnel and fortifications. They had limited success by combining them with bomb attacks and ambushes on convoys. Frequently, they attacked two fortifications or more, simultaneously, in order to prevent immediate relief from reaching them.

Factors such as real-time information and targeting, as well as the vulnerability of the IDF soldiers to explosives, anti-tank missiles and bullets, contribute to satisfactory outcomes (from Hizballah's point of view) of attacks on convoys and on IDF and SLA strongholds. A valuable characteristic of the Hizballah doctrine is the demand for frequent tactical changes, made on the basis of what seems a careful analysis of IDF and SLA vulnerabilities and reactions. The IDF forces in southern Lebanon pointed out that the capabilities of the Hizballah have improved significantly in recent years. The actual

improvements that are seen daily, are in observations and weapon systems. "...They improved their means, their tactics, and propaganda. We are aware of their improvements in night vision systems, which forces us to change our tactics."6

1.2.6 Weapons and Other Systems

Challenging IDF troops is a hazardous mission which demands high-quality manpower. The militia's operations over the last few years have demonstrated a significant improvement in performance, increased daring and courage, better coordination and planning, and skillful use of relatively advanced weaponry and other systems, with which the Hizballah's military wing is equipped.⁷ Recently, in response to the growing presence of armored platforms like the Merkava tank, the Hizballah fighters have begun using the anti-tank AT-3 Sagger. At the end of 1997 they acquired AT-4 Spigot guided missiles that significantly strengthened their anti-armor capability and extended the target range up to three kilometers. In response to the intensive operations of the IAF, the Hizballah have used IR Strella Surface-to-Air Missiles (SAM). Their main offensive weapons are mortars and rocket-launchers. These weapons, deployed north of the security zone, have the capability to hit targets in Israeli territory, too. According to an Israeli senior officer, the Hizballah's expertise in using explosive charges is extremely advanced, and "the Hizballah engineers fight a running battle with Israeli countermeasures, with both sides using the most sophisticated means. "Iranian experts carefully study each attack and provide the equipment when changes are necessary."⁸ However, the Hizballah's infrastructure is poor and has not even a modest capability of production and maintenance of weapons and ammunition.

1.2.7 Occupying Territory and Building Bases

Experience and theory have shaped the Hizballah's approach towards occupying territory and building bases and infrastructure. The IAF air superiority and its lethality enable it to destroy any base or infrastructure asset in a brief time and at low risk. As a result of many IAF attacks, the Hizballah has halted most of its efforts to build essential assets and bases, such as training camps and technical facilities. The Hizballah leadership has developed a flexible approach towards the occupation of territory: When the Hizballah gains a loose control of the area north of the security zone, it is prepared to withdraw and give ground to offensive operations by IDF units in order to avoid unnecessary casualties, since the power and tactics of the IDF prevent Hizballah teams from successfully defending a front-line. However, once the IDF units leave the area, the Hizballah fighters regain control of the territory and population. This strategy is in line with the classic strategy of guerrilla warfare.

1.2.8 Influence on Public Opinion

A substantial element of Hizballah strategy is influencing a variety of public opinions. Its activities aim at shaping public opinion among Israeli civilians, governmental officials and branches, and IDF officers. The Hizballah tries to shake the confidence of these groups in the IDF's capabilities and in the wisdom of having a security zone in Southern

Lebanon. Hizballah leaders try to undermine the cooperation of the SLA and Southern Lebanon population with Israel by pointing out that it will not stay there forever and will retreat eventually. At the same time, the movement works very hard to acquire the support and good will of the population that lives north of Southern Lebanon. The Hizballah takes part in Lebanese politics and elections as part of its intention to gain influence over the future of Lebanon. The Hizballah invests money and other resources in supporting civilian infrastructure such as medical centers and schools. Indeed, the organization has widespread support among Shiite population in Lebanon and abroad, with the surrounding population supplying essential needs such as food and lodging.

It seems that part of the reason for the Hizballah's operations against the IDF and SLA is to improve their political maneuverability and freedom versus Syria and Iran. At the same time, the organization recognizes the necessity and advantage of making friends in the international community. Most of the psychological warfare is conducted by social and political sections of the Hizballah movement, while the military wing focuses on the use of force.

1.2.9 Weaknesses and Vulnerabilities

1.2.9.1 Dependence on Iran and Syria

Hizballah requires significant political and diplomatic support as a strategic backup, to prevent large-scale IDF operations, and to target Israeli diplomatic pressure. The intensive guerrilla war in Southern Lebanon requires an immense supply of weapons, ammunition, and other essential materials. For example, during the 'Grapes of Wrath' Operation, Hizballah fighters fired about 1,100 Katyusha rockets!⁹ Furthermore, it needs funds for its social organization, propaganda, recruitment of new volunteers, etc. Thus it is dependent on external supporters such as Iran and Syria.

Iran serves as the main supplier of war materials and other necessary means for the enforcement of other activities as well. Syria plays an indispensable role as a political and military backup for Hizballah activities in Southern Lebanon against the IDF and SLA. Both sponsors (Iran and Syria) benefit from their support because control over Hizballah activities serves their interests very well. Furthermore, through Hizballah operations they harm Israel by proxy at low risk to themselves. Syria uses the Hizballah as a leverage in its policy towards Israel, and as a good-will response when the United States occasionally demands cease-fires.

The Hizballah is dependent on Syria in various ways: as a transit route for weapons supply, it provides political backing, freedom of action, political legitimacy in Lebanon, and deters the Lebanese government from suppressing its political position. This dependence allows Syria to use the Hizballah as an instrument to advance its own interests. While in the short term there is much in common between Hizballah and Syrian interests, it is plausible that, in the long term, basic differences may lead to disagreement on goals, strategy and tactics.

The ideological platforms are almost antagonistic. Hizballah's ideology is based on extreme religious fundamentalism, whereas Syrian establishment ideology is atheist, socialist, and nationalistic. Hizballah political and military strategy may accelerate the risk of High Intensity Conflict (HIC) with the state of Israel. Syria, on the other hand, prefers to achieve its pragmatic goal - Israeli withdrawal from the Golan Heights - by negotiation, and recognizes the danger of an all-out war. These differences explain the risks the Hizballah undertakes by its dependence on Syria.

1.2.9.2 The Lebanon Government's Posture

Hizballah's fundamental ideology, its religious nature, and its pan-Islamic goals are contradictory to Lebanese political culture and regime. The Shiite faction is considered, in the long-run, a threat to the relatively modern and liberal state of Lebanon. At present, the Hizballah serves the ephemeral goals of the Lebanese government in Southern Lebanon, but as soon as intensive useful negotiation with Israel emerges, the Lebanese government will probably abandon its support and cease to grant it legitimacy. It may force the Hizballah to conform to the goals of the government.¹⁰ The main power that could conceivably delay an open violent dispute would be the Syrian president who, de facto, dominates Lebanese politics. But it is very likely that, because of the common Syrian and Lebanese interests regarding agreement with Israel, Syrian troops will not protect opposed Hizballah forces.

1.3 IDF in Southern Lebanon

1.3.1 Background

The history of Israel's defense of its northern border is long and troublesome. We can start out our brief account with the Litani Operation of 1978. In response to terror attacks against Israelis from PLO bases in Lebanon, the IDF invaded Southern Lebanon, 'cleaned' the area and established a security zone and the SLA. Attacks on Israeli targets continued, and a few years later, in 1982, the Lebanon War broke out. As mentioned, the current division of Southern Lebanon took place in 1985. Since then, the Hizballah has replaced the PLO in conducting guerrilla attacks against Israel.

In the 1990s the IDF conducted two major operations in Southern Lebanon ('Operations Accountability' and 'Grapes of Wrath'), which ended with vague ad hoc political agreements. The current situation derives, on the one hand, from the history of the conflict, and on the other, the topography and layout of the area. One cannot ignore the pivotal roles of the political aspects of the conflict, and the Israeli internal aspects as well.

1.3.2 IDF Goals

Israel's concept of national security emphasizes peace. Israel's leadership considers the Southern Lebanon conflict as an obstacle to peace negotiations with Syria and its client - Lebanon. Israel's leadership assesses that Syria has the power to manage, accelerate or reduce the intensity of activities of its proxy, the Hizballah, in accordance with its policy

regarding the peace process. Recognizing these links, Israel's strategic goal is to mitigate if not solve the conflict as a mid-term phase towards a peace agreement with Syria. Consequently, the Israeli strategy in Southern Lebanon is defensive. However, the means for fulfilling it consist of both defensive and offensive weapons and tactics. This phenomenon complies with Israel's fundamental dialectic strategy, doctrine and tactics.

The IDF security concept emphasizes maintaining the status quo as a goal. The IDF uses offensive operations in order to achieve and preserve it. Formally, Israel has no intention or interests in expansion. This being the case, a basic assumption of IDF strategy is that the only tenable goal in occupying the security zone is to provide the necessary security for the civilian population in northern Israel. A second goal is to minimize IDF casualties. After agreement is achieved and the threats from the other side of the border are substantially reduced, occupation of the security zone will be irrelevant, and the IDF will leave the area.

1.3.3 Definition of the Enemy

Prior to the 1982 Lebanon War, the PLO used the area as a base for hostile operations against Israel. The Palestinian presence and the threat it created, along with the Litani Operation's failure to remove the threat, were among the circumstances that brought about the Lebanon War.

This controversial war actually achieved some successes - one of which was the expulsion of the Palestinian terrorists from Southern Lebanon. But nature abhors a vacuum; the newborn Hizballah movement's military wing entrenched itself in the area, close to the security zone, and this new enemy was much more motivated, skilled, and well-organized than its predecessor. Israel, by reason of its moral values, domestic public opinion, and the IDF fighting ethos, cannot direct its forces against the Hizballah's civilian organizations, even though this decreases the effectiveness of IDF operations. Consequently, the military wing alone is defined as the actual enemy. The long-term ethic code of promoting moral values at the expense of short-term effectiveness is valid in most counter-guerrilla conflicts.

1.3.4 Basic Motivation

The Lebanon War was a major cause for significant change in the Israeli public's motivation for fighting against and defeating terror and guerrilla movements outside the borders. In the past, the public was united around 'just causes', in the belief that Arab terror represented pure evil, and that there was justification in every operation against terror. Like other fundamental beliefs, these have lost some of their vitality. The Lebanon War accelerated processes of division and uncertainty in Israeli society. It is beyond the scope of this study to delve into these issues and processes, but they reflect an attenuation of the basic motivation to fight and win the conflict with the Hizballah. The Hizballah leadership seems to have mastered classic guerrilla warfare theory and history, which stresses decreasing the will and motivation of the enemy, and, in light of their relative success, might believe they are approaching victory. On the other hand, IDF troops have

high fighting spirit and motivation. Nevertheless, the battle over the motivation and determination has advanced to the forefront.

1.3.5 Strategy and Doctrine

Israel's counter-guerrilla strategy and operational doctrine, which will be presented in this study, is not a stand-alone concept but is linked to other elements of Israel's strategy and operational doctrine, in face of the threat emanating from Southern Lebanon. They combine complementary elements, among them 1) passive defense; 2) active defense; 3) offensive operations; 4) deterrence; and 5) negotiation and diplomatic efforts.¹¹

1.3.5.1 Passive Defense

Passive defense provides defensive measures in Israel to protect civilians from Katyusha rocket launches and other guerrilla attacks. These include shelters, sophisticated fences, health services such as hospitals, social workers, and psychiatric care, and other civilian services such as police and fire fighters. A backbone of the passive defense is the modern 'fence' along the Israel-Lebanon border. Israel defends its northern border with cordons of electrified wire and mines equipped with sophisticated detection devices, which make any infiltration nearly impossible. "The electronic monitors can locate any intrusion within 500 meters. Patrol roads run behind the line, covered with constant mobile and foot patrols on the move day and night."¹² The sophisticated fence consists of: "...control panels [which] give early warning of anyone trying to cross. There are also ground, infra-red, radio and television monitors at strategic points and routine road patrols along the security road, with two vehicles on lookout during the day and three during the night. Other than the standard land-mines, foot patrols or observation posts, other defensive measures exist. The border fence is ..[the] last line of defense."¹³

A forward passive defense array has been built in the security zone. The IDF has established strongholds in strategic points surrounded by entrenchment, in order to control and delay Hizballah movements in and out of the security zone.

1.3.5.2 Active Defense

Active defense is characterized by limited operations. It comprises patrols and ambushes, which 'search and engage' Hizballah teams, ground forces and helicopters at a high state of alert, serving as reinforcement against any suspected infiltration. The area of active defense activities is in the security zone and its close vicinity, which is, in fact, a buffer zone, used primarily to halt the Hizballah's penetrating teams as early as possible from reaching the Israeli border.

1.3.5.3 Offensive Operations

Offensive operations are characterized both by the nature of the activity and the area of operations. The area of offensive operations lies beyond the security zone and the buffer zone. This element of Israel's strategy aims at taking the initiative, in forcing the

Hizballah to divert its attention and resources to defensive tactics. The IAF plays an important role in offensive operations, but due to its subordinate position, its potential is not fully utilized. Offensive operations include air operations against Hizballah infrastructure, training camps, guerrilla leaders and other guerrilla-related targets deep in Lebanon, or even in areas under direct Syrian control and under its air defense umbrella.

1.3.5.4 Deterrent Image

The IDF's deterrence has been eroded during the recent years of the Southern Lebanon War. Counter-guerrilla obstruction is based on the success of almost every operation and a very high loss rate in favor of the IDF. Some failures and significant changes in the loss-rate are two factors in the diminishing of deterrence. Nevertheless, IDF special operations are part of a non-systematic policy that concentrates - or should concentrate - on reestablishing deterrence. While routine activity has a limited effect, the two relatively large scale operations restored IDF's position. The status quo in the area, and the agreement not to attack civilian villages on both sides, is a direct result of the 'Grapes of Wrath' Operation.

Another element of deterrence is immediate reaction and punishment. Such operations are frequent, mostly executed by artillery, and attack aircraft. However, there is no confirmation of the assumption that immediate reaction and punishment enhances deterrence, and decreases Hizballah activities in numbers or degree of risk-taking. This is probably due to the absence of a consistent, declared policy of deterrence.

1.3.5.5 Diplomacy

Diplomatic efforts are the last element of Israel's strategy, and are due to the understanding that a comprehensive solution for the Southern Lebanon war is available only at the negotiating table. The recent diplomatic initiative to accept the UN 425 Resolution and to retreat from Southern Lebanon is based on a widespread political and public-opinion sensitive approach that articulates negotiations and compromise with regard to withdrawal from Southern Lebanon. Obviously, the political considerations should lead and dictate military policy and operations.

1.3.6 Weapons and Other Systems

The IDF employs the most modern and sophisticated equipment - platforms like the Merkava battle tank, the Apache attack helicopter, the F-16 fighter aircraft and UAVs, as well as smart munitions such as laser bombs and TOW guided missiles. The soldiers use modern equipment for fighting at night, for detecting mines, etc. Since soldiers' lives are of the highest value for Israel, a great deal is invested in medical equipment and in the deployment of medical teams. The last but not least set of super-modern equipment is early warning, surveillance and target-acquisition systems.

1.3.7 Weaknesses and Vulnerabilities

The IDF's entrenchment in Southern Lebanon has certain weaknesses and vulnerabilities - defending its own forces has become a predicament.¹⁴ The more units and soldiers are deployed, the more targets are exposed to attack by the Hizballah. The result has been that the IDF's units, forts, and convoys have changed from predator to prey. The conclusion is not necessarily that occupying Lebanese soil was a wrong conception, but that the deployment concept should be reassessed.

1.3.7.1 Intelligence

Intelligence gathering and targeting in Southern Lebanon is one of the most perplexing challenges. The Hizballah has made remarkable improvements in its activities, operating in small teams, hiding among civilians in villages, and moving under the concealment of the hills. However, since sensor technology came into use, new options are available for gathering the needed data in near real time, and the IDF should be able to significantly improve its performance.

1.3.7.2 Human Resources

IDF army units in Lebanon are far less proficient in guerrilla warfare than are the Hizballah. This weakness stems from the fact that Israel's armed forces are trained largely for HIC. Consequently, the training of soldiers and units for counter-guerrilla warfare is marginal. Thus, Hizballah fighters are much more familiar than IDF soldiers with the terrain, population, and other unique conditions and circumstances of Southern Lebanon. Correcting this weakness is not too complicated, and only limited resources are needed. A promising solution, widespread among modern armed forces is the deployment and employment of specialized brigade-size units, trained for assigned counter-Hizballah operations.¹⁵ Some small commando units, such as the Egoz company-size unit, were adequately trained and equipped, and their success has proven the concept of proficiency and dedication to the mission. Yet, the leadership of the national security establishment has failed so far to meet this cardinal challenge.

1.3.7.3 Misuse of 'Media Warfare'

Media warfare is a vital element of guerrilla strategy. The media has always been a valuable instrument. Frequently, TV reports on a guerrilla operation have more effect than the operation itself. Therefore, the contest between a guerrilla movement and its rival over manipulating the media is highly intense. Since the international media tends to favor guerrilla movements, this contest is difficult to win. Israeli governmental offices have not yet succeeded in the war over international public opinion.

The SLA, which was originally established for the purpose of protecting the civilian population of the area against guerrilla infiltration, fights on the side of the IDF. The SLA was organized during the mid 1970s, at a time when the border was poorly defended, and when Israeli settlements in the Galilee were under regular attack from the PLO element. Its forces consist of about 2500 soldiers. During the last few years its operational capabilities improved significantly.¹⁶

The population of Southern Lebanon, along the Israeli border, is largely made up of Christians and Shiites, whose prosperity and security were shaken by the civil war in Lebanon. This is why they were persuaded, during Israel's withdrawal after the Lebanon War, to form a militia for the purpose of their own security as much as for that of Israel. Over the past ten years, the SLA has become a cohesive small militia. The IDF provides it with tanks, APCs, artillery and support equipment, and SLA officers are trained by the Israeli Army.¹⁷

Unfortunately, during the course of this decade many questions have been raised regarding the future of the SLA. Some critics assert that the SLA has ceased to play an influential role. The wishful thinking that the IDF could fight terror and guerrilla by proxy has evaporated. Therefore, the SLA, constructed to be a buffer force, should be reorganized, and its purpose should be carefully reassessed.

1.5 The United Nations Interim Force in Lebanon (UNIFIL)

As an outcome of the 'Litani Operation,' on 19 March 1978, the UN Security Council adopted resolutions 425 and 426. It also decided to establish UNIFIL, in order to restore peace and security in Southern Lebanon and to assist the Government of Lebanon in ensuring the return of its effective authority in the area. UNIFIL has about 5300 troops provided by 9 countries. Its operations are based on a network of 125 checkpoints, observation posts and patrols. The situation in Southern Lebanon has prevented UNIFIL from carrying out its mandate. Within available resources, UNIFIL provides civilians with humanitarian assistance such as medical supplies, water, food, fuel and electricity. The periodic reports of the Secretary-General state that although UNIFIL is unable to implement its mandate, its contribution to stability in the region and the protection it provides to the local population remain important.¹⁸

Conclusion

The Hizballah has become a remarkably skilled guerrilla movement, pursuing political, social, military and propaganda goals. Its development reveals a deep understanding of the theory and practice of guerrilla warfare. Central control of the different wings of the organization is a power multiplier that enhances the movement's integrity and unity. In the last few years Hizballah fighters have acquired the knowledge and proficiency needed to exploit modern weapon systems such as anti-tank missiles, sophisticated mines, proximity and electronic fuses, communication, and intelligence gathering systems. The integration of guerrilla doctrine and tactics with modern systems has become a substantial factor in the movement's success against a modern, well-trained, well-equipped IDF.

The IDF and SLA have suffered substantial losses in recent years. This trend has sparked a hot debate in Israel on the pros-and-cons of a unilateral withdrawal from Southern Lebanon. If such an alternative were carried out, it would be a great victory for the Hizballah and the Arab world as well. The sense of victory could impel the Hizballah to increase its power and to advance its struggle to the northern border of the State of Israel. Retreating to its northern border could weaken Israel's defensive strategy, and the war

could then escalate to an uncontrolled level. However, another possible outcome could be that, in the long run, dynamic changes might enhance a peaceful agreement.

New approaches such as creative thinking on the role of the IAF in the Southern Lebanon War, were expressed by former IDF Northern Command: "I do think that it is important to adapt ourselves to the changing conditions.... We should consider a new deployment. We should consider new operational methods."¹⁹ Although a peace agreement will not be achieved on the battlefield, military consequences have significant influence on the decision-makers of both sides. The war in Southern Lebanon has become more of a struggle between minds than a fight between soldiers. It is hazardous to predict the end of the conflict. At this time, the main advantages enjoyed by the Hizballah are its motivation and readiness to suffer casualties, while the IDF's advantages should be creative thinking, improved training, quality of manpower and advanced technology, mostly in the hands of the IAF.

Chapter 2: Guerrilla and Counter-Guerrilla Warfare

2.1 Definition of the Guerrilla

The IDF Dictionary of Operational Doctrine defines guerrilla warfare as " A method of warfare, seen in the actions of small independent units (regular and irregular), generally of infantry and light forces, whose salient characteristics are great deviousness and a method of hit and run."²⁰ The dictionary of the US Armed Forces defines guerrilla warfare as "Military or paramilitary operations, on the territory of an occupied enemy or in enemy territory, by native irregular forces."²¹ These definitions reflect a narrow military view. This study requires some additional definitions of important terms:

* **Guerrilla:** A type of war, warfare, strategy, tactics, and organization. It represents the struggle between insurgent groups against the regime. In this struggle, the insurgent group uses political, social, and violent means to destroy, reshape, or preserve some political, social, religious, or class element.²²

* **Guerrilla War:** An irregular war, lacking a clear border, whose goals are to corrode the regime, and wear down the population's endurance and motivation.

* **Guerrilla Warfare:** A type of warfare managed by irregular forces, whose targets are enemy soldiers, civilians and sensitive assets. The means are largely infantry and sabotage.

* **Guerrilla Strategy:** A type of attrition that intends to achieve the goals of the guerrilla war by integrating military, propaganda, political, civil and social activities, based on the concession of territory and the preservation of strength.

* **Guerrilla Tactics:** Based on activities of small teams, raids, ambushes, terrorist activities, an avoidance of direct confrontation, the concession of territory, and few casualties.

* Guerrilla Organization: An organization that integrates social, military, and political sub-organizations that constitute the guerrilla movement.

* Guerrilla Force: A group of irregular, predominantly indigenous personnel, organized along military lines, to conduct military and paramilitary operations in enemy-held, hostile, or denied territory.²³

2.2 The Attributes of Guerrilla Warfare

The Chinese revolutionary army formulated rules of war appropriate to this strategic and tactical level. These rules emphasize the supreme importance of force preservation, and the secondary importance of occupying territory. "When a guerrilla force engages an enemy stronger than it, it retreats when the enemy advances, harasses when the enemy halts, attacks when the enemy tires, pursues when the enemy retreats."²⁴

These imperatives speak for themselves. Guerrilla fighters assume weakness in relation to the enemy during the early stages of war. They rely on the people's support, on ideological commitment, on methodical organization. A guerrilla organization abstains from frontal encounter and adjusts its type of fighting to that of the opponent.

A guerrilla organization, as a political movement and a military force, applies a large variety of strategies, such as the use of physical and psychological terror. Terrorism is directed against the supporting population in order to tighten the ranks and prevent collaboration with the enemy or lack of cooperation with the guerrilla movement, against the enemy - its leadership, civilian population, and so on, and at times also directed against hostile communications media.

The principles of guerrilla warfare and its characterization are especially important for designing counter-guerrilla tactics. The following parameters of the guerrilla have a significant influence on understanding modes of operation, and consequently, influence modes of operation of counter-guerrilla warfare. However, there are limitations on the ability to define guerrilla warfare: The characteristics do not encompass its entire range, or are so general that they lose their value. There are also evident gaps between theory and the actual phenomenon, stemming from the polymorphic character of guerrilla warfare and from its modes of fighting. A comparison between guerrilla war and other forms of war also does not provide an accurate definition of guerrilla warfare. Thus Harkabi, for one, characterizes guerrilla warfare according to various criteria that serve to describe it in different places in the world, and sets out the boundaries of possible variance of each parameter.²⁵

* Guerrilla Goals: These are highly varied and may differ according to nationality, class, ethnic group, and religion. Common to all guerrilla movements, however, is the aspiration to overthrow and replace the existing regime. They generally recognize the limitations of unilateral action, and so limit their operative goals to attrition against the regime. For completion of their goal, they seek to draw nations friendly to them into full confrontation with their opponent.²⁶ The goals of the war are strategic. For example: the

Kurdish guerrillas' goal is establishing an independent Kurd entity, while the Cuban revolutionaries' goal was toppling the Batista regime.

* **Boundaries of Guerrilla Activity:** This activity overlaps many other activities such as terrorism, civil war, violent class struggle, extra-territorial war, war between rivalries with uncertain borders, on both strategic and tactical levels.

* **Modes of Action:** Modern guerrilla warfare assumes new guises at a relatively rapid rate. For example, by the creation of alliances with guerrilla and terrorist organizations in other countries, guerrilla warfare can, in some cases, become international. The multi-national character of some guerrilla movements becomes an important element of their strength.

* **Media Warfare:** A guerrilla movement focuses on the media in a battle to win over public opinion of its affinity population level of nation, movement, or class. It also struggles to win over international public opinion and public opinion in the society it is fighting, as part of its war against the enemy's army and leadership. This emphasis guides modes of activity and constitutes a key to understanding its operating conception.

* **Technology:** Guerrilla forces equip themselves with the latest means of warfare and procure modern technology for their objectives.

* **Infrastructure:** At an advanced stage of its activity a guerrilla movement aspires to take control of a given area, even partially, and institutionalize its activities by building permanent or temporary facilities and bases.

A classic guerrilla movement structure is built from several hierarchical levels.²⁷ The first level consists of a broad population that supports the movement in non-violent ways. The following layer is a militant population that is not very active, but which provides instruction and training for fighters, proximate assistance, logistics, and so on. This level is the source of enlistment for the third level, which is made up of small professional groups such as the Hizballah fighters in Lebanon and the Topac Amaros in Peru. This organizational system is built to preserve the size of the fighting force in the face of the losses incurred in battles with the enemy. For this reason, it is very difficult to defeat a guerrilla movement by killing its soldiers. Guerrilla movements depend on a broad base in the population, and if they lack such support, they concentrate their activity on 'conquering' it by ideological, social, and violent methods.

There are three major stages in the development of a guerrilla movement. The first stage consists of building the force, which is composed of small groups; limited activity; and winning over the hearts and minds of the population. In the second stage, the movement gains strength and organizes itself in an area in which it has relative control over the territory and the population. In the third stage, the paramilitary groups turn into forces resembling a regular army. An operational infrastructure is built, and relatively large-scale operations against the enemy are begun. Paradoxically, the stronger a guerrilla force

becomes as it passes from one stage to the next the more vulnerable and susceptible to counter-guerrilla warfare does it become; a phenomenon that will be discussed further on.

The area from which a guerrilla force functions after having firmly based itself, may be within the country or in a neighboring country. There is a fundamental difference between these two types of areas with regard to counter-guerrilla warfare. Also important in the political context are the guerrilla movement's allies among other movements in the world, and among sovereign states.

We have seen constant evolutionary change in guerrilla movements. Today such a movement links up with various states with different interests, for ideological backing and for the ongoing supply of weapon systems, instructors and advisers, for physical infrastructure, for training, maneuvers, the manufacture of weapon systems, and for the creation of front companies for the purchase of supplies from countries not cooperating with it. Likewise, a modern movement is not made up of a single framework; it includes organizations with looser or stronger connections, each of which has a different role. Some of them are educational and welfare institutions involved in legitimate activity that provides cover for warfare groups employing violence. The most concrete example of a modern organization is the group of organizations belligerent to Israel, ranging from a legitimate political movement such as the Palestinian Liberation Organization (PLO) to terrorist organizations such as Hamas or guerrilla organizations like Hizballah. The interrelations among all these organizations are an all-encompassing challenge for Israel's foreign, defense and domestic policies. Guerrilla movements around the world incorporate some or most of the characteristics of the Palestinian movement on a large scale and the Hizballah on a smaller one. They too constitute an all-encompassing threat to the states confronting them. The mutual support of guerrilla and terrorist groups has brought with it international cooperation to counter them; Rabin and Netanyahu were two advocates of such cooperation.²⁸

* Main Measures of Guerrilla Strength: include military capability; endurance; basic cause (self-determination, religion, ideology, nationality, class) and motivation; extent of influence on the media and through it on the target population; allies (states and guerrilla movements) and weapon systems.

2.3 Guerrilla as a Strategic Threat

The existential threat presented by guerrilla warfare derives first and foremost from the guerrilla movement's goal of capturing a given territory and a given population controlled at the time by the regime, and sometimes also of destroying the existing regime. When the threat becomes more severe it can reach the point of becoming existential.

Noteworthy is the fact that there is no direct relation between the guerrilla force's military strength and the level of its military threat. The level of the threat is synergetic to all sources of strength, only part of which is military. The second strategic threat results from the guerrilla movement's activities that are aimed at eroding the target population's battle motivation, readiness to fight, and endurance. These activities corrode social and political cohesion, and call into question the internal security of the state and its

individual citizens. At times, the opposing regime is late in recognizing the serious nature and character of the guerrilla threat and addresses only its military dimension. Even when a strategic threat is identified, the regime continues to counter it largely with military means, without recognizing the need to act against all the guerrilla's sources of power.

2.4 Technology and Guerrilla Warfare

While the guerrilla's weapons remain the bomb and the rifle, more recently, advanced technology has also been introduced into guerrilla arsenal. Examples include night vision system, remote control explosives, communications systems, communications intelligence (COMINT) systems, ultra-light aircraft, anti-tank missiles, anti-aircraft systems, and rockets with ranges of dozens of miles. These and other weapons have added new capabilities which enable, with minimum risk, long range target attacks, attack of armored vehicles, maintenance of an effective anti-aircraft defense, and receiving of early warning of enemy movements, which allow guerrilla fighters to vacate an area in time or to plan a surprise attack. One of the reasons guerrilla forces have been able to equip themselves with advanced weapon systems is the large quantities of modern weapon systems which can be found in the free market, for very reasonable prices. While modern weapons systems require a higher level of fighters than in the past, this is not an insurmountable difficulty. Many of the systems are relatively easy to operate and the top level guerrilla fighters are capable of using them. Thus, there is an ongoing concern that a guerrilla movement might obtain chemical and biological weapons. If this were to happen, the quality of manpower would not be an obstacle to using them.

2.5 Attributes of Counter-Guerrilla Warfare

A regime or government struggling against a guerrilla movement is on its defense, from the strategic point of view. On the operational and tactical level, the struggle has defensive and offensive facets. Generally, governments recognize their inability to destroy the guerrilla movement and make do with wearing it down and minimizing its own attrition. This is also the tactical and operational goal of the guerrilla movement, so there is a great deal of correspondence between the goals of the two contenders. Thus, the characterization of the counter-guerrilla struggle should be carried out in parallel with the delineation of the guerrilla movement's weaknesses.

The principal goals of a war against guerrillas is the preservation of the regime, of the population's normal course of life, and the removal of the strategic threat which the guerrilla movement constitutes. Governments generally recognize their inability to destroy the guerrilla movement entirely as an operative goal, and are satisfied with attrition of the guerrilla movement, especially as reducing its hostile activity to a tolerable level. Winning a counter-guerrilla campaign requires investments in weapon systems, manpower, organization and innovative doctrine: " Guerrilla warfare is decisive only where the anti-guerrilla side puts a low value on defeating the guerrillas and does not commit its full resources to the struggle."29

Military activity against the guerrilla movement includes policing activities, border patrols and guard duty, covert operations, counter-terror, and intelligence. It also involves political, economic, social, or diplomatic activities. Guerrilla warfare develops in parallel with the guerrilla movement in the areas of strategy, tactics, diplomacy, media, and so on, including cooperation with neighboring and friendly states. Those fighting guerrilla movements understand the importance of the media in the battle for public opinion, but for the most part have yet to deal properly with this issue. Counter-guerrilla forces are improving by adapting new weapon systems, but they still do not direct sufficient technological efforts to research and development (R&D).

Guerrilla groups become more professional over the course of the conflict until they sometimes are on a higher quality level than the regular army units fighting them. For example, the Hizballah forces in Lebanon, who display a high level of field skills and expertise in operating mortars, rockets, ground-to-air missiles and intelligence gathering devices.³⁰ A modern distinction of the asymmetries between regular and irregular warfare was formulated by Gotowicki³¹:

Table 1 : Modern Definition of War

Parameter	Modern War	Irregular War
Organization	Organized	Informal
Technology	Advanced Technology	At-hand Technology
Control	National Direction	Local Direction
Doctrine	Coherent Doctrine	Ad hoc Doctrine
Manpower	Soldiers	Warriors
Warfare	Decisive Battle	Raids & Skirmish
Logistics Dependency	Logistics Dependent	Logistics Independent
Supporters	Allies	Accomplices

2.6 Comparison and Implications

The following table (No. 2) reflects the phenomenon that some characteristics are common to both guerrilla and counter-guerrilla. These include the comprehensive and operative goals, basic motive, attack targets, warfare methods, and weapon systems. Both sides declared a comprehensive goal of destroying the opponent, but in practice recognize their inability to realize this goal. The operative goals of each side are thus largely to weaken and wear down the opponent and its leadership through military, political, and psychological warfare,³² and through media warfare, while in its broad sense, is an information warfare.³³ The great similarity between guerrilla and counter-guerrilla warfare requires careful study of guerrilla warfare and terrorism in all its forms, and to learn the various lessons of the wars of the past. Regular armies assigned to counter-guerrilla warfare have understood that one of the ways to cope with guerrilla movements

is to adopt their tactics. Counter-guerrilla units also adopt guerrilla weapons, while making improvements by capitalizing on their technical and technological abilities.

Table 2: The Parameters of Guerrilla and Counter-Guerrilla

Parameter	Guerrilla	Counter-Guerrilla
Comprehensive goal	Elimination of regime, creating independent entity	Elimination of guerrilla movement. Full realization of sovereignty
Operative goals	Attrition, preservation of force	Attrition, reduction of guerrilla activity, minimal attrition of own force & of national motivation
Definition of enemy	State regime, regular army, area defined by its borders	Irregular forces, internal or external supporting population, undefined territory & leadership
Basic motivation	Existential need	Strategic or existential threat
Strategic goals	'Weak areas', social architecture, external targets, public opinion	Sources of strength, allies (states, movements), public opinion
Targets	Civilians, government facilities at home & abroad, soldiers, leaders	Fighters, bases, leaders
Intelligence	Targets	Early warning, targets, real time
Military characteristics	Low signatures, concealment and camouflage, ground mobility	Firepower, fixed targets, cumbersome bureaucratic & command structures, large quantity of available means, insufficient doctrine
Tactics	Initiated operations, terrorism, surprise, media warfare, violence against relevant population	Routine harassment activities, initiated operations, counter-guerrilla warfare, media warfare
Weapon Systems	Light arms, explosives, long-range rockets, small teams	Lights, explosives, special units, regular units, or helicopters
Advanced Systems	Electronic mines, night vision, COMINT, Ultralite aircraft	Night vision, accurate weapons, advanced fencing, COMINT, C3I system, electronic warfare
Military Potential	Poor, relative to the enemy	Large but difficult to exploit its potential
Support of population	Vital	Important
Allies' Support	Great importance, significant	Certain significance

Chapter 3: Counter Guerrilla Air Warfare: Operational Doctrine

The subject of this chapter is the use of air power in counter-guerrilla warfare. The air force may well be one of the most efficient means of response by a state to guerrilla warfare and other similar threats. The major means for carrying out counter-guerrilla operations by air are attack helicopters, assault helicopters, airborne commando forces, and attack aircraft, integrated with airborne and ground intelligence systems, command and control systems, all belonging to the air force and under its command, in collaboration with other military and political elements. However, the obstacle to realizing this potential is the lack of a doctrine guiding the development of tactics, weapon systems, and the structure of an operational organization. This chapter attempts to formulate a framework for such a doctrine.

3.1 Why the Air Force

The main criteria for military success are: reduction of the number of casualties, reduction of guerrilla activity, reduction of the threat to civilians and population centers. Counter-guerrilla warfare in its present format fails to produce the desired results, militarily and politically. The major potential of counter- guerrilla air warfare lies in the development of weapon systems and the formulation of operational doctrines.

Airborne weapon systems are far superior to weapons in the hands of guerrillas. Most of the advanced weapon systems that give the military flexibility, mobility, firepower, maneuverability, and intelligence in relevant time spans are airborne means. These include assault helicopters, capable of significantly reducing distance between guerrilla groups and a regular army; attack aircraft for rapid strikes; UAVs for obtaining intelligence; and airborne communications systems. These systems and forces are extremely mobile, and are capable of responding to guerrilla operations and of initiating operations in shorter time spans than the time required by guerrilla teams. Attack helicopters, in particular, can accurately concentrate superior firepower and with better range than can a guerrilla force. The combination of high mobility, immediate response, and concentration of firepower, create an entirely new synergistic ability to cope with guerrilla activity, demonstrated in practical terms in a broad range of operations in Lebanon, especially in operations like the kidnapping of the guerrilla leader Mustafa Dirani in May 1994.

3.2 Qualities of Counter-Guerrilla Air Power

Several fundamental traits of air power are important for an analysis of counter-guerrilla warfare, since they consist of the main advantages of air power over guerrilla: 1) the capability of immediate response; 2) the capability to hit long range targets deep in enemy territory; 3) the capability to quickly concentrate forces and firepower; 4) the high kill capability of small forces; 5) the capability for autonomous, seamless operations; and 6) the lack of restraints by topography and layout.

In order to effectively realize these abilities, air power should exploit the entire spectrum of the leading edge of technology, and should make use of advanced weapon systems, which are not approved yet for regular units, such as space systems.³⁴ Space systems can support a special task force across the range of operations, by gathering information through mission execution to battle damage assessment. Space assets provide assistance with command, communication, positioning, navigation, and weather forecast. Satellite imagery and electronic intelligence can be used for mission route planning, detection and threat avoidance, mapping and detection of obstacles for very low flying safety.³⁵

Air power has an additional characteristic that has important implications for counter-guerrilla warfare, in contrast to ground forces. Ground forces acquire some vulnerability when gaining control over a given territory. Its occupation is frequently a burden, since the occupying force must deploy forces to secure, guard, and patrol the territory, thus losing the initiative. The invading force and its bases become new targets for the guerrilla, and paradoxically, capturing territory disables the occupying force. Guerrilla forces have an advantage over ground forces, since they have no qualms about giving up territory temporarily, retreating or dispersing in order to attack once again under improved conditions.³⁶ However, guerrilla has no advantage over air power in this respect, since air power has a similar attitude towards territory, marginalizing this element in relation to the concentration on the destruction of forces.³⁷ Thus the advantages of air power could help focus the struggle on wearing down the guerrilla force without the unnecessary burden involved in the occupation of territory.

3.3 The Weaknesses of Air Power in Counter-Guerrilla Warfare

Weapon systems, operational units and organizations have weaknesses and limitations alongside advantages and capabilities, and this is true also of air power used against guerrilla forces. The main limitations stem from certain environmental conditions:

- * In an urban environment the operative capability of air power is greatly reduced since the guerrilla fighters easily assimilate into the population, and the fear of hitting civilians who are not linked to the guerrillas creates severe difficulties for air operations.
- * The proximity of friendly forces constitutes another limitation, since air attacks can hit these forces. This problem exists with regard to all types of air warfare against ground forces, and is not unique to counter-guerrilla warfare. Therefore, most of the integrated air warfare should be a few miles beyond the boundary line of friendly forces.
- * Poor visibility and adverse weather conditions also considerably reduce the efficiency of air power, both in conventional and in counter-guerrilla battle. Lack of precise and updated intelligence on targets and threats is another precondition that decreases the effectiveness of air power.
- * The high cost of operations, particularly the price of the air platforms, which is extremely high. However, as they are purchased for other basic roles of the air power, their use in counter-guerrilla warfare actually improves their cost-effectiveness. Another

weakness is the vulnerability of the air platforms, in particular the different types of helicopters, which requires that they be used cautiously, wisely, and with careful planning.

3.4 Airborne Forces

Airborne forces deployed against regular armor units with armored forces, artillery, and so on, suffer from the following weaknesses: relatively inferior firepower, restricted mobility after landing, 'shortness of breath' due to logistic difficulties in supplying material far away, relatively low survivability, and restrictions on the size of the force.³⁸ In contrast, in a counter-guerrilla mode, the above weaknesses are diminished, and most of the advantages of air power exist (including in situations involving airborne units in an envelopment operation), since guerrilla forces are equipped mainly with light arms. The advantages of airborne forces in such situations include: flexibility in operation, tactical and strategic mobility via helicopters, both close to the front and deep in the territory held by the guerrilla forces, superior firepower, relatively high survivability, and quantitative superiority at decisive engagements through offensive close air support.

Table 3: Comparison of Ground & Air Force Counter-Guerrilla Task Force

Characteristics	Ground Force	Air Force Counter- Guerrilla Task Force
Mobility	low, dependent on layout and topography	Unconditioned high mobility
Agility and rapid response	low, less than the guerrilla force	Exceedingly rapid
Firepower	Limited in quality and quantity, resembles the guerrilla fire- power	Best conventional weapon systems
Concentration of force	Slow, limited in force size	Rapid and strong relative to the guerrilla force
Survivability	Moderate, battle within range of guerrilla weapons	High, standoff munitions in most encounters
Intelligence	Slow, inaccurate, relying on outdated technology, improving	Rapid, available on-time advanced technologies (sensors, UAVs), meets operational requirements
Range of action	Short	Long
Offensive capability	Moderate	High
Suitability to counter-guerrilla warfare	Moderate, at best equal to guerrilla force, requires - at least temporarily - occupying territory	High, superior to guerrilla force in mobility, firepower, and concentration of fire, not required to capture territory

Command	Situation picture unclear, insufficient ground C3 system	Adequate picture of situation, rapid and reliable C3 system, Near-real-time command
Evacuation and rescue	Rapid only with air means	Rapid
Medical care	Rapid only with air means	Rapid
Supply	Slow, vulnerable to guerrilla force, requiring escort	rapid, flexible, with survivability

3.5 Air Force Counter-Guerrilla Task Force

Air power, in most cases, cannot win a counter-guerrilla war alone. However, unification of all functions of offensive operations (intelligence, planning, and execution) under the command of the air force, can bring about a revolution in the long term outcomes of campaigns against guerrilla forces. A model for the creation of integration of advanced technology and high quality manpower would be the Air Force Counter-Guerrilla Task Force, a specialized task force for well-defined goals and missions, whose principal role would be counter-guerrilla warfare. Its headquarters - an air force unit - would enjoy full responsibility and authority for training the units, the development of operational and tactical doctrines, command in combat, and the operational evaluation of operations weapon systems. The United States Air Force has built a Special Operation Forces unit (AFSOF). This unit is organized and employed in small formations, capable of both independent and supporting operations, with the purpose of enabling timely and tailored responses. 39

3.6 Structure of the Air Force Counter-Guerrilla Task Force

The proposed Air Force Counter-Guerrilla Task Force must be constructed according to several guidelines. First and foremost, the force must specialize in this form of warfare in its training and doctrine. Second, the structure of the force, its doctrine, its training, and its command must be based on inclusive integration of all elements of the force, in order to allow efficient coordination and cooperation, and a common language. The following chart delineates a possible structure of such a task force, including the conduct of operations, processes and activities of the Air Force Counter-Guerrilla Task Force, which will be delineated according to this chart.

Table 4 : Structure of Air Force Counter-Guerrilla Task Force 40

Commander of the Air Force Air Force Counter-Guerrilla Task Force		
Intelligence Element	Command and Planning	Operational Unit
Collection	Planning teams	Attack helicopters
UAVs unit	Professional experts	Assault helicopters

Ground observers	C2 Teams	Attack aircraft
Analysis team	C3 systems	Airborne commando
Target production		Electronic warfare
counter-intelligence		

3.7 Conduct of Operations

This study cannot go into details of the suggested operations. However, in order to allow the reader to get a sense of the way in which such a task force would operate, a possible cycle of activities in a single operation will be described.

The intelligence element belonging to the task force would search and locate a guerrilla force moving far from the front-line. Following, several forces would be scrambled to engage the guerrilla force. An additional force would be flown to the designated area in order to engage the guerrilla force. A special force of the airborne unit, deployed by assault helicopters nearby the guerrilla unit, would use laser designation systems in order to mark it for attack by air. Simultaneously, attack aircraft loaded with precision anti-personnel munitions would take off towards the guerrillas for the completion of the mission. In addition, assault helicopters manned with an airborne elite unit belonging to the force would be deployed in ambushes on the expected retreat routes of the guerrillas, in order to hit or capture the escaping survivors. Throughout the entire procedure of scramble and engagement, contact would be maintained with the guerrilla force by means of data collection (UAVs, for example) and would designate it by laser designators and other means for aircraft and helicopters. The goal of the first wave would be to destroy a part of the force and to 'freeze' the rest of it in place. At this point, after the guerrilla force has lost its maneuverability and mobility, since movement would expose it to additional volleys, attack aircraft and attack helicopters would continue to destroy the guerrilla force. Finally, the elite unit would close in and finish off the battle. The few guerrillas who succeeded in escaping would probably run into the ambushes and be hit by them.

3.7.1 Unity of Command

Comprehensive authority and responsibility (Unity of Command) is one of the prominent principles of war and of air strategy, which should be applied in counter-guerrilla air warfare.⁴¹ In counter-guerrilla warfare, improvisation and innovation are the secret of success. Attaining optimal coordination depends on lengthy and informal understanding and acquaintance among commanders of different levels under common command. Thus, the headquarters of this task force should have broad areas of responsibility and authority and should consist of the following roles: 1) Training the air task force; 2) Initiating and planning operations; 3) Commanding the task force in training and in combat; 4) Analysis of previous operations and improvements in tactics and planning; 5) Development of operational doctrine. 6) Defining operational requirements for development of unique weapon systems.⁴² The majority of modern armies and air forces established special forces for counter-insurgency missions in accord with this concept.

3.7.2 Intelligence

Counter-guerrilla Air Warfare planning and execution is intelligence- intensive. Operations planners should use all-source intelligence from both organic and external intelligence sources. Harkabi, as a representative of the military viewpoint, emphasized the importance of tactical intelligence: "Development of tactical intelligence is very important for counter-guerrilla warfare, in order to stop the guerrilla's efforts and to hit them. Exploiting strong but blind power against a 'stealthy' enemy as guerrilla is useless and dangerous."⁴³ Air power requires 'real time intelligence,' since the swiftness of its operations demands knowledge on the enemy at the time of the execution of operations. Specific efforts should be invested to satisfy this requirement."⁴⁴

A proper focus of intelligence on irregular forces should establish a database on various groups' identification and intentions, local political alignments and alliances, guerrilla goals and objectives. It should also monitor disaffected and radicalized individuals, and assess the influence and intentions of local religious leaders.

The present intelligence requirements for countering guerrilla are strongly focused on human intelligence collection.⁴⁵ An intelligence officer offered an outstanding job description of the role of the Air Force's Intelligence branch in counter-guerrilla air warfare:

Air force participation in intelligence gathering, by making use of the special equipment and employing methods peculiar to aircraft, is not only applicable, but of vital importance in a counter-insurgency war. There is a continuous demand for updated intelligence, which becomes crucial when a planned operation is to be carried out. By means of aerial reconnaissance, changes in insurgent deployment may be detected. . . . Intelligence material is needed for target allocation, for the preparation of 'hard cop' for air crews and as evidence to be used in public relations operations and any political campaign directed at the insurgents. In intelligence gathering, use is made of available means, such as remotely piloted vehicles, and SIGINT (mainly COMINT). It further involves the operation of the intelligence infrastructure as a whole, as it would in a conventional war, including for instance infra-red photography, fast dissemination and briefings.⁴⁶

The intelligence community would provide intelligence infrastructure and equipment such as software, SIGINT systems and maps, and long-term intelligence, for example information on leaders, sources of recruitment, doctrines, weapon systems, and links with states and other organizations. Immediate assistance would be provided by the intelligence of the air force, which would supply air photos, expensive and rare systems and operations such as reconnaissance aircraft and satellites, SIGINT system, and new information warfare systems.⁴⁷

An indispensable role of the intelligence component of the task force would be to gather, collate, integrate, analyze, process, evaluate, and distribute tactical short-range, near-real-time information concerning the capabilities, intentions, and activities of actual and potential guerrilla enemies by using visual, imagery and electronic reconnaissance.⁴⁸ This component of the task force must satisfy the never-ending demand for near real-time information on relevant targets, and at the same time it must identify the threats which might interfere with the operations. Accurate information on targets in relevant time is the Achilles' heel of counter-guerrilla air warfare. The Air Force Counter-Guerrilla Task Force's responsiveness, accuracy, and lethality significantly augment the need for precise and update information on targets, while locating and tracking human moving targets is much more difficult than locating armor and fixed targets. Therefore, air power must shape unique requirements for sensors' research, development, testing and evaluation (RDT&E) and procurement. An LIC American expert criticized the US military intelligence tendency to emphasize the technological side of intelligence, while

LIC operations, however, require effective political/human intelligence, which can be gathered and analyzed by well-educated people with operational experience.... Not having accurate intelligence... can be deadly. For instance, the disastrous bombing of US marines in Lebanon in October 1983 that cost almost 300 American lives, is largely attributable to a lack of understanding of the nature of the threat in a LIC situation. US forces in Lebanon had little knowledge of how various Lebanese and Palestinian Liberation Organization (PLO) faction were likely to respond as the US escalated military actions.⁴⁹ HWHW[HW3]

That frank evaluation of the US Air Force's fundamental conception of building an intelligence organization for counter-guerrilla air warfare could well apply to other modern air forces. Due to some inherent limitations, advanced technology falls short of satisfying the operational requirements for counter- guerrilla information gathering systems. The importance of the organizational structure, in which intelligence is under the authority of the Air Force Counter-Guerrilla Task Force commander, is crucial. During HIC, ground forces' intelligence can supply information on targets to the aerial forces while the latter fulfill the close air support missions. However, during counter-guerrilla air operations, much closer cooperation is required between the intelligence and the task force. This stems from the fact that the 'Life Cycle' of targets from the time they are located to the time they are lost is so brief that real-time coordination and communications lines are required between 'eyes' and 'teeth', i.e., between intelligence officers and shooters. No less important is the extensive knowledge the intelligence personnel must have about air weapon systems and various environmental conditions such as weather and visibility.

3.7.3 Unity of Planning

Counter-guerrilla operations planning is divided according to the various partner authorities; while ground unit operations are planned in the framework of the regional command staff, air operations are planned by the air force branch. The fundamental

differences between the two branches are the main cause which can lead to failure, due to lack of coordination and inappropriate 'tailoring' of the boundaries of responsibility and authority. Unity of command dictates unity of planning, which means that any function which could be helpful would be represented at the planning stage, under the Air Force Counter-Guerrilla Task Force umbrella.

Additional important contributions of unified planning include:

- 1) Improvement of the proficiency and expertise of the operational planning.
- 2) Improvement of responsiveness, location and tracking of new targets.
- 3) Optimal integration in planning that may significantly improve the outcome of counter-guerrilla air warfare.

Unified planning teams under the command of the task force would plan operations in near-real time. The unified planning element would change the role of the task force from a responsive to an offensive, initiating one. This would reduce the guerrilla forces' offensive and initiative capabilities, and would force them to engage in defense. The planning unit would be responsible for developing tactics and doctrine. In order to realize these roles it should be exclusively devoted to that purpose.

3.7.4 Unity of Organization

Special units are involved in counter-insurgency. When such a unit is assigned to the air force, a new organization is created whose capabilities and advantages should be evaluated. There may well be a number of organizational frameworks, according to the diverse conditions and circumstances among countries, armies and air forces. One example is the use of helicopters: in the US most of the helicopters belong to the army, whereas in Israel they belong to the air force. This difference effects the structure of the Air Force Counter-Guerrilla Task Force. The task force, under the air force authority, would include attack aircraft, attack helicopters, assault helicopters, a commando unit, a UAV unit, a communications and electronic warfare component, a logistical component, and an evacuation and medical team. These elements, and a few others, would be subordinated to the task force's commander. Additional elements may be added to them in accordance with particular needs or as part of the operative conception resulting from special aspects of the territory, the environment, and the enemy.⁵⁰

3.8 Suitability of the Principles of Air Warfare

Too frequently, pragmatic operational-level thinking tends to ignore the theoretical infrastructure developed by the defense community. However, comparison of new doctrine and theoretical infrastructure is not less important than empirical evaluation. Analysts should evaluate contemporary thinking in light of the basic principles of war. Therefore, despite the uniqueness of counter-guerrilla air warfare, it should be viewed in accordance with the principles of air warfare as recently formulated.⁵¹

Counter-guerrilla air warfare corresponds with the following principles:

- * Air Superiority
- * Central Command
- * Versatility and Flexibility
- * Destruction as the Essence of Air Warfare
- * Preservation of Power
- * Comprehensive Authority and Responsibility

An essential condition for effective action against a guerrilla force is air superiority over the battle area. This is essential as this type of warfare requires long endurance at relatively low speeds in the area of operations. The air-crew must devote full attention to the mission while being exposed to interceptors and to Surface-to-Air Missiles (SAM) systems.⁵² A substantial advantage of the Air Force Counter-Guerrilla Task Force lies in the central command which would enable, due to a very short chain of command, coordination, unity of goals, smooth communication and integration. Integration would allow versatility and flexibility in tactics, weapon systems, and integration of units, depending on the changing conditions, such as visibility, the size of the guerrilla force, its distance from the border, topography, and, no less important, internal politics, international relations, and threats to national assets and interests outside the country (embassies, cultural centers). From a purely military point of view, destruction is the essence of counter-guerrilla air warfare. The tactical-level goal is the killing of warriors and the destruction of the human infrastructure of training, command, propaganda, etc. Counter-guerrilla warfare is generally a never-ending war of attrition, in which the winner is the side that best preserves its strength, motivation and national willpower. This type of warfare is led by the principle of preservation of power that guides any air power operation.

3.9 Suitability of Basic Guidelines for Operations

It is of interest to evaluate the extent to which counter-guerrilla air warfare corresponds with some of the basic guidelines defined recently ⁵³:

- * Offensive and Initiative Approach
- * Synergy and Integration
- * Determination and persistence
- * Evaluation of Operations and Lessons Implementation

One of the keys to success in counter-guerrilla war, and especially in air warfare, is the offensive and initiative approach that puts the guerrilla on the defensive, forcing it to hide and to absorb attacks. By doing so, its offensive capability is diminished and its civilian backup and infrastructure is weakened. Counter-guerrilla warfare has recently become one of the top priority roles of air forces, using sophisticated means, strategy and tactics. The Air Force Counter-Guerrilla Task Force integrates a variety of advanced systems and units in order to produce a strong synergistic effect for defeating the guerrillas in every engagement. Such outcomes would enhance the government to pursue the entire range of social, political, and propaganda advantages. Pursuing a long counter-guerrilla war of attrition without clear victory requires determination and persistence. A guerrilla war is in continuous metamorphosis and is not bound by the more rigid rules of an all-out war or a static war of attrition between countries. A rapid process of evaluation of operations and implementation of lessons learned is thus of vital importance, in order to respond adequately and on time to new challenges.

Conclusion

There is not yet a common understanding of the air power's capability to fight and win a counter-guerrilla campaign, and proof lies a long way ahead. Although counter-guerrilla air warfare is a unique type of air warfare, it should rely on old and proven methods as well as relying on innovative concepts and technologies, in order to employ forces and execute operations successfully. The organization, training, planning and fighting of the Air Force Counter-Guerrilla Task Force should be based on simplicity, quality of manpower, speed, surprise, creativeness, self-criticism, autonomy, a very short chain of command, accurate intelligence, the most advanced weapons and systems, and the aim for the highest level of achievements.⁵⁴ The challenges of this type of air warfare demand the most proficient task force, equipped with adequate advanced means, and last but not least, the best available commanders.

Chapter 4: Operational Concept for IAF Counter-Hizballah Campaign

4.1 Introduction

The role of the IAF in the Southern Lebanon War is no different from the general tenets of operational doctrine for classical counter-guerrilla air warfare. Thus it is appropriate to apply the model of the air power role in counter-guerrilla warfare in this case.

However, this work discusses only its applications and implications for operational issues, organizational structure, and the decision-making process. Since this study is limited to the doctrinal level, and since data limitations prevent detailed elaboration on the subject, quantitative analysis will be left to subsequent studies. There are some precedents for doctrine of counter-guerrilla air warfare, including the USAF Special Operations Doctrine.⁵⁵ This doctrine supports the heretofore-ignored essential need to formulate a counter-guerrilla air warfare doctrine for the IAF.

4.2 Capabilities

Until recently, air power was not considered suitable for counter-guerrilla warfare. However, developments in military technology, doctrines and operational experience have changed this. Evaluation of the IAF role in the Southern Lebanon War should begin, then, with an illustration of its capabilities. The IAF employs a mix of platforms, weapon systems, surveillance and C3I systems, including attack aircraft, attack helicopters, UAVs and Precision Guided Munitions (PGM). Although the exact operational and technological capabilities are classified, data from unclassified reports published by the IAF about weapon systems, operations and potential capabilities will suffice.

4.2.1 Attack Helicopters

Attack helicopters are one of the most effective weapon systems for counter-guerrilla warfare. Their mobility, speed, lethality and responsiveness are only some of its formidable qualities. The IDF employs the Apache, which is equipped with an advanced weapon system that enables it to fulfill multiple missions such as precision attack. The TADs optical system is used for target acquisition. The optical system's zoom capability of 126 enables precise target acquisition from long range, enhancing the helicopter's survivability. During night attack, the weapon systems officer makes use of the FLIR (Forward Looking Infra-Red) system which creates a picture of the terrain and targets according to differences in temperature. A laser designation system is used to illuminate the target. Then a Hellfire missile equipped with a laser seeker is launched. Its seeker homes in on the target and the missile hits it accurately, destroying it with a deadly warhead. The accuracy of the missile and the penetration capability of the warhead, in combination with the Apache's weapon system, make them an ideal weapon for precision attacks.⁵⁶ An American officer delineates the advantages of attack helicopter units as follows:

The concept uses rotary-wing aircraft to project a combined arms force that maneuvers at significantly greater speed and depth ... It solves the limitations in ground mobility, protection and firepower of current light-force, designs and maximizes the benefits of the digitized battlefield and precision weapons advances.⁵⁷

The IAF has advanced attack helicopters, flown by experienced pilots, equipped with suitable weapons and systems for counter guerrilla warfare. The IAF is supported by Israel's defense industry, which upgrades helicopters according to the changing requirements of crews in the field.

4.2.2 Attack Aircraft

The IAF emphasizes the use of advanced aircraft and their weapon systems for air-to-ground warfare. The new age of air-to-ground weapon systems significantly enhances the capabilities of attack aircraft for effective involvement in counter-Hizballah operations.

An F-16 C/D equipped with LANTIRN pod integrated with the aircraft fire control system, enables precision attacks twenty-four hours a day and

in all weather conditions. Another aircraft in the IAF arsenal is the Kurnas 2000 (an upgraded F-4E, used as an excellent night hunter). Its SAR (Synthetic Aperture Radar) enables it to execute its missions twenty-four hours a day and in any weather conditions. Its radar can map ground contours at high resolution and can recognize the axis of movement, or masses of armored vehicles.⁵⁸

4.2.3 Munitions

In the past, the IAF refrained from using expensive weapons against Hizballah. However, the recent importance attributed to the Southern Lebanon War has substantially changed this perspective. Col. G., chief of the munitions branch has assessed the use and results of expensive but accurate munitions:

Attack helicopters used Hellfire and TOW guided missiles. Attack aircraft used various laser-guided bombs, and 'dumb' bombs. . . . All types of munitions have had a achieve a high percentage of target hits. Hellfire and TOW missiles achieved excellent hit percentage; laser-guided bombs also achieved high percentage, much better than the producer data.⁵⁹

4.2.4 Unmanned Airborne Vehicles

UAVs play an essential role in Southern Lebanon. They are very useful as surveillance and target-acquisition systems in the hunting process. A good example is the UAV squadron activities during the 'Grapes of Wrath' Operation which actually began its activities long before the operation. Their sorties assisted in locating potential Hizballah targets such as training camps, sites containing a concentration of fighters, and commanders' houses... "Thanks to the UAV's FLIR camera," says Major S., "UAVs can see at night. Darkness is no longer a cover for the Hizballah fighters. One night we located a team immediately after a rocket launch. The team used a car to escape; we directed an aircraft that hit the car . . . in a few minutes."⁶⁰

4.2.5 Katyusha Launchers Hunting

Rockets launched towards Israeli towns and villages were the main cause for IDF offensive operations in Lebanon. Most of the activities against launchers were executed by the IAF. General Y., Commander of the Joint Operation Unit, mentioned that in these operations the IAF concentrated considerable firepower that included the use of attack helicopters, attack aircraft, and artillery on tracking down the Katyushas:

Some attack helicopters and aircraft formations were constantly on patrol, searching for rocket launchers. Simultaneously, a thick intelligence array was deployed for locating suspicious vehicles and movement of people. Additional information was gathered by artillery radar arrays. Within seconds from a launch, we received the rocket trajectory and an initial

launcher position, towards which aircraft or helicopters were directed, in order to locate and destroy the launcher.⁶¹

4.2.6 Night Attack

Effective night attack is a challenge for any air power. Counter-guerrilla night attacks are particularly so because of the targets' low cross-section. Indeed, such operations are important for applying the twenty-four-hour pressure, necessary for attrition of guerrilla fighters and their organization. The IAF has improved its night warfare capabilities and tactics and implements them often in night operations:

Fighting at night in Lebanon has provided the IAF with three main advantages: aircraft and helicopter survivability enhancement; surprise; and 'around the clock' fighting. Over the last few years the IAF has purchased hundreds of millions of dollars worth of equipment for night warfare, including missiles and guided munitions, infra-red systems and radar, and also some new Apache and F-16s with significant night warfare capability. ... Almost any platform in the IAF has means for flight and attack at night, and most of the improvements were incorporated during the last five years. . . . At the same time, the center of gravity in training has changed. The IAF today allocates a significant percentage of its flight hours for night training and exercises. This trend will be enhanced in the future.⁶²

4.3 The Independent IAF Campaign

The astonishing current operational capabilities of the IAF systems have been delineated in some detail in order to illustrate the potential effectiveness of the IAF. This potential, however, is not fully applied, plausibly due to political constraints, military limitations, and mainly to the lack of a comprehensive doctrine for counter-guerrilla air warfare. The subordination to ground commanders prevents the IAF from optimal exploitation of its advantages.

The proposed IAF concept of operation stemming from the air strategy consists of several building blocks, including: 1) An independent IAF campaign; 2) Creation of a task force; 3) Proficiency; 4) Intelligence; 5) Preservation of force and 6) Organizational structure.

The degree of air power independence is a significant factor in planning and executing aerial operations. It is measured by the boundaries of responsibility and authority obtained by air power commanders. The advantages and disadvantages of air power's independent operations has been pointed out. An independent campaign means that the IAF would be given undivided responsibility and authority to achieve assigned missions, to deploy and employ forces, and to manage the battle.

Such a campaign has a few requirements. First, it can occur in an area in which friendly forces do not operate. Second, the IAF would need various means, such as commando

units and intelligence assets for complementing its capabilities. Third, would require freedom of action, defined by policy, orders, and directives, which would enable the IAF to initiate or react quickly to the dynamic situation and transient opportunities and threats.

4.4 IAF Task Force

The term 'Task Force' is defined as "A grouping of units, under one commander, formed for the purpose of carrying out a specific campaign or mission."⁶³ A task force assembles various units, agencies, professions, ranks, and functions into an integrated force under one IAF commander, who is assigned to the mission until its accomplishment. The IAF can learn from the USAF, which has already built a Special Operations Forces (AFSOF).⁶⁴

The IAF tradition continues to resist this approach, which seems to contradict the principle of versatility and flexibility due to the dedication of the task force to one mission. However, lessons of the past, and the experience of IDF special units as well as other national armies, show that building a task force dedicated for counter-insurgency missions is generally a useful and adequate approach. An IAF Task Force, dedicated to counter-Hizballah operations may be a consequential response to the challenges of the highest proficiency required for counter-guerrilla air warfare.

4.5 Integration and Synergy

Any system seen on its own has limitations and weaknesses. This is true regarding any weapon system, data-gathering system, planning team, C4I element, or any other function related to counter-guerrilla warfare. Moreover, different units have their own weaknesses and vulnerabilities. The IAF's advantages result from the integration of a variety of systems and units - including planning, intelligence, and operations - under a central command, generating a strong synergistic effect. Thus an IAF Task Force could enhance the requirements to fight the Hizballah.

Another level of integration can exist between ground and air units at the tactical, operational and strategic levels. Since time is a dominant factor in counter-guerrilla operations, complicated integration works against the nature of these operations. Nevertheless, a task force could facilitate such integration.

4.6 Proficiency

Though The IAF has engaged guerrilla forces for the last three decades, never has the qualitative challenge been as vigorous as the Hizballah challenge. Although the offensive capabilities are much greater than the threats to the platforms' survivability, due to air dominance over the battlefield, nevertheless, the continuous battle requires the highest degree of proficiency, achieved by dedicated manpower, resources, thinking, training, deployment and employment.

Fulfillment of the decrease in the rate of casualties, a national primary goal, requires significant improvement in the proficiency of air crews, planners, intelligence officers, commanders and the decision makers. The necessary changes in the concept of operations, such as versatility, high proficiency, and shifting of resources to LICs, require revolutionary processes rather than the current, slow, evolutionary one. Proficiency is a substantial element of that concept of operation.

4.7 Preservation of Power

The IAF's most important mission is the preparation for HIC such as the 1973 War. The IAF is considered the main deterrent and decisive arm, while LICs and resources invested in them are considered to be of secondary importance. However, in the periods between wars, air power is not fully exploited except in LIC. So, in general, the same IAF assets are used in LIC and HIC on a 'time-sharing' basis.

Thus the concept of operations should be to preserve the force during counter-guerrilla operations for a large-scale conventional war and for the sake of deterrence. The emphasis should be on preserving warriors, platforms, and unique systems, and technological and tactical surprises as well. Preservation of IAF power requires certain proficiencies (such as real-time location of new threats) that are absent in ground forces due to the uniqueness of the threats to aerial platforms. Realization of these proficiencies is dependent on the undivided responsibility and authority of the IAF for planning missions, real-time command and control, and execution of operations. Consequently, independent IAF operations, rather than integrated ones should be favored. Currently IAF is subordinate to supreme military echelons - the Chief of Staff, and to the Israeli government.

4.8 Intelligence

Since the IAF's main tactical goal of counter-guerrilla operations is destroying Hizballah targets, a crucial function of its intelligence is thus target production. A common argument against the prospects of successful counter-guerrilla air operations in Southern Lebanon is the lack of intelligence. Specifically, insufficient real-time targeting. This claim cannot be ignored. There are liabilities and weaknesses, which limit the IDF intelligence, which concentrates mostly on enemy capabilities, force deployment, doctrine and order of battle. This concentration is inappropriate against guerrillas; Assessment of the Hizballah's capabilities is usually well below the threshold of the IDF intelligence 'sensitivity' since these capabilities consist of no more than a few fighters, light weapons and explosives.

There are some technological and organizational solutions to this issue, but probably the most important benefit for the concept of counter-Hizballah operations is subordinating all necessary assets, functions and resources to the IAF Task Force.⁶⁵ By central command for all intelligence sources, and near-real-time target-acquisition, coordination would improve and the number of targets would grow.

4.9 Organizational Structure

The organizational background of most air forces is based on the principle of a central chain of command.⁶⁶ Under its umbrella, autonomous functions of planning, command intelligence and logistics are connected to each other and to the operational units in parallel lines of communication. The same structure should be established for an IAF Task Force.

This study proposes the creation of an IAF Task Force headed by a senior IAF officer whose role would be to wage an all-out campaign against the Hizballah. The new C4I function of the task force would be to gather the necessary professionals from other headquarters, and will create a unified staff consisting of officers in charge of planning, intelligence real-time command and control. In addition, it would have a small team for Battle Damage Assessment (BDA), learning lessons from operations, improving tactics, doctrine, planning, command, execution of operations, R&D, etc.

The structure of the IAF Task Force would be comprised of a three-legged compact organization according to the model delineated in the previous chapter. The first component would be the function of the small staff. The second would be the operational element; It would be composed of airborne platforms such as attack aircraft, attack helicopters assault helicopters, UAVs, reconnaissance and target-acquisition systems, precision munitions and a commando unit. The exact structure of these elements will be left to a more detailed study. The third component would consist of intelligence gathering assets, which would be connected to any available source of information and data, UAV, other aerial means, and ground support systems, which would conduct reconnaissance and targeting.

These functions would be placed under the management of the commander of the IAF Task Force. Most functions may be regarded as a series of independent operations requiring a high degree of proficiency, training, experience and devotion. As a result, the new organization would enable the IAF to become responsible for the offensive campaign in southern Lebanon and elsewhere (except for a narrow strip along the border of the security zone or the northern Israel border in the case of an Israeli retreat from the security zone). Other IAF elements would execute subordinate operations that resemble Close Air Support (CAS) missions. Such organization is suitable for many special units around the globe, including the proposed IAF Task Force.

Conclusion

Counter-guerrilla war challenges some of the basics of Israel thinking on battle management, which insists on swift campaigns and decisive victories (suitable for battles against regular armies), but not necessarily appropriate for counter-guerrilla warfare. Air power, and the IAF in particular, is used for swift operations and decisive victories. Generally, continuous operations and delayed results have somewhat decreased its creativity and flexibility. For example, during the War of Attrition the IAF operated CAS missions along the Suez Canal; deep operations around the Egyptian capital - Cairo;

destroying bridges on the Nile; and, at the end of the war, it fought the Russian-Egyptian surface-to-air missile system. All these missions began with astonishing and surprising operations, but after a while they became routine and predictable.

Counter-guerrilla air warfare is a specific type of attrition war, which requires a different approach and different expectations than from HIC. This different thinking should be translated into changes in goals and objectives, derived from the political long-terms goals.

Israel has never won a war defensively. The best way to use offensive fighting against the Hizballah in the foreseeable future is through aerial strikes. The ground forces can certainly defend the borderline, but a few kilometers beyond this line it is better to transfer the responsibility and authority to the IAF. This would allow the air force to deal with the situation in its own time, tactics, and arsenal, without cumbersome communication, coordination and approvals along the chain of command.

The task force's command and control center would then be able to supply real-time intelligence on targets and scramble its forces to carry out an attack. Within minutes, attack aircraft and attack helicopters could blast the targets with lethal precision weaponry, keeping vulnerable troops at a distance far enough to prevent any casualties.

There are some arguments against this strategy. First, why did the intensive air attacks during the Operation 'Grapes of Wrath' not achieve a comprehensive victory? The second argues that most of the forces and weapon systems have already been employed. However, the quantity of operations against the Hizballah is not relevant. Air power is much more effective in an independent campaign than in a subordinated one. As long as the Air Force does not receive responsibility and authority for identifying the targets, locating and attacking them independently, the results will stay poor. The IAF carries out a great number of sorties, but cannot do so efficiently. The new concept of operations states that, with the same funding, the IAF Task Force would reach much better results. The assets are there; the resources are at hand; what is needed is a revolution in strategy. The IAF now plays a subcontractor role in the Southern Lebanon War, rather than initiator. A subcontractor does the job and goes home. But an initiator is responsible for the accomplishment of the broad mission. An appropriate conclusion of the discussion is a high-ranking IAF officer's comment on this concept:

The IAF can definitely do the job beyond the red line better and better. We are more accurate, more effective, [have] more deterrence, less threat of casualties. The deterrent effect is great...Hizballah no longer risks a barrage using many cannons; instead it has fallen back on isolated mortar fire.⁶⁷

A discussion of the future of the political and military situation in the Middle-East cannot ignore the possibility of continuous LICs. LIC may be enhanced as an instrument to advance the peace process and paradoxically, as an instrument to delay, prevent, and destroy such agreements. In addition, the proliferation of weapons of mass destruction

(WMD) in the region may prevent HIC, and enhance the use of LICs as the only instrument of violence supporting political and religious struggles. Consequently, the political elite, the national security establishment, and the civilian population in Israel should be prepared for long-term, low intensity conflicts.

It is plausible that fundamental changes in the Southern Lebanon situation may push the IAF to accept more responsibility. There are some signs of progress in the IAF counter-Hizballah campaign. The Head of the Branch for Operational Planning replied to a question referring to the implications for the IAF of the Israeli initiative to retreat from Southern Lebanon: "I am sure that it will enhance and expand the IAF responsibility for the security of the northern border. As no other forces will operate in Southern Lebanon, much more...will be [placed under] the sole responsibility of the IAF. As always, where soldiers can't fight - The IAF should fly."68

Summary

This work discussed the war between the IDF in South Lebanon against the Hizballah. It served as a case study for verifying and comparing the proposed model of counter-guerrilla air warfare. Counter-guerrilla air warfare is a new issue, and the potential of air power is growing due to technological advancements multiplied by doctrinal and tactical progress. This work analyzed the IAF capabilities, doctrines, and proposed roles in the Southern Lebanon War as a model that may be used effectively in LICs and in particular against guerrilla forces.

Military forces will be unable to create a qualitative and operational advantage over guerrilla forces if a conservative approach prevails. The time has come to reevaluate the structure of the military and the division of resources within it. Guerrilla movements are not the only threat to the qualitative advantage of the modern military forces. One of the obstacles to such a revolutionary approach toward counter-guerrilla air warfare is the lack of an updated doctrine for air power. A criticism of the US Air Force may illustrate this point: "We can trace the lack of clear air power doctrine for low-intensity conflict...to the intellectual heritage of the Air Force. The USAF has a cultural tendency to view an enemy as a static system containing centers of gravity that serve as suitable targets for strategic attack....Indeed, this bias toward mid-level conventional wars and against LICs has even resulted in considerable confusion....".69

Guerrilla warfare has strategic goals. Air power has a qualitative advantage over guerrilla forces. The thrust of this study is that an aerial task force should be devoted entirely to counter-guerrilla warfare. It would be:

- 1) trained specifically for this type of warfare,
- 2) equipped with the best weapon systems appropriate for this type of warfare,
- 3) responsible for operational requirements of developing weapon systems,

4) would formulate an operational doctrine,

5) would operate under a single commander who would train the aerial task force and would command it in battle.

This organizational concept would produce high levels of performance and suppress guerrilla forces 'quickly, forcefully, and elegantly.'

The leaders of air forces must outline a counter-guerrilla operational doctrine. Their role is to take the initiative, to become an offensive force against guerrilla forces while ground troops are assigned to guard the borders and security zones beyond the borders of the country. In fact, this concept, surprisingly, realizes part of Douhet's vision of an offensive and decisive air power, while the army's role is defending the country's territorial integrity.⁷⁰

The designers of a doctrine for counter-guerrilla warfare must consider the following points:

- * A ground force that conquers a territory with topographical importance, must defend that territory, and build a static defense array and a non-elite guarding force. The defensive deployment provides easy targets for guerrillas. In contrast, an air force is hardly susceptible to guerrilla attacks.
- * Holding territory beyond the country's borders, due to the requirements stemming from the guerrilla war situation, carries with it a heavy political and media cost. Air operations, which do not require territory, can prevent such damage.
- * A ground force that aspires to make contact with a guerrilla force should use tactics of patrols and ambushes. Its maneuver turns it into a target for guerrilla ambushes. In contrast, an aerial task force does not move through dangerous territory and sets 'Air' or 'Airborne' ambushes that decrease the risk during flight to the target and back.⁷¹
- * The stronger a guerrilla movement becomes the more it tends to construct physical infrastructure, deep in friendly territory, for training, stockpiling of weapon systems, command posts and communication. This infrastructure is by its nature a tempting cluster of targets for the aerial task force. Therefore, paradoxically, the strengthening of a guerrilla movement may make the air force extremely effective in suppressing it and forcing it back into tolerable dimensions.
- * The more offensive counter-guerrilla war is, the more the guerrilla movement is forced into a defensive posture and into 'evaporation status' until the threat dissolves. Without this offensive activity, the guerrilla will not be able to achieve even some of its goals. Large-scale ground operations against guerrilla forces resulting in heavy losses and political damage would be avoided if operational doctrine and conception of counter-guerrilla air warfare were formulated. Offensive air campaign is the very soul of the war

against a guerrilla movement. The anticipated contributions of an integrated air power are:

- 1) Improvement of offensive capability;
- 2) Reduction of the number of casualties;
- 3) Shortened reaction time.

While this doctrine cannot bring about an immediate resolution of the conflict, in the longer term it may have a significant effect in the transition from defensive doctrine to an initiating and offensive one, that will weaken guerrilla pressure on the civilian population and on the military forces guarding the country's borders or controlling regions, and will thus reduce the number of casualties. The creation of an Air Force Counter-Guerrilla Task Force will revolutionize the theory and practice of Low Intensity Conflict.

The new counter-guerrilla air doctrine will also affect other doctrines. Modern war has become more and more integrated and air power has become the decisive power. Until a few decades ago, ground units were organized coherently according to their weapons: armored units, infantry, and artillery. Now they are combined units consisting of various elements. In the years to come, units combining ground and air elements will be constructed, such as the US's Marine Expedition Force MEF. An integrated counter-guerrilla warfare unit is an effective model for the integration that would take place in other battlefields as well. But the ultimate concept of counter-guerrilla conflict is that beyond military campaign, a nation should adopt an initiative, an offensive comprehensive policy, in all domains of the struggle - political, diplomatic, media, economic aid, and peacekeeping - in order to suppress and neutralize the guerrilla movement it encounters. However, that issue is beyond the scope of this study.

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Glossary

AFSOF	Air Force Special Operation Forces
CAS	Close Air Support
C3I	Command, Control, Communication and Intelligence
C4I	Command, Control, Communication, Computation and Intelligence
COMINT	Communication Intelligence
FLIR	Forward Looking Infra-Red
HIC	High Intensity Conflict
LIC	Low Intensity Conflict
OOTW	Operations Other Than War
PGM	Precision Guided Munitions
RAF	Royal Air Force
SAM	Surface-to-Air Missiles
SAR	Synthetic Aperture Radar
SIGINT	Signal Intelligence
SLA	Southern Lebanon Army
UAV	Unmanned Airborne Vehicle
UNIFIL	United Nations Interim Force in Lebanon
USAF	United States Air Force

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