



THE BEGIN-SADAT CENTER FOR STRATEGIC STUDIES

Medium-Intensity Threats *The Case for Beefed-Up IDF Ground Forces*

Eado Hecht and Eitan Shamir



Mideast Security and Policy Studies No. 125

**THE BEGIN-SADAT CENTER FOR STRATEGIC STUDIES
BAR-ILAN UNIVERSITY**

Mideast Security and Policy Studies No. 125

Medium-Intensity Threats
The Case for Beefed-Up
IDF Ground Forces

Dr. Eado Hecht and Dr. Eitan Shamir

Medium-Intensity Threats: The Case for Beefed-Up IDF Ground Forces

Dr. Eado Hecht and Dr. Eitan Shamir

© The Begin-Sadat Center for Strategic Studies
Bar-Ilan University
Ramat Gan 5290002 Israel
Tel. 972-3-5318959
Fax. 972-3-5359195

office@besacenter.org
www.besacenter.org
ISSN 0793-1042

October 2016

Cover image: GPO, photograph by Moshe Milner, June 9, 2010

The Begin-Sadat (BESA) Center for Strategic Studies

The Begin-Sadat Center for Strategic Studies advances a realist, conservative, and Zionist agenda in the search for security and peace for Israel. It was named in memory of Menachem Begin and Anwar Sadat, whose efforts in pursuing peace lay the cornerstone for conflict resolution in the Middle East. The center conducts policy-relevant research on strategic subjects, particularly as they relate to the national security and foreign policy of Israel and Middle East regional affairs.

Mideast Security and Policy Studies serve as a forum for publication or re-publication of research conducted by BESA associates. Publication of a work by BESA signifies that it is deemed worthy of public consideration but does not imply endorsement of the author's views or conclusions. *Colloquia on Strategy and Diplomacy* summarize the papers delivered at conferences and seminars held by the Center for the academic, military, official and general publics. In sponsoring these discussions, the BESA Center aims to stimulate public debate on, and consideration of, contending approaches to problems of peace and war in the Middle East. The *Policy Memorandum* series consists of policy-oriented papers. The content of the publications reflects the views of the authors only. A list of recent BESA Center publications can be found at the end of this booklet.

International Advisory Board

Founder of the Center and Chairman of the Advisory Board: Dr. Thomas O. Hecht

Vice Chairman: Mr. Saul Koschitzky

Members: Prof. Moshe Arens, Ms. Marion Hecht, Mr. Robert Hecht, Prof. Riva Heft-Hecht, Hon. Shlomo Hillel, Mr. Joel Koschitzky, Amb. Yitzhak Levanon, Sen. Joseph I. Lieberman, Mr. Robert K. Lifton, Rt. Hon. Brian Mulroney, Mr. Seymour D. Reich, Mr. Greg Rosshandler, Amb. Zalman Shoval, Amb. Norman Spector, Ms. Drorit Wertheim

International Academic Advisory Board

Prof. Desmond Ball *Australian National University*, Prof. Ian Beckett *University of Kent*, Dr. Eliot A. Cohen *Johns Hopkins University*, Prof. Irwin Cotler *McGill University*, Prof. Steven R. David *Johns Hopkins University*, Prof. Yehezkel Dror *Hebrew University*, Prof. Lawrence Freedman *King's College*, Prof. Patrick James *University of Southern California*, Prof. Robert J. Lieber *Georgetown University*

Research Staff

BESA Center Director: Prof. Efraim Inbar

Research Associates: Maj. Gen. (res.) Yaacov Amidror, Dr. Efrat Aviv, Dr. Yael Bloch-Elkon, Brig. Gen. (res.) Moni Chorev, Dr. Gil Feiler, Prof. Jonathan Fox, Prof. Hillel Frisch, Prof. Eytan Gilboa, Col. (res.) Aby Har-Even, Eado Hecht, Dr. Tsilla Hershco, Prof. Efraim Karsh, Lt. Col. (res.) Dr. Mordechai Kedar, Prof. Avi Kober, Prof. Udi Lebel, Dr. Alon Levkowitz, Dr. Yaacov Lifshitz, Prof. Ze'ev Maghen, Ambassador Arye Mekel, Col. (res.) Dr. Eran Lerman, Dr. Liad Porat, Mr. Amir Rapaport, Mr. Uzi Rubin, Dr. Jonathan Rynhold, Prof. Shmuel Sandler, Maj. Gen. (ret.) Dr. Emanuel Sakal, Dr. Eitan Shamir, Lt. Col. (res.) Dr. Dany Shoham, Prof. Shlomo Shpiro, Dr. Max Singer, Prof. Joshua Teitelbaum

Director of Public Affairs: David M. Weinberg

Program Coordinator: Hava Waxman Koen

Publications Editor (Hebrew): Alona Briner Rozenman

Publications Editor (English): Judith Levy

Medium-Intensity Threats: The Case for Beefed-Up IDF Ground Forces

Table of Contents

Executive Summary	7
Introduction	9
The Debate on Ground Forces' Utility	9
War on Land, Sea and Air	11
Ground Forces' Role in Israel's National Security Concept	13
Ground Forces and the Air Force in Israel's Routine Security Strategy	16
The Need for Ground Forces vis-à-vis Contemporary Threats ...	21
High-Intensity Threats: Reduced but Not Eliminated	21
The Rise of the Medium-Intensity Threat	23
Strategy and Tactics of the Medium-Intensity Threat	26
Summary of the Threat	29
Countering the Threats: Exploring Scenarios that Require Ground Forces	30
Countering the Ground Threat	32
Countering the Artillery Threat	33
Conducting a Ground Offensive	35
Conclusion	39
Notes	41

Medium-Intensity Threats: The Case for Beefed-Up IDF Ground Forces

Dr. Eado Hecht and Dr. Eitan Shamir

EXECUTIVE SUMMARY

Since 1982, the IDF has refrained whenever possible from using heavy ground maneuvering forces¹ in its operations. Instead, it has evinced a clear preference for air power and stand-off fire. This tendency was stated explicitly in the IDF's recent force build-up plan, which gives priority to the air force and to precision-fire assets over ground units. Some pundits contend that in the absence of a direct threat from state armies, and in a situation where terror, guerrilla and rocket threats predominate, large, heavy maneuvering formations have become obsolete.

This study argues, to the contrary, that the rise in capabilities of non-state actors represents a new intermediate level between low- and high-intensity threats; that is, the medium-intensity threat. The paper describes several plausible threat scenarios that show a clear need for large, highly capable maneuvering ground formations. This study demonstrates that current conventions are wrong with regard to the ineffectiveness of ground forces vis-à-vis these threats, and it argues for the building of credible, effective ground forces.

An earlier version of this study appeared in *Survival*, Volume 58, Issue 5, published online on September 20, 2016.

Medium-Intensity Threats: The Case for Beefed-Up IDF Ground Forces

Dr. Eado Hecht and Dr. Eitan Shamir

INTRODUCTION

The Debate on Ground Forces' Utility

Israel's security doctrine has traditionally distinguished between routine threats (low-intensity attacks by state armies or non-state organizations) and fundamental threats (high-intensity offensives by state armies). But security planners have paid much less attention to the middle ground – the medium-intensity threat.

Medium-intensity threats have grown in the wake of changes in the priorities of some Arab states, the reduced military capabilities of others, and the emergence of non-state organizations that have acquired some state capabilities and have successfully combined guerilla and terror tactics (irregular warfare) with more conventional practices (regular warfare).²

The medium-intensity threat has moved from the sidelines to center stage, and is now the strategic focus of Israel's active enemies. Israel's security doctrine must address this grey area, first by defining it and then by identifying the optimal strategies and tactics that will be required to combat it.

Dr. Eado Hecht is a researcher at the BESA Center for Strategic Studies, specializing in military theory and military history. He lectures at Bar-Ilan University, Interdisciplinary Center Herzliya, and at Haifa University, as well as at a variety of IDF advanced officer training courses.

Dr. Eitan Shamir, a senior research associate at the Begin-Sadat Center for Strategic Studies, is a professor of political studies at Bar-Ilan University and the former head of the National Security Doctrine Department in the Israeli Ministry of Strategic Affairs.

Of course, while “fundamental threats” to Israel have diminished, they have not disappeared; nor have “routine threats.” Thus, in order to respond effectively to all three threat levels the Israel Defense Forces (IDF), contrary to recent trends, needs to invest more in its ground forces capabilities.

To make the case for the utility of ground forces, this study will explore the changes that have occurred in the strategic role of Israel’s ground forces and the (misguided) rationale for this change. The study will then present various scenarios stemming from the threat analysis that clearly demonstrate the need for a large, highly capable ground force, in clear contrast to the conventional wisdom that is leading the push for their reduction.

Nominally, it seems that the IDF has a clear understanding of the threat and the need for ground forces. Recently, it published a document, signed by the Chief of Staff, offering an introspective glance.³ One should bear in mind, when analyzing this document, that it is the shorter, unclassified version of a comprehensive document designed as the conceptual framework for a new IDF five-year plan that has yet to be approved by the government.⁴

The document elaborates on several issues, but what is important for this study is that it explicitly states that in the face of current and foreseeable threats, the IDF must maintain an effective ground force capability. The stated tasks of the ground force are:

- Defending against small-scale or large-scale attacks into Israeli territory,⁵ though mass offensives are deemed less likely for the time being given the internal Arab wars.⁶
- Conducting small or large focused raids into enemy territory in order to destroy enemy military assets or pressure hostile leadership.⁷
- Temporarily conquering large tracts of hostile territory in order to clear them of enemy artillery or other military threats.⁸

To accomplish these tasks, the IDF believes it needs ground forces with better firepower, mobility and protection than its potential enemies.⁹ It

also believes that the size of the ground force has to achieve a “critical mass”¹⁰ – in other words, quality is not enough; it also needs quantity.

But over the past five years, the IDF has disbanded six armored brigades, two artillery brigades, and an undisclosed number of rear-area security battalions – one more step in an ongoing, drastic decrease of ground force combat power.¹¹ When viewed in conjunction with statements by senior officers expressing doubt as to the net worth of offensive ground operations, these reductions cast doubt on the seriousness of the military’s commitment to conducting them.¹² Those who voiced an opinion in favor of the value of ground forces represent a minority.¹³

Furthermore, the IDF document emphasizes precision firepower – especially, but not exclusively, aerial – and even states that one of the major tactical goals of ground maneuvers is to locate targets for the IDF’s precision-fire assets to destroy.¹⁴

A general background is presented below, followed by a brief historical analysis of the relative roles of ground and air forces in Israel’s wars. The analysis tracks the IDF’s gradual shift towards more reliance on air power and less on ground power – a shift the authors of this study believe has gone too far.

WAR ON LAND, SEA AND AIR

Men have waged wars on land since the beginning of human existence. A few thousand years ago, as civilizations and technology became more advanced, a new dimension was added: war at sea. Ground forces kept their decisive role, however. Control of the sea, though at times immensely important, was viewed mainly as an enabler for control of land.

With the invention of flight, war soared into the aerial dimension. Military theoreticians such as Giulio Douhet argued that air power was revolutionary and would render ground forces obsolete. The realities of the Second World War and most wars since then have proven otherwise. Air power proved a necessary but insufficient tool for winning wars, with ground forces remaining the decisive element.

New technologies added new domains for combat. Yet with minor exceptions, expectations that these new technologies would permit wars to be won without ground forces have been disappointed. Despite all the advances in other dimensions of warfare, ground forces are still crucial for winning wars. In fact, even in some of the cases in which they were not ultimately involved, it was the credible threat of their future involvement that made the difference. Maintaining that credibility requires maintaining effective and significant ground forces.

During the 1990s, with the advent of the so-called Information Revolution and the Revolution in Military Affairs (RMA), the idea resurfaced that ground forces were destined to become obsolete. Long-range precision-guided munitions, delivered from anywhere to everywhere, coupled with accurate intelligence and ‘information dominance’ led some analysts to argue that future wars would see little use for ground forces.

Ostensibly, NATO won the Kosovo War (1999) with air power alone, but whether this was proof of the theory or a circumstantial anomaly is still debated by analysts. Despite solid data showing that the tactical and strategic achievements of the air forces were considerably less than initially claimed, this ‘stand-off war’ option is welcomed by western societies wishing to avoid messy interventions and casualties. The employment of drones and robots instead of people in ‘surgical’ actions, termed by analyst Edward Luttwak “post-heroic wars”, appeals greatly to politicians and the public alike.¹⁵

The Information Revolution added a new, fourth dimension to warfare: cyberspace. Replacing bombs with computers, the attacker paralyzes vital computer-dependent military and civilian systems, throwing the enemy into disarray and eventually causing it to collapse without employing physical force. This revolutionary vision, like Douhet’s, has yet to be proven in practice, but most governments and military establishments take it very seriously.¹⁶

Not all analysts agree with these visions. Ground force proponents in the US argue that in COIN and stability operations, there is no substitute for large numbers of ground soldiers, or “boots on the ground”. However, the Western withdrawal from Iraq and Afghanistan signals a loss of appetite

for large-scale state-building interventions in the foreseeable future. The West is moving away from ‘people-centric counterinsurgency’ to ‘counter-terrorism’, with the latter ostensibly requiring mostly superb intelligence, cyberwarfare, precision weapons and special operations forces.

To face symmetric challenges like China, for example, the AirSea Battle concept, based on RMA capabilities, was put forward. This concept emphasizes massive sea- and air-launched stand-off fire striking the enemy from afar without the participation of extensive ground forces.

Ideas similar to NATO’s in Kosovo have appeared in Israel too. Since the 1980s, Israel has been a leader in developing what are often referred to as ‘RMA technologies’.¹⁷ It has invested heavily in its air force, though this stems at least partially from the need to project force to distant countries (first Iraq, then Iran). During the 1990s and 2000s, as in the West, the confluence of a growing sensitivity to casualties and the development of the new technologies caused Israel to prefer aerial and ground-based stand-off fire operations whenever possible. (A major exception to this trend was the retaking of control of the Palestinian territories during the Second Intifada [2000–06].)

The failures of the Second Lebanon War (2006) were largely attributed to the neglect of ground warfare. After that war, the IDF invested heavily in rebuilding its ground forces. However, in apparent contradiction to the lessons of that war, the IDF’s five-year force buildup program, announced in 2013, refocused its limited resources once again on cyber, intelligence, air force and special operations capabilities, again at the expense of conventional ground forces.

GROUND FORCES' ROLE IN ISRAEL'S NATIONAL SECURITY CONCEPT

The evolution of the balance between the roles of ground forces, the air force and stand-off fire in Israeli strategy follows a pattern similar to that described above: the focus was initially on ground force capabilities, with a gradual shift towards the air force and stand-off fire instead.

Fighting between Israel and Arab states and non-state organizations has been constant ever since the end of Israel's War of Independence in the spring of 1949, varying only in intensity and in the identity of the Arab participants at any given time. From the early 1950s, Israelis have divided the Arab threat into two categories:¹⁸

- the 'Fundamental Threat', in which the Arabs would launch a major offensive (high-intensity war) intent on physically annihilating Israel; and
- the 'Routine Threat', in which the Arabs conduct constant small-scale raids (low-intensity conflict) in order to wear down the resolve of the Jewish population to remain in Israel.

Given the physical asymmetry between Israel and the hostile Arab nations, Israeli political and military leaders have always understood that they cannot achieve a single military victory so decisive as to compel the Arabs to give up on their goal of annihilating the Jewish state.¹⁹ Israelis can only hope that by repeatedly achieving partial victories, they will cause Arab resolve against Israel to gradually dissipate. Those partial victories would, meanwhile, bring temporary respites between rounds of high-intensity war (the fundamental threat) and reduce the intensity of constant low-intensity fighting (the routine threat) to an acceptable level.

The physical asymmetry also means that Israel cannot maintain a standing army large enough to face all levels of threat. Therefore, the major portion of Israel's military has to be a part-time force intended to be mobilized only when fighting intensifies to a level beyond the capability of the standing force. This, in turn, means that the army has to receive advance warning of the need to mobilize extra forces. Furthermore, in order not to cripple the national economy, operations involving such a mobilization must be brief enough to return mobilized soldiers to their civilian lives as soon as possible.

The resulting security concept, developed to match the conflicting requirements, was summed up in three catch-terms: Deterrence – Early-Warning – Decision.²⁰

Since 1949, Israel's military actions have not been initiated by any desire to gain territory, even when this has been the actual result. Politically, all operations, small or large, have been regarded as raids of varying durations, in which territory acquired would be treated as a bargaining chip for negotiating a better security arrangement.²¹ The immediate military goal of each operation was, and still is, to temporarily reduce enemy military capabilities and create deterrence by impressing on that enemy, and on others watching from the sidelines, the cost of attacking Israel while gaining nothing substantive in return for that aggression.²²

The same strategic concept was applied to both 'fundamental threats' and 'routine threats', albeit adapted to the different characteristics of each. 'Fundamental threats' were to be defeated in a massive, rapid, overwhelming offensive – preferably preemptive; whereas 'routine threats' were to be defeated by a series of punitive retaliatory actions – usually small, though occasionally larger if the routine threat escalated to an intensity that caused major disruption of civilian life in Israel or excessive cumulative Israeli military casualties.

From its outset, the Israeli military has favored the standing air force over its other arms for several reasons:

- Per man, the air force can produce more firepower than ground forces can.
- There was an extreme fear in Israel of air attacks on civilians, fueled by images of the Second World War.²³ It was feared that enemy air forces would bypass Israeli ground forces to strike the civilian population.
- If early warning failed, the air force can respond faster than ground forces.
- It is easier to maintain combat readiness of reserves in the air force than in the ground forces.

Despite this, the ground forces were originally deemed the main force for defeating the 'fundamental threat'. The air force was there to buy time to mobilize ground force reserves, protect the civilian rear from enemy air attacks, and assist ground forces in their battles. The air force was not believed to be able to defeat an Arab army or state on its own.

In the 1956 war against Egypt, the Israeli Air Force focused on providing air cover and air support for ground forces. In both 1956 and 1967, artillery support provided to Israeli ground troops was limited. Instead, ground forces relied on the air force to support them when necessary.

After the air force's achievements in 1967 and in the 1967–70 War of Attrition (see below), Israeli military planners fully expected it to be the decisive arm in the next high-intensity war. The expectation was that a small standing ground force coupled with air force superiority would be able to decisively stop any full-scale Arab offensive on its own. However, in October 1973, this concept collapsed. Only the supreme sacrifices of the standing ground forces and the rapid arrival of small contingents of reserves finally halted the Arab advance.

Consequently, following the war, Israeli artillery was dramatically enlarged by 100% and upgraded.²⁴ In the 1982 operation 'Peace for Galilee', the fire support enjoyed by the Israeli ground force from both the air force and the artillery arm was considerably more powerful and quick to respond than it had been in 1973.²⁵ The air force, having solved the anti-air defense problem it faced in 1973, destroyed the Syrian air defense systems in Lebanon 1982 and conducted numerous interdiction and close-support strikes.

Since 1973, no Arab state has attempted to provoke a major war with Israel. In 1982, the Syrians, reluctantly drawn into the fighting in Lebanon, refrained from opening a second front on the Golan Heights. Ostensibly, the goal of achieving long-term deterrence of the fundamental threat had been achieved.

GROUND FORCES AND THE AIR FORCE IN ISRAEL'S ROUTINE SECURITY STRATEGY

The ink of the 1949 Armistice Agreements had barely dried before attacks on Israel began again, albeit at a very low intensity. The initial Israeli response was defensive, in the form of ambushes and border patrols. It was quickly concluded that only an offensive, punitive response would reduce the number of Arab attacks.²⁶

Initially, the air force was seen as an easier and less dangerous tool with which to conduct punitive retaliatory attacks. The first retaliatory raid against Syria, on 5 April 1951, was conducted with eight fighter aircraft attacking Syrian army positions on the southern Golan. However, international criticism of air action was more vehement than to ground raids (in direct opposition to reactions today). To appease the international community, the Israeli government banned the use of aircraft in these actions for a number of years and used ground forces instead.²⁷

It was not until Egypt escalated its attacks in 1969, during the War of Attrition, that air power began to be considered the main offensive tool in Israel's arsenal. For political reasons, Israel could not respond to the Egyptian artillery and commando-raid offensive with a large-scale ground offensive aimed at destroying Egyptian forces across the Suez Canal. Nor could it sustain a tit-for-tat response based on its own artillery and commandos. Therefore, the Israeli Air Force joined the artillery duel by attacking Egyptian forces at the front.

In January 1970, the Israelis made their first attempt to use their air force as a strategic weapon by conducting a series of air strikes on military and military-industrial targets near Cairo. The goal, not achieved, was to embarrass the Egyptian regime into accepting a cease-fire because of its failure to prevent Israeli strikes near its capital. On the Jordanian, Syrian and Lebanese fronts of the War of Attrition, the roles of ground and air forces were more balanced.

From 1971, after Jordan violently evicted the Palestinian fighting organizations, the geographic focus of fighting moved to Lebanon. The Israeli Air Force participated in the fighting, but the major burden remained on the ground forces, who conducted continuous operations along the Israeli side of the border and inside Lebanon. In 1978, after a particularly deadly amphibious raid, Israel responded with a massive eight-day ground raid into southern Lebanon. Palestinian forces were driven out of the area of Lebanon south of the Litani River.

The Palestinians responded by increasing the proportion of stand-off attacks, firing rockets and cannon shells from the area north of the Litani River into northern Israel. During a ten-day duel in the summer of

1981, Palestinian artillery fired some 1,230 rockets and cannon shells at Israeli towns and villages. The Israeli Air Force and artillery attempted, but failed, to destroy the launchers and cannons while simultaneously conducting air raids on Palestinian military infrastructure to create deterrence and transportation bottlenecks to hinder Palestinian logistics.

The IDF deduced from this ten-day exchange of fire that its air force and artillery could not prevent Palestinian artillery fire on Israeli civilians. A similar future escalation was going to require the use of ground maneuver forces.²⁸ Consequently, in the summer of 1982, following a three-day escalation of artillery fire from Lebanon, Israel launched Operation ‘Peace for Galilee’. Israeli ground forces defeated the Palestinian military forces, leading to their almost complete eviction from Lebanon and the eventual creation of a buffer zone in southern Lebanon.

In the 1990s, the buffer zone and northern Israel came under increased attack from a new enemy: Iranian-backed Hezbollah. As the fighting gradually escalated, Israeli ground troops were used primarily in defensive operations, with the air force used as the principal offensive tool. Offensive operations were low intensity, perhaps a dozen to two dozen air strikes each month north of the buffer zone – each dropping only one or two bombs on a specific military target.

For one week in 1993 (Operation ‘Accountability’) and two weeks in 1996 (Operation ‘Grapes of Wrath’), Israeli air strikes escalated into major operations involving hundreds of air strikes each while the ground forces remained on the defensive. In 2000, Israel changed its strategy. It withdrew its ground force from the buffer zone, promising to respond massively to any attack on Israeli territory. However, it was not until 2006, after approximately 200 Hezbollah attacks, that Israel finally made good on its promise in what became known as the Second Lebanon War.

Responding to a particularly successful Hezbollah raid, the war began as a large-scale aerial retaliatory offensive, similar to those of 1993 and 1996, but larger in scope. This offensive destroyed significant portions of Hezbollah’s medium-range rocket arsenal and infrastructure, but failed to halt Hezbollah fire into northern Israel. The insufficient results gradually compelled Israel to involve ground troops.

Meanwhile, air power was absent in fighting the Palestinians in Gaza and in Judea and Samaria (the West Bank). It was first used during the September 1996 escalation, when only attack helicopters were used and in a very restricted way. From autumn 2000, as the fighting grew worse, the air force was gradually drawn in, first with small warhead precision weapons and eventually with larger weapons.

The air force was utilized very differently in Gaza than it was in Judea and Samaria, where ground troops continue to be the main offensive tool. Ground forces were used to conduct numerous small-scale overt and covert raids of varying duration and size into Palestinian-controlled areas to arrest or kill terrorists and destroy terrorist infrastructure, such as bomb-manufacturing workshops. Air strikes in Judea and Samaria, even when employed to support large ground operations (as in the case of Operation ‘Defensive Shield’), were infrequent, always extremely limited in scope, and employ only small warheads.

The Israeli air force was initially used in a similar manner in Gaza, with the addition of the targeting of specific terrorist leaders. But in a 2004 operation, the air force participated for the first time as a major element, working in close coordination with ground troops who conducted counter-terrorism raids into the Palestinian Authority-controlled ‘A areas’. These ground force incursions drew Palestinian militants towards them, exposing them to aerial attack. After the Israeli withdrawal from the Gaza Strip in summer 2005, Israeli ground troops were relegated to a defensive role along the border, and the offensive aspect of defending the border was relegated to the air force.

Operation ‘Cast Lead’ (December 2008 – January 2009) was the first large-scale operation in which the air force conducted a major offensive in Gaza. A week-long series of intensive air strikes was followed by a ground offensive that captured and cleared rocket launchers and storage sites from outlying areas around the Gaza metropolis, but did not enter the city itself. The ground forces were then withdrawn.

When the rate of attacks from Gaza escalated again, the Israelis initiated the purely aerial Operation ‘Defensive Pillar’ (November 2012). During all previous operations in Gaza, as in Lebanon, air strikes had not stopped incoming rocket fire from Gaza. But the short and successful 2012 operation led some in the defense community to view it as a model for the future.

When the attacks escalated yet again nearly two years later, the Israelis initiated Operation ‘Protective Edge’ (July – August 2014). Israel initially repeated the ‘Defensive Pillar’ air-only strategy, but was compelled to employ ground forces to temporarily enter Gaza to destroy a system of tunnels, impervious to air strikes, dug from Gaza into Israel under Israeli border defenses.

To conclude, Israeli leaders have sought since the early 1950s to use the air force as their main military tool because it was considered more efficient while exposing fewer Israeli troops to hostile fire. However, this aspiration was always tempered by a number of political, technical and strategic considerations:

- Politically, at least in the first two decades, use of the air force was thought to signal escalation more than use of ground forces and therefore elicited international criticism. Gradually, the atmosphere changed, and air strikes have become more acceptable than ground operations – as long as they do not cause significant collateral damage.
- Technically, there are many limitations to the air force’s ability. In the past, the low level of accuracy reduced the probability of destroying intended targets while simultaneously increasing the likelihood of collateral damage. The improved precision, strength and variety of modern aerial munitions have expanded the boundaries of what can be achieved, but certain types of targets were and still are impervious to aerial attack.
- Strategically, the effect of air strikes can be reduced by a prepared enemy. Once air strikes are seen as Israel’s typical response, their strategic effect is reduced. This can be partially overcome by increasing the quantity and size of bombs dropped and targets attacked – but that brings the air force into renewed collision with the political limitations mentioned above.

Gradually, as new political and social environments evolved and new technological capabilities were developed, the Israeli Air Force received more and more missions. This trend was reinforced by misguided lessons many Israeli officers took from the wars in Kosovo, Iraq and Afghanistan. Their misunderstanding of the true relative effects of aerial and ground

power in those wars, and the applicability of those actions to Israel's situation, led in some cases to failure to achieve intended strategic results. This failure diminished the extent and durability of political achievements as well, proving that more efficient is not necessarily more effective.²⁹

THE NEED FOR GROUND FORCES VIS-À-VIS CONTEMPORARY THREATS

To assess the current and near future requirements for ground forces in the IDF requires first assessing the probable character of future threats against Israel. A determination of effective ways to counter those threats reveals the role of ground forces in defeating them. The following will not address the entire range of threats, but only those relevant to IDF ground forces; i.e., those emanating directly from states bordering Israel. Thus, the threat of, for example, long-range missile attacks from Iran is not directly relevant to our discussion, though it is competing for budgets and manpower.

High-Intensity Threats: Reduced but Not Eliminated

One of the assertions made publicly again and again by many senior IDF commanders, and expressed in the recently published IDF strategy document,³⁰ is that for the foreseeable future, there is no threat of a major ground invasion of Israel by a state-sized army. They conclude, therefore, that the composition of forces required by the IDF requires a radical change:

- First, ground forces can be drastically diminished in size since the remaining threats do not require such a large force. This conclusion has been implemented over the past few years by disbanding and discharging numerous ground force reserve units and shortening the duration of conscript service.³¹
- Second, the internal composition of the ground force can be changed. What is now required, according to this premise, are mostly light infantry units supported by precision-fire weapons.³² This conclusion has been made manifest by focusing the aforementioned reduction of forces on armored and artillery units.

- Third, infantry units must be trained more in commando-style and counter-guerrilla operations than in large-unit actions and maneuvers.³³

These assertions are mistaken. It is true that no Arab state or coalition has attempted to conduct a massive invasion of Israel since 1973, but it is important to understand why.

The first cause is the deterrent effect of the repeated military defeats inflicted on the Arabs in high-intensity wars, beginning with the defeat of the Arab invasion of the just-established Israel in 1948 and culminating in the Yom Kippur War 1973. Despite having started that last war in the best conceivable strategic situation, the Arab armies' achievements were minimal, and within a few days the IDF had reversed the situation.

Israel's superiority in regular warfare created deterrence. Adding to it was the Egypt-Israel Peace Treaty, which removed the most powerful Arab state from the enemy line-up. The current inter-Arab wars have diverted hostile attention from Israel and decimated the Syrian army, and the post-Saddam, American-built Iraqi army is weak and barely competent.

Theoretically, at least, there is indeed no current high-intensity threat against Israel. Whenever the inter-Arab wars end, it will take years for Syria and Iraq to rebuild military forces capable of conducting a war of annihilation against Israel. However, this analysis rests on a number of assumptions, which, though valid today, might quickly change.

The peace treaty with Egypt, for instance, was maintained because it was deemed a major interest of the military oligarchy that ruled and is now again ruling Egypt. However, the Muslim Brotherhood that ruled Egypt from the summer of 2012 until its ousting a year later viewed the peace treaty negatively (though it prioritized dealing with other issues first).³⁴ Had the Brotherhood not been deposed by the current regime, it is probable that Israeli-Egyptian relations would have soured and possibly reached a state of threat once again. The stability of the current Egyptian regime is not clear, and the Muslim Brotherhood is still a potent political threat to its existence.³⁵

The flip-flop in Egypt displays how difficult it is to predict the precise array of Israel's enemies beyond the very near future. How stable is the

current Egyptian regime? How stable is the Jordanian regime? If either regime collapses, will these states become like Syria? Or will they maintain their current military capability and only change their policy, as in the brief Muslim Brotherhood interlude in Egypt? If Egypt loses control of its border with Israel in Sinai, will it accept Israeli operations there against aggressive jihadi groups or resist them as a matter of principle?

Furthermore, as proven in the 1973 war, a high-intensity war can also be initiated to achieve limited political objectives. So the question is not only whether there exists an existential high-intensity threat, but whether a limited high-intensity threat could arise in the foreseeable future. The strategy would be different, but the tactics and force composition would be similar.

The Rise of the Medium-Intensity Threat

The rise of the medium-intensity threat is a result of the increasing strength and capabilities of hostile non-state organizations with control over territory and population. Sponsored by states, these entities are capable of inflicting greater damage than traditional terror or guerrilla movements. Much like states, they are characterized by well-developed organization and doctrine, the use of various weapons and tactics, and a division between the political and civilian arms.

Non-state organizations are strong enough to inflict considerable damage, though not as much as a full-strength state army – and as non-states, they are not bound by the laws of war by which western states abide. Because they are neither states nor irregular forces, they qualify for a category of their own: a medium-intensity threat that resides in the grey area between a low-intensity routine threat and a high-intensity fundamental threat. Creating suitable strategic and tactical responses to this threat requires that it be defined and dissected.

Countering the medium-intensity threat requires capabilities similar to those used against the fundamental threat. The tactical mistakes against Hezbollah in 2006 can be largely attributed to the IDF's failure to recognize this requirement. The IDF tried to conduct the war with tactics designed to fight an enemy conducting irregular warfare, rather than an enemy

conducting regular warfare (albeit of lesser strength, and mixed with irregular warfare measures).³⁶ As an IDF battalion commander explained to one of the authors after the 2006 Lebanon War, “I went in as if to arrest a terrorist and collided with a regular army. It took me a couple of days to understand the situation and adapt my actions accordingly.”

The most immediate threats to Israel are the two Palestinian ‘mini-states’ of Gaza, ruled by Hamas; and Judea and Samaria, ruled by Fatah. Following them are Hezbollah in Lebanon and whoever controls the Syrian Golan Heights (the Syrian Golan is currently divided between the Assad regime, with its Hezbollah allies, and rebel forces, led by the Al-Qaeda affiliate Jabhat al-Nusra). Iran and Hezbollah have been ‘testing the water’ against Israel on the Golan since 2013, if at a very low intensity.

At present, the Islamic State is capable of conducting only terrorist or guerrilla attacks on Israel, but that could change. With the exception of the Palestinians, the other threats are focused right now on fighting each other – but there is no way of knowing how long that will last. They all consider Israel an enemy, if one to be dealt with after defeating their immediate rivals. In the past, inter-Arab rivalry reduced the effectiveness of, but did not prevent, Arab coalitions against Israel.

Given that the most probable scenario in the foreseeable future is a series of confrontations with Palestinians, Hezbollah (with or without Syrian and Iranian army support), Jabhat al-Nusra or the Islamic State, we must assess their military capabilities. All are essentially infantry armies equipped with light and medium weapons and with varying sizes of artillery forces. Each of these military forces, barring the smaller Jabhat al-Nusra, employs tens of thousands of fighters,³⁷ and Hamas and the Islamic State are both working to increase their potential.³⁸

Though they are not yet organized in this manner, these numbers are equivalent to each organization having three or four light infantry divisions (though without much of the service and support personnel associated with American or European light infantry divisions). This combines to a total potential enemy force equivalent of seven or eight infantry divisions currently adjacent to Israel’s borders.

Given Hezbollah's assistance to the Syrian regime, even if Assad does not employ the official Syrian army directly against Israel, he would be hard put to refuse them reinforcements from the Alawite militia, The National Defense Forces. This militia, which is currently assessed at 70,000 to 80,000 men,³⁹ could provide a significant manpower boost to Hezbollah's forces.

Though some of these potential enemies are rivals who are unlikely to coordinate their attacks on Israel, this does not preclude a simultaneous war with them.⁴⁰ So, depending on how the Syrian civil war ends, the combined potential enemy force threatening Israel could grow by 50% or more. Given the size, composition and competence of the Jordanian army (equivalent to four divisions) and the Egyptian army (ten 'heavy' divisions), an Islamist takeover in either state would increase the strength of the threat by orders of magnitude, limited only partially by these armies' dependency on the US for resupply. (Pre-revolutionary Iran was also completely dependent on the US and other Western states for its military equipment. Yet after the revolution cut it off from its western suppliers, it still managed to conduct an eight-year war with Iraq.)

Furthermore, IDF ground forces must be capable not only of defeating ground attacks into Israel, but of successfully conducting ground offensives into neighboring states. Since the mid-1970s, Israel has initiated a number of medium-intensity ground force offensives against the Palestinians and Hezbollah to defeat medium- and low-intensity threats that had intensified to an unacceptable level. Some of these offensives began at a lower intensity and escalated, despite Israel's preference to remain at that level. The IDF did not have to simultaneously employ more than three or four divisions in any of these medium-intensity offensives, but that was because in each case, the fighting was limited to a single front.⁴¹

For the 2002 'Defensive Shield' offensive in Judea and Samaria against a much weaker foe, the IDF employed two divisions with numerous reserve units. If, simultaneously with this operation, there had been an escalation of fighting in Gaza or Lebanon, the IDF would have had to mobilize a number of reserve divisions to those other fronts too. The experience of Operations 'Peace for Galilee', 'Defensive Shield', 'Second Lebanon War', 'Cast Lead' and 'Protective Edge' shows that to

conduct simultaneous ground offensive operations on any combination of fronts, the IDF would need a ground force at least equal in size to the combined enemy forces, and preferably larger.

In other words, simultaneously defending all of Israel's borders while conducting a major offensive at least on one front, and possibly on two, would require at least ten divisions' worth of front-line ground forces and a quantity of rear-area security forces. A force size smaller than this would not achieve the "critical mass" the IDF claims it needs in its official strategy document.⁴²

The composition of these ground forces (the proportions of 'heavy', 'light' and artillery units) would depend on the strategy and tactics of the enemy, which are discussed below.

Strategy and Tactics of the Medium-Intensity Threat

The challenges the Israeli military might face over the next few years can be surmised by examining the experience of earlier wars and evaluating developments in the capabilities of possible future enemies. The Islamic State and Jabhat al-Nusra have not yet fought Israel, but their goals and capabilities are variations on those of Hezbollah and Hamas. While acknowledging the differences (as evinced in Syria and Iraq), it is still possible to assess how those actors might adapt their strategy and tactics to fight Israel.

Though the ultimate political goal of Israel's enemies – annihilation of the Jewish state – has not changed, they realized long ago that they cannot achieve this in one fell swoop. The political goals of the major confrontations over the past few decades have therefore been more modest: to gain some immediate advantage that in the long run will be a step towards the ultimate objective.

Unable to decisively defeat the Israeli military, their strategy in each confrontation has been to gradually exhaust Israel's civilian population by terrorizing it and depressing its morale. The tactical tools used to implement this strategy have been direct attacks on Israeli civilians by individual assailants or small groups and long-range artillery bombardments of Israeli population centers. To these were added

sniping, bombarding, ambushing, and small-unit, commando-style raids on Israeli forces. These last were used to inflict military casualties and thus attack the civilian population's morale indirectly.

A major change in the policy and strategy of the Palestinians and Hezbollah is unlikely for the foreseeable future. This assessment is based on several factors: 1) their current rhetoric and force build-up; 2) the limitations enforced by demographic and budgetary constraints on the size and composition of their forces; and 3) the groups' continued emphasis on long-range artillery rockets,⁴³ commando units, light infantry, and advanced anti-tank, anti-aircraft and anti-ship weapons.

The Islamic State and Jabhat al-Nusra, lacking a dependable source for more advanced weaponry and currently fighting an enemy very different from Israel, are lagging behind in all these fields except light infantry. Conversely, though Hezbollah and Hamas have used suicide bombers, they have never used them as frequently or effectively as have the Islamic State and Jabhat al-Nusra.

Whereas the strategy of these groups is more or less unchanging, there have been developments in the tactical field.

The familiar tactics are still being employed, but more emphasis is being placed on commando-style cross-border raids. One of the lessons learned by Hamas from the 2014 Gaza war is the tactical and strategic effect of such raids.⁴⁴ Using tunnels or diving gear to bypass Israeli detection systems, they were able to inflict casualties on Israeli forces inside Israel (a sixth of IDF fatalities during the 2014 war were in infantry engagements on the Israeli side of the Gaza border). A number of Hamas commando troops have undergone parachute-glider training as well.⁴⁵

The novelty is not in the methods, which have all been used in the past. It is in the emphasis on planned efforts to conduct several such raids in concert, simultaneously or sequentially, rather than conducting small, isolated actions.

Furthermore, though the raids from Gaza in 2014 were fairly shallow (i.e., close to the border), Hamas is apparently contemplating deeper raids, with attack objectives further inside Israel.⁴⁶ Hezbollah leaders have mentioned

“liberating” the Galilee⁴⁷ – an operation currently beyond their military capability, but which could presage attempts to raid objectives deeper than merely along the border. The concept of deep, large-force raids is a staple of Islamic State and Jabhat al-Nusra tactics.

These raids could be conducted by forces ranging in size from a squad (as was seen during the summer 2014 war with Gaza) to a battalion (as seen in operations by the Islamic State, and which is certainly within Hezbollah’s capability).⁴⁸ Hamas is lagging behind in the size of its trained raiding forces, but could develop this capability if it so chooses.

A different force size would indicate a different mission: the bigger the force, the bigger the objective, and the more persistent the force will be in achieving that objective. In fact, there is a point at which, though conceived as a raid, such an operation might become an attempt to capture and hold territory. This leads us to the most dramatic change in the tactical competence of these military organizations.

Over the past few years, Hezbollah, Jabhat al-Nusra and the Islamic State have acquired a great deal of experience employing thousands of fighters organized in ad hoc or almost regular combat teams to capture or hold territory, especially built-up areas. Islamic State forces have also conducted wide-ranging offensive operations, requiring the coordination of actions dozens to hundreds of kilometers apart towards a common operational goal. At the battle for Kobane (autumn 2014) the Islamic State employed the numerical equivalent of an infantry division – some 9,000 infantry and 30 to 50 tanks, supported by artillery and surveillance drones.⁴⁹

They still have much to learn. Written and video reports on the fighting in Syria and Iraq (2012-16) show that, even when larger forces were fighting around a single objective, the biggest forces seen to be operating together tactically, rather than just side by side, have been equivalent to battalions. Platoon- and company-sized actions were much more common. Also observed were combined-arms teams at the platoon and company level, using mortars, tanks, anti-tank missiles and light artillery to support mostly infantry forces.

Hezbollah is probably more advanced than the others because of Iranian mentoring and training,⁵⁰ experience working closely with Syrian army

formations at the brigade and division level, and participation with them in combined-arms battles. Thus, at the battle of al-Qusayr (spring 2013), Hezbollah employed 1,700 men with a combined-arms force of 5,000 to 6,000 men from the Syrian army's 1st Armored Division, with some reports even claiming that command of the entire battle was relegated to the Hezbollah commander at the scene.⁵¹ Hamas has only defensive experience. As of summer 2014, it did not show much capability in coordinating units larger than platoons.

The indication is that there could very well be attempts to conduct larger operations to capture, at least temporarily, not just some military post, but Israeli villages or towns adjacent to the border, or some important civilian or military installation further in for the purpose of conducting massacres and/or taking hostages.⁵² Given the overall disparity in military strength, such attacks would likely be conducted more for the sake of their psychological value than to capture and retain territory. But the taking of an Israeli village or part of a town – even if temporary, and even if the population had been evacuated ahead of time – would have a dramatic psychological effect on Israel.⁵³

Though all the organizations fighting in Syria have employed heavy weapons like tanks, infantry fighting vehicles and armored personnel carriers, the numbers have been relatively small: usually a handful at a time, and on occasion a few dozen. Attacking forces will include mostly infantry supported by medium weapons (especially mortars and guided anti-tank missiles). If the forces are Jabhat al-Nusra or Islamic State, they might also contain human and vehicle suicide-bombs.⁵⁴

Summary of the Threat

To summarize, the strategy of current and near future military threats to Israel is to achieve psychological exhaustion of the Israeli population by employing two complementary methods:

- Artillery bombardment – ranging from a few rockets per month on military and civilian targets near the border to a medium-intensity offensive (a few hundred rockets per day over an extended period) covering most of Israel's population centers and vital national

infrastructure. The number of rockets in Hezbollah's arsenal enables it to outlast Israel's limited anti-rocket defenses.⁵⁵

- Ground raids – ranging from small, sporadic, harassing attacks of military and civilian targets to concerted efforts to capture one or more villages or towns adjacent to the borders and/or military posts and camps protecting them. There might also be attempts to infiltrate raiders deeper into Israel.⁵⁶

In the near future, the size of the enemy forces on any single front is unlikely to be bigger than the equivalent of three or four poorly coordinated infantry division-equivalents. However, the potential for a simultaneous confrontation on more than one front – doubling to trebling the size of the enemy forces involved – cannot be ignored. Further in the future, especially after the current civil wars around it have abated, Israel will have to take into account increasingly large enemy ground force capabilities.

Again, it is unlikely that the Arab entities, whatever they eventually become, will be able to create a capability that can conquer Israel completely (assuming Israel has not over-dismantled the IDF). But in view of the willingness of the combatant groups in Syria to suffer casualties and damage, they will very likely be capable of conducting medium-scale ground offensives in Israel's border regions with smaller raids aimed at its interior.

Given the current size of the hostile combat forces, this mode of operation does not pose an immediate existential threat of conquest to the state of Israel. However, it will threaten and disrupt the lives of its civilians (in 2006, hundreds of thousands of northern Israelis temporarily became refugees in central Israel, and a smaller number of southern Israelis became refugees in 2014). It will also greatly threaten the lives of IDF troops deployed to defend Israeli territory.

COUNTERING THE THREATS: EXPLORING SCENARIOS THAT REQUIRE GROUND FORCES

Given the characteristics of the most probable threats outlined in the last section, we must now assess Israel's possible strategic, operational and

tactical responses and the role of ground forces in those responses. The similarity of the political goals, capabilities and modus operandi of the most likely current enemies allows us to study generic scenarios rather than conduct separate discussions for separate enemies.

The Palestinian Authority and organizations in Judea and Samaria are an exception, in that their military capabilities are markedly inferior to the other threats. Any IDF capability developed against the others would, therefore, certainly suffice against them. In fact, for political reasons, and in view of the IDF's superior intelligence in this area, the IDF would be required to employ a reduced capability if facing a renewed escalation of fighting in Judea and Samaria. Furthermore, as the Palestinians' capabilities in this geographical area have not evolved since Operation 'Defensive Shield', the IDF does not need to develop new capabilities to defeat them. The main effect of such an escalation would be to draw IDF manpower from other fronts.

First, it must be noted that even as hostile non-state organizations demonstrate increasing strength and capabilities, they exhibit reduced strategic aspirations. This creates a middle ground between the low-intensity routine threat and the high-intensity fundamental threat: a medium-intensity threat against which the IDF must employ capabilities similar to those it would use against a fundamental threat.

As noted above, the tactical failures against Hezbollah in 2006 can be attributed at least in part to the IDF's failure to recognize this requirement. It attempted, misguidedly, to conduct the war using tactics designed to fight an enemy conducting irregular warfare rather than an enemy conducting regular warfare, albeit of lesser strength and mixed with irregular warfare measures.

Likewise, some of the mistaken operational decisions in the 1973 war against Egypt and Syria can be attributed to the IDF's failure to recognize that though the enemy was using high-intensity regular warfare tactics, his strategic aim was limited. The enemy's objective was considerably less grave than a fundamental threat to Israel's existence, so the IDF could perhaps have eased off a bit and responded with less haste.⁵⁷

Countering the Ground Threat

Given the offensive tactics and weapons observed to be in use by Hezbollah, Islamic State and Jabhat al-Nusra (and partially by Hamas), defending against the ground threat requires the IDF to possess both defensive and offensive regular ground warfare capabilities. Using air power to hold ground has repeatedly proven ineffective. It can provide immense support to ground troops conducting this mission, and can inhibit large concentrations of enemy forces from moving freely. But, as was proven during the Second World War and repeatedly since (including during failed attempts by the anti-Islamic State coalition in Iraq and Syria over the past year), it cannot completely prevent the enemy from gradually accumulating his forces and attacking.⁵⁸

Therefore, when on the defensive, the IDF needs to be able to physically cover entire borders with contiguous observation and very rapidly responsive fire capabilities. Given the observed enemy tactics of rapid massive infiltration, villages and towns near the border must be surrounded by permanent defensive forces. These forces must be well-protected from light artillery and advanced anti-tank missiles, as well as from multiple attacks by large, vehicle-mounted bombs.

The defending forces must be deployed for 360-degree defense and be capable of withstanding attacks by dozens to hundreds of attackers while waiting for reinforcements. Quick reaction forces must be close enough to rapidly reinforce any area under attack, especially villages or towns adjacent to the border. The reaction forces must be capable of negotiating difficult terrain under light artillery and heavy anti-tank fire while crossing small fields of IEDs and mines.

Conducting such a defense with light infantry forces would be casualty-intensive for the Israelis. The casualty ratio would only be improved in the IDF's favor by prodigious use of long-range fire and well-protected armored vehicles.⁵⁹ Precision-guided munitions (PGMs) can be used effectively only against an enemy that consists of a few small targets, whereas area-coverage weapons would be effective against a mass modern-style infantry attack.

In other words, contrary to the trend stated by many senior IDF officers, what would be needed are not more PGMs, cyber capabilities and special forces, but rather simple artillery, tanks, heavily armored personnel carriers, and denser infantry strongpoints to make infiltration between them more difficult.

It is true that against these enemies, one does not need the Merkava 4. But tank-mounted firepower, protection and mobility do offer a major advantage. One can make do with older, cheaper tanks upgraded with the latest anti-anti-tank missile protection (such as the Trophy system) and effective anti-personnel shells. Throughout the past 100 years, simple field artillery and mortars have proven to be the most effective anti-infantry weapons.

Countering the Artillery Threat

Since 1969, Israel's preferred response to artillery bombardments has been to use its air force for two purposes simultaneously: first, to suppress the bombardment directly by attacking the artillery forces; and second, to dissuade the relevant Arab authority from continuing the bombardment by attacking targets (personnel and infrastructure) deemed too important for that authority to afford losing them.

A comparison of the intensity of Arab artillery fire into Israel with the intensity of Israeli aerial suppression strikes (targeting weapons, logistics and operating personnel), from the 1969-70 artillery bombardments of the War of Attrition until the summer 2014 Gaza War, shows that the overall intensity of Arab artillery fire was rarely affected, if at all, by the IDF's suppression air strikes. The IDF's gradual improvement of strike capability over the years was more or less matched by the Arabs' improvement of survivability and redundancy.

This does not mean that suppression air strikes are irrelevant. They do have a limited cumulative effect insofar as they gradually degrade the enemy's artillery force, especially personnel, and so might ultimately induce enemy leadership to cease fire. But achieving this necessarily entails a protracted period of time during which Israelis will continue to suffer bombardment.

In the end, it was not Israeli suppression attacks that were the decisive factor in the numerous stand-off fire campaigns conducted between Israel and its enemies. It was, rather, casualties among senior and medium-level individuals in the Arab hierarchy, damage to infrastructure important for the relevant Arab authority, and the accumulation of casualties among their combatants that usually created the conditions for achieving a cease-fire under favorable terms for Israel. However, this method too required extensive time, depending on the determination of the Arab leaders in charge and the availability of relevant targets.

Even in relative terms, Israeli air campaigns have never inflicted more than a fraction of the casualties and damage created by similar campaigns conducted by the US and Britain against Germany and by the US against Japan and North Vietnam. It is therefore not surprising that the Arab states and non-state organizations proved as politically undeterred by Israeli air campaigns as did Germany, Japan and North Vietnam to British and American air campaigns.

That is not to say that there have been no occasions when air power was sufficient on its own (for example, Operation ‘Defensive Pillar’). But those occasions were characterized by the immediate political goal having been less important to the relevant Arab leadership, and in most cases, Israel provided them minor face-saving concessions.

Ground operations are superior to stand-off operations in diminishing enemy artillery fire and convincing the enemy to cease fire because they capture launch sites and storage sites and inflict heavier casualties on the enemy much more quickly. But they have disadvantages. The following are the main reasons why the IDF has refrained from such operations in the past:

- Increased casualties – There is a perception among the Israeli leadership that Israeli society is casualty-sensitive. A recent study showed, however, that the level of sensitivity is contingent on various factors, and the public can in fact be casualty-tolerant under certain circumstances.⁶⁰
- Range – Many artillery weapons have ranges of dozens of kilometers and some up to hundreds of kilometers, and are therefore beyond the range of any likely ground operation.

- International opinion – The usual international diplomatic backlash whenever Israel defends itself aggressively.
- The difficulty of devising an exit strategy – There are situations in which the exit strategy is to merely withdraw IDF forces and let the fighting fizzle out, but other situations require some sort of political arrangement, with or without international involvement.

These disadvantages create a vicious circle. IDF senior commanders know the political leadership hesitates to use ground forces, so they economize on investing in those forces and instead focus investment on other capabilities relevant to stand-off fire. This in turn further reduces the willingness to employ reduced-capability ground forces.

Despite the disadvantages, the Israeli government might be compelled to order a ground force operation to push a threat back from Israel's border, as was the case in Lebanon (1982, 2006) and Gaza (2008, 2014). This could be because of 1) an expected failure to suppress enemy artillery fire, 2) an expected extended duration of a war confined to stand-off fire by the Israeli air force, 3) a limited number of expensive anti-rocket missiles relative to the number of rockets in enemy arsenals, or 4) a lack of a suitable stand-off response to some of the threat tactics (such as the Gazan offensive tunnels).

Conducting a Ground Offensive

Though it is less preferable from a military standpoint, Israel can, for political reasons, leave the initiative for ground combat in enemy hands. It could choose simply to defend, or perhaps make small local attacks to take pieces of dominating ground across the border that improve its defensive capability while waiting for its aerial offensive to convince the enemy to desist.

However, as noted above, if the human and economic toll among Israel's civilians accumulates while the arsenal of defensive interceptors is depleted and the enemy still refuses to desist, there will be increased pressure to defend by attacking enemy base areas (as in Operation 'Protective Edge'). This would be especially true if the enemy were to achieve some successes inside Israeli territory (capturing, even if only temporarily, Israeli strongpoints, villages or neighborhoods, ambushing Israeli civilians or forces, etc.).

In other words, the Israeli government might be compelled to order a ground offensive. It might do this with the minimalist aim of reducing enemy access to Israel's border and pushing at least the short-range rocket launchers beyond their range, or with the maximalist aim of forcing the enemy to request a cease-fire.

Different strategic goals for an Israeli ground offensive – diminishing an artillery bombardment by occupying rocket launch areas versus destroying enemy ground forces to compel the enemy to request a cease-fire – create different operational needs. But whatever the strategic goal, to conduct an effective ground operation, the IDF will need the tactical capability to cross, clear and cover large tracts of ground, some of it hilly and wooded; capture and clear numerous built-up areas of various sizes; and search for tunnels and other hidden storage sites – and do it all while being fired at by mortars and long-range anti-tank missiles, ambushed by infantry with small arms and personal anti-tank rockets, mines, explosive booby-traps and remote-controlled explosives, and counter-attacked by infantry units as well as suicide bombers and suicide-bomber vehicles while overcoming a variety of natural and artificial obstacles.

As noted above, the IDF was surprised in Lebanon in 2006 and in Gaza in 2014 by the intensity of enemy resistance. In future, the IDF must assume this level of resistance at a minimum. Actually, as potential enemies are gaining considerable combat experience, an even higher level of intensity and competence should be assumed. Even though Israel's current enemies are not as big, well-armed or well-trained as the Egyptian and former Syrian armies, they must be considered not merely as guerrillas, but as trained armies. To defeat them will require the application of regular warfare tactics adapted to the specific circumstances.

The IDF faced such a situation in 1982. PLO forces in Lebanon at the time were roughly equivalent in size to each of the separate enemy forces facing the IDF today – though undoubtedly less competent, technologically advanced and fortified than Hezbollah. They were deployed across southern Lebanon and along the coast up to Beirut. Defeating them in Operation 'Peace for Galilee' in 1982 required the employment of three IDF divisions.⁶¹

Employing superior firepower and bypassing main centers of resistance, four days were required to reach Beirut. The PLO forces bypassed in Tyre and Sidon fought for a few more days before finally being defeated in house-to-house combat. When asked if the IDF could achieve a similar result today, IDF officers were skeptical.⁶²

To reduce friendly and local civilian casualties, the IDF besieged Beirut for five weeks instead of conquering it. Ultimately, it was a combination of diplomacy and force that brought about the PLO decision to withdraw from Beirut, thus sparing the IDF the need to conquer it house by house.

Though few of Israel's current enemies are significantly more competent than the PLO forces were in 1982, Hezbollah certainly is, and the learning curve shown by Hamas since 2006 indicates that it is going in the same direction. As for the Islamic State and Jabhat al-Nusra, though they lag behind in technology and tactical acumen, their ferocity and suicidal techniques also pose a higher level of threat than did the PLO in 1982.

As noted when discussing defense, to defeat these enemies the IDF might not need massive numbers of the latest high-tech ground weapons, but will need the tanks, APCs and artillery it has used in the past, upgraded with specific capabilities (especially anti-anti-tank missile, anti-artillery and anti-IED protection). Furthermore, as recently retired IDF Major-General Gershon HaCohen stated in an interview, the simultaneous capture and clearing of large tracts of territory will require significant quantities of these weapons⁶³ – a statement with which the IDF strategy document seems to concur, under the heading “critical mass”⁶⁴.

One threat with which the IDF did not have to deal in the initial weeks of the 1982 war was rear-area security in the areas it had taken in Lebanon. That threat evolved only gradually, mainly because the majority of the Lebanese population was happy to see the PLO evicted and initially saw the IDF as liberators. This is unlikely to be the case in virtually any of the scenarios requiring a future offensive into Lebanon, Syria or Gaza.

In addition to the actual offensive operations moving forward, the IDF will have to employ large forces to secure its lines of supply and constantly comb its tactical rear to find and destroy stay-behind or infiltrating elements of enemy forces. The deeper the advance, the more forces will be required to secure supply routes.

In fact, the threat posed by current long-range (up to five kilometers) guided anti-tank missiles to a convoy of trucks carrying supplies to combat forces, especially fuel and ammunition, through recently taken territory, can be countered only by using a large number of highly protected APCs to carry the supplies or by saturating the terrain with combat forces to prevent enemy missile teams from infiltrating to attain a position overlooking the supply routes.

When not enough such forces are available, casualties among support units will be heavy. Though the enemies faced by American forces in Iraq and Afghanistan, for example, were barely competent tactically and completely lacking in the modern weaponry employed by Hezbollah and Hamas, lack of sufficient ground forces relative to the size of the contested area was a central reason for the Americans' and their allies' immediate loss of control.⁶⁵

To conclude, any IDF offensive that requires advancing even only a few dozen kilometers into Lebanon or Syria will require large forces not only to capture territory, but also to clear and secure it.

Take, for instance, the toughest probable single-front scenario against a non-state: a third Lebanon War. If one uses Operation 'Peace for Galilee' as a baseline while replacing the PLO capabilities with those of a Hezbollah reinforced with Syrian-Alawite units, it can be estimated that at least four reinforced divisions of armored and mechanized troops would be required in battle. They would be needed in order to reach the major rocket launch and storage areas of Hezbollah, clear the terrain and secure safe supply routes.

At least one further reinforced division would have to be deployed to defend Israel's 78-kilometer border against Hezbollah raids into Israel. Israel's other fronts, too, would need to be defended by at least another division each. A scenario such as this would not allow a major Israeli offensive on any other front unless it had more than ten 'heavy' divisions' worth of troops.

CONCLUSION

Israel's security doctrine discerns two levels of military threat. These are 1) a high-intensity offensive by state armies that threatens the existence of Israel as a state (the fundamental threat); and 2) the constant low-intensity offensive, by armed non-state organizations and occasionally state armies as well, that threatens the well-being of civilians and the smooth functioning of everyday life in Israel (the routine threat).

Offensive action, to destroy capabilities and deter intentions, was a dominant theme in countering these threats. Though air strikes were always an essential element in IDF operations against both levels of threat, they were deemed less effective than offensive ground maneuver.

Repeated defeats of the Arab state armies by the IDF, peace treaties with some Arab states, and the civil wars wracking the Middle East have reduced the viability of the fundamental threat. These political and strategic developments, coupled with an increasing sensitivity to casualties and improvements in precision firepower, have pushed the IDF to increasingly rely on air strikes and stand-off fire to achieve the required destruction and deterrence while decreasing reliance on offensive ground maneuver.

Though still espousing the importance of ground maneuver capabilities *de jure*, as evinced in the IDF's recently published strategy document, the *de facto* reduction in the employment of ground maneuvers and perception of a weakened threat have led to a drastic diminishment of IDF ground forces.

This study finds that the IDF's *de facto* strategy of de-emphasizing ground forces and ground maneuvering is mistaken.

First, because the option of a large state-on-state confrontation, even if remote at present, cannot be completely ruled out. It has been proven time and again that in the volatile Middle East, things can change overnight.

Second, because simultaneously with the weakening of the Arab state armies, we are witnessing the emerging prominence of non-state armies capable of creating a medium-intensity threat. This phenomenon is the result of the Islamist resurgence and the increased funding, increased

training and new technologies that are enhancing the military capabilities of non-state organizations.

Though they remain weaker than most Arab state armies, these organizations are already capable of conducting medium-intensity defensive operations and are working to achieve a medium-intensity offensive capability. (Hezbollah already has this capability.) In other words, though medium-intensity offensive actors are not a fundamental threat, they are more powerful than actors posing a “routine threat” and their power is increasing.

This paper has outlined several highly probable threat scenarios that clearly demonstrate that cultivating a small and highly capable ground force with the latest gadgets is important, but not enough. To meet the requirements set out in the IDF’s strategy document, Israel is advised to maintain a large, mechanized, capable and ready ground force, as it has done in the past – even if a large portion of this force is equipped with older AFVs and artillery upgraded only in specific crucial components.

The IDF strategy document states the need for a “critical mass” to achieve its missions, but does not provide a number.⁶⁶ We estimate that a scenario that requires maintaining a defensive line along all fronts, while having sufficient ground combat power to also conduct simultaneous major offensives on two fronts (for example, Lebanon and Syria, or Lebanon and Gaza), would require a ground force “critical mass” equivalent to at least 10 armored or mechanized divisions plus a large force of lighter rear-area security forces.

If we accept the assessment that most future wars will be multi-week to multi-month in duration, then this force size is even more necessary to enable rotation of units in action. The past and planned reductions in ground force units by the IDF imperil the ability of the IDF to meet the standard it sets for itself in its strategy document.

NOTES

- 1 Ground forces are flexible and perform a variety of missions. However, we refer here to ground forces primarily capable of and designed for maneuver and heavy mechanized combined arms operations.
- 2 Frank G Hoffman, “‘Hybrid Threats’: Neither Omnipotent nor Unbeatable.” *Orbis*, Vol. 54, Issue 3 (Summer, 2010), pp. 441-455. David E Johnson, “Hard Fighting: Israel in Lebanon and Gaza.” RAND Arroyo Center (Santa Monica, CA: 2011),pp. xxi, xxii.
- 3 IDF Chief of the General Staff, *IDF Strategy* (Hebrew), August 2015; http://www.idf.il/SIP_STORAGE/FILES/9/16919.pdf.
- 4 Michael Herzog, “The IDF Strategy Goes Public” *Policy Watch no. 2479*, The Washington Institute, 28 August 2015. Available at: <http://www.washingtoninstitute.org/policy-analysis/view/new-idf-strategy-goes-public>.
- 5 IDF, *IDF Strategy*, p. 1.
- 6 *Ibid*, p. 28.
- 7 *Ibid*, p. 29.
- 8 *Ibid*, p 28. Essentially, this is still a raid, albeit a more extended one, since the political intention is to return the territory to the enemy either by withdrawing during the war, when the clearing operation is deemed complete (as in summer 2014 in Gaza) or after the cease-fire (as in summer 2006 in Lebanon).
- 9 *Ibid*, p. 29.
- 10 *Ibid*, p. 27.
- 11 IDF Website Board, “All You Wanted to Know About the Multi-Year Plan – Gideon” (Hebrew), 26 July 2015; <http://www.idf.il/1133-22449-he/Dover.aspx>. As Amir Rapaport reports: “The truth is that the IDF has been engaged in an effort to adapt to the wars of the present and the future for some time:

since 1985, the number of tanks was reduced by 75%, the number of aircraft was reduced by 50% and the number of UAVs – Unmanned Airborne Vehicles – increased by 400%. The number of reservists was cut down by hundreds of thousands.” See: Amir Rapaport, “The New Multi-Year Plan of the IDF and the Agreement with Iran,” *Israel Defense*, 9 September 2015. According to IISS “Military Balance” reports, from 1989 to 2015, the number of standing armored brigades was reduced from 6 to 4 and the reserve brigades were reduced from 18 to 10. The IDF’s entire remaining fleet of M-60 and Centurions was decommissioned, which means a decrease of 1,510 tanks, leaving 1,500 Merkava (Mk. 1 through 4) MBTs in the order of battle. According to a 2014 report by the Institute for National Security Studies in Tel Aviv (INSS), <http://www.inss.org.il/uploadImages/systemFiles/Israel106082368.pdf>, Merkava 1 will be soon decommissioned as well, further reducing the number of operational tanks. Press reports announcing the disbanding of the 500th Armored brigade in 2003 <http://www.himush.co.il/?item=2061§ion=687>, a memo issued for the disbanding of the 130th Armored brigade in 2014, http://www.yadlshiryon.com/vf/ib_items/7121/130.pdf, an article about the disbanding ceremony of the 11th Armored brigade: http://www.yadlshiryon.com/show_item.asp?levelId=63829&itemId=6328&itemType=0 and an additional press report on the disbanding of the 600th Armored brigade in 2014 and 27th Armored brigade and the planned decommission of the Merkava 1, <http://www.ynet.co.il/articles/0,7340,L-4512425,00.html>.

- 12 Some statements were made by senior officers to the authors on condition of anonymity. Typical public expressions were by Brigadier General (Reserves) Gal Hirsch, Brigadier General (Retired) Avigdor Klein and Colonel (Retired) Shmuel Gordon in a BESA Symposium on the IDF’s 2013 Build-Up Program, 30 December 2013 and by Brigadier General (Reserves) Moni Chorev in a BESA conference on the IDF Commander’s Initiative, 16 June 2015.
- 13 Major General Gershon HaCohen interview: Amir Rapaport, “The Army Suffers from Excessive Professionalism” (Hebrew), *Israel Defense*, 31 July 2015; <http://www.israeldefense.co.il/he/content/%D7%94%D7%A6%D7%91%D7%90-%D7%A1%D7%95%D7%91%D7%9C-%D7%9E%D7%A2%D7%95%D7%93%D7%A3-%D7%9E%D7%A7%D7%A6%D7%95%D7%A2%D7%99%D7%95%D7%AA>

- 14 IDF, *IDF Strategy*, p. 29, paragraph 20.
- 15 Edward N. Luttwak, E.N., "Toward post-heroic warfare," *Foreign Affairs*, Vol. 74, No. 3 (May/June, 1995), pp. 109-122.
- 16 For the ongoing debate see: Thomas Rid, "Cyber War Will Not Take Place," *Journal of Strategic Studies*, Vol. 35, No. 1 (February, 2012), pp. 5-32; John Stone, "Cyber War Will Take Place," *Journal of Strategic Studies*, Vol. 36, No. 1 (February, 2013), pp. 101-108.
- 17 Dima Adamsky, *The Culture of Military Innovation: The Impact of Cultural Factors on the Revolution in Military Affairs in Russia, the US, and Israel* (Stanford: Stanford University Press, 2010), pp 93-99.
- 18 Motti Golani, *There Will Be War Next Summer...* (Hebrew), (Tel Aviv: Maarachot, 1997), p. 18.
- 19 David Ben-Gurion, *Uniqueness and Purpose* (Hebrew), (Tel Aviv: Maarachot, 1971), p. 219.
- 20 Yitschak Ben-Israel, *Israel Defense Doctrine* (Hebrew) (Tel Aviv: Modan & Misrad Habitachon, 2013), pp. 59-67.
- 21 In 1967, only after the Arabs refused an Israeli offer made on 19th June 1967 (about a week after the cease-fire) to exchange captured territory (except ancient Jerusalem) in return for a comprehensive peace treaty, did some Israelis begin demanding that the ground taken, or at least part of it, remain in Israeli hands.
- 22 Efraim Inbar and Eitan Shamir, "'Mowing the Grass': Israel's Strategy for Protracted Intractable Conflict," *Journal of Strategic Studies*, Vol. 37, No. 1 (2014), pp. 65-90.
- 23 The images of the German aerial bombardment of Britain and the British and American aerial bombardment of Germany were deeply imprinted in the minds of Israel's political leadership.
- 24 By June 1977, Israel had replaced its matériel and increased its order of battle by: Artillery 100%, Tanks 50%, APCs 800%. Yitzhak Rabin, *Memoirs*, (Tel Aviv; Ma'ariv 1979), p. 505.

- 25 See: Ze'ev Schiff and Ehud Yaari, *Israel's Lebanon War*, (New York: Touchstone, 1985); Richard A. Gabriel, *Operation Peace for Galilee* (New York: Hill and Wang, 1984); Brigadier General (retired) Arie Mizrahi (commander of the Israeli artillery arm in 1982), *Lecture on the Israeli Artillery in Operation 'Peace for Galilee'*, The Israel Military History Society, November 2012.
- 26 From the 1949 Armistice till October 1956, approximately 265 Israeli civilians and nearly 200 Israeli soldiers were killed in Arab attacks; Yehuda Wallach (chief editor), *Carta's Atlas of Israel: The First Years 1948-1960* (Hebrew), (Jerusalem: Carta, 1978), p 113.
- 27 From the 1949 Armistice till October 1956, nearly 70 Israeli soldiers were killed in retaliation raids; *ibid.*, p 113.
- 28 A very clear statement to that effect was made by the IDF Chief of Staff Lieutenant General Rafael Eitan. Schiff and Yaari, *The Deceiving War* (Hebrew), (Tel Aviv: Schocken, 1984), p. 30.
- 29 Itay Brun, "Where Has the Maneuver Disappeared?" (Hebrew), *Ma'arachot* 420-421 (September 2008), pp. 4-14. Victor Israel, "This Is How the IDF Subjected Itself to Fire and Abandoned Maneuver" (Hebrew), *Ma'arachot* 415, (November 2007), pp. 4-9. Ron Tira, "Has the IDF Given Up on Maneuver?" (Hebrew), *Ma'arachot* 453 (February 2014), pp.14-17.
- 30 IDF Strategy, 2015, page 3, page 32, paragraph 35.
- 31 See: Amir Rapport, "Holes in the Strategy," *Israel Defense*, August 20 2015; <http://www.israeldefense.co.il/he/content/%D7%97%D7%95%D7%A8%D7%99%D7%9D-%D7%91%D7%90%D7%A1%D7%98%D7%A8%D7%98%D7%92%D7%99%D7%94#comment-1593>
- 32 Some serving and retired officers have expressed even more extreme versions of this statement in private and in public. Typical expressions: Haim Asa and Major General (retired) Yedidia Ya'ari, *Fighting Differently: A New Combat Concept* (Hebrew), (Tel Aviv: Hemed Books – Yediot Akharonot, 2014); Colonel (retired) Gordon, S., at the BESA Symposium, 30 December 2013.
- 33 Example: Brigadier General (reserve) Gal Hirsch, at the BESA Symposium, 30 December 2013.

- 34 See, for example: Ron Ben Yishai, “Preventing Discussion: Thus Morsi is Eroding the Peace Treaty” (Hebrew), *Ynet News*, 22 August 2012, <http://www.ynet.co.il/articles/0,7340,L-4271733,00.html>; Liad Porat, “The Muslim Brotherhood in Egypt and Its True Intentions Towards Israel,” *BESA Center Perspective Papers* No. 192, December 2012; Liad Porat, *The Muslim Brotherhood and Egypt-Israel Peace*, The Begin-Sadat Center for Strategic Studies, August 2013.
- 35 See, for example: <http://www.middleeasteye.net/news/26-egyptian-officers-jailed-plotting-coup-against-sisi-997863448>; <http://www.alaraby.co.uk/english/news/2015/12/22/army-officers-sentenced-to-death-for-plotting-sisis-assassination>. The Egyptian government has denied these reports but neither its credibility nor the reporting sources are above suspicion.
- 36 See, for example, a comparison between Hezbollah’s 2006 tactical practice and the Syrian army’s pre-civil war tactical doctrine in: Amir Eshel, “Enroute to Immobilizing the Ability to Maneuver” (Hebrew), *Ma’arachot* 434, (December 2010) pp. 17-19.
- 37 Palestinian Authority and Fatah: Adnan Abu Omer, “Security Services Drain Palestine’s Budget”, *Al-Monitor*, 10 May 2015; <http://www.al-monitor.com/pulse/originals/2015/05/palestine-gaza-security-services-annual-budget-finance-aman.html#>; Hamas: Muhammad Omer, “Hamas Growing in Military Stature, Say Analysts”, *Middle East Eye*, 17 July 2014; <http://www.middleeasteye.net/news/hamas-gains-credibility-fighting-force-analysts-say-371780262>; Islamic State: Jim Sciutto, Jamie Crawford and Chelsea J. Carter, “Isis Can ‘Muster’ between 20,000 and 31,500 Fighters, CIA Says”, *CNN*, 12 September 2014; <http://edition.cnn.com/2014/09/11/world/meast/isis-syria-iraq/>. Samia Nakhoul, “Saddam’s Former Army is Secret of Baghdadi’s Success”, *Reuters*, 16 June 2015; <http://www.reuters.com/article/2015/06/16/us-mideast-crisis-baghdadi-insight-idUSKBN0OW1VN20150616>. David Gartenstein-Ross, “How Many Fighters does the Islamic State Really Have?”, *War on the Rocks*, 9 February 2015; <http://warontherocks.com/2015/02/how-many-fighters-does-the-islamic-state-really-have/>. Hezbollah: Aram Nerguizian, “Assessing the Consequences of Hezbollah’s Necessary War of Choice in Syria”, *CSIS*, 17 June 2013; <http://csis.org/publication/assessing-consequences-hezbollahs-necessary-war-choice-syria>. Dominic Evans, “Analysis: Hezbollah Takes Syrian Centre-Stage, Yet Remains in Shadows,” *Reuters*, 18 June 2013;

<http://www.reuters.com/article/2013/06/18/us-syria-crisis-hezbollah-analysis-idUSBRE95H10Y20130618>.

- 38 Every summer Hamas conducts military-training summer-camps for thousands of Gazan children and teenagers: Shimon Cohen, “Again in the Strip: Terrorist Guided Military Summer Camps” (Hebrew), *Channel 7*, June 24 2013; <http://www.inn.co.il/News/News.aspx/258077>. “Like Every Year, Summer Camps for Kids and Teenagers, Conducted in the Gaza Strip, Were Exploited for Indoctrination of Hamas’s Ideology and for Semi-Military Training” (Hebrew), *The Meir Amit Intelligence and Terrorism Information Center*, 7 July 2014; <http://www.terrorism-info.org.il/he/article/20664>. “Hamas’s Summer Camp in Gaza: 25 Thousand Palestinians will Go Through ‘Basic Training’” (Hebrew), *Walla News*, 25 July 2015; <http://news.walla.co.il/item/2875812>. The Islamic State has enacted conscription of one male per family in the territories it controls. Ahmed Ali, “Iraq Situation Report: December 15, 2014,” *Institute for the Study of War*, <http://www.understandingwar.org/sites/default/files/2014-12-15%20Situation%20Report.pdf>. Mona Alami, “ISIS Is Running Short of Recruits,” *Newsweek*, 4 March 2015; <http://www.newsweek.com/isis-running-short-recruits-311375>.
- 39 “Iran: Senior IRGC commander: 130,000 trained Basij forces waiting to enter Syria”, <http://ncr-iran.org/en/ncri-statements/terrorism-fundamentalism/16496-iran-senior-irgc-commander-130-000-trained-basij-forces-waiting-to-enter-syria>; “Iranian Media Reports Deleted Following Publication (1): Senior IRGC Official Speaking On Iran’s Military Involvement In Syria Says Iran Has Established ‘Second Hezbollah’ There”, *MEMRI Special Dispatch No. 5848*, 25 Spetember, 2014, http://www.memri.org/report/en/print8162.htm#_edn1; “The Syrian Army in the Civil War”, <http://www.globalsecurity.org/military/world/syria/army-war.htm>.
- 40 For an example of such an uncoordinated simultaneous war see the various offensives being conducted concurrently against the Islamic State.
- 41 In Operation ‘Peace for Galilee’ (1982), the IDF employed seven divisions, but only three against the PLO, whose forces in southern and western Lebanon were

equivalent in size to two infantry divisions. The other four IDF divisions were employed against the Syrian forces in central and eastern Lebanon.

- 42 IDF, *IDF Strategy*, p. 27.
- 43 Hezbollah is estimated to have approximately 100,000 rockets and missiles; the Gazan arsenal was significantly depleted in summer 2014, but they are working to replenish and increase it.
- 44 Yoav Zeitun, “ Hamas’s Amphibious Commando Getting Stronger; The Target: Ashkelon and Ashdod” (Hebrew), *Ynet News*, 20 August 2015; <http://www.ynet.co.il/articles/0,7340,L-4692519,00.html>.
- 45 Gilli Cohen, Shirley Seidler, Yaniv Kobovic, Revital Khovel, “Captured Hamas Tunnel Unit Member: We Received Parachute Training in Malaysia” (Hebrew), *Haaretz*, 31 July 2014, <http://www.haaretz.co.il/news/politics/1.2392945>.
- 46 Yoav Zeitun, “ Hamas’s Amphibious Commando Is on the Rise; The Target: Ashkelon and Ashdod” (Hebrew), *Ynet News*, 20 August 2015; <http://www.ynet.co.il/articles/0,7340,L-4692519,00.html>.
- 47 Shimon Shapira, “Hezbollah Operational Plan for War With Israel: Launching Missiles on Tel-Aviv and Conquering the Galilee” (Hebrew), 3 November 2011; <http://jcpa.org.il/2011/11/%D7%AA%D7%95%D7%9B%D7%A0%D7%99%D7%AA-%D7%9E%D7%91%D7%A6%D7%A2%D7%99%D7%AA-%D7%A9%D7%9C-%D7%97%D7%96%D7%91%D7%90%D7%9C%D7%9C%D7%94-%D7%9C%D7%9E%D7%9C%D7%97%D7%9E%D7%94-%D7%A2%D7%9D-%D7%99%D7%A9%D7%A8/>. The article is based on public speeches and interviews with Hezbollah sources published in Lebanese newspapers and, though these were likely exaggerating for propaganda effect, the basic premise of ground attacks into Israel, rather than merely small raids, seems to be taken seriously by the IDF: Ron Ben Yishai, “What the Third Lebanon War will Look Like,” *Israel News*, 13 September 2015; <http://www.ynetnews.com/articles/0,7340,L-4700232,00.html>.
- 48 Or Heler, “Hezbollah Has an Offensive Capability in Our Territory” (Hebrew), *Israel Defense*, 13 September 2015; <http://www.israeldefense.co.il/he/cont>

nt/%D7%9C%D7%97%D7%99%D7%96%D7%91%D7%90%D7%9C%D7%9C%D7%94-%D7%99%D7%9B%D7%95%D7%9C%D7%95%D7%AA-%D7%94%D7%AA%D7%A7%D7%A4%D7%99%D7%95%D7%AA-%D7%91%D7%A9%D7%98%D7%97%D7%A0%D7%95.

- 49 Karam Shoumali and Anne Barnard, “Slaughter is Feared as ISIS Nears Turkish Border,” *The New York Times*, 6 October 2014; http://www.nytimes.com/2014/10/07/world/middleeast/isis-moves-into-syrian-kurdish-enclave-on-turkish-border.html?_r=1. Hannah Lucinda Smith, “Fears of Massacre as ISIS Tanks Lead Assault on Kurdish Bastion,” *The Times*, 4 October 2014; <http://www.thetimes.co.uk/tto/news/world/middleeast/article4226717.ece?shareToken=f90094518fab34e4ca7f4a59e7a3990#tab-5>. Gilad Shiloach, “This is ISIS’s Favorite Drone,” *The Week*, 30 January 2015; <http://theweek.com/articles/536593/isiss-favorite-drone>.
- 50 Thus, for example, in summer 2012, it was reported that Hezbollah had conducted an Iranian-mentored exercise in which 10,000 fighters practiced defensive battles and attacks to capture portions of northern Israel. Yahav, N., “Hezbollah Conducted 10,000 Man Exercise” (Hebrew), *Walla News*, <http://news.walla.co.il/item/2560837>.
- 51 Jeffrey White, “The Qusayr Rules: The Syrian Regime’s Changing Way of War,” *The Washington Institute – PolicyWatch* 2082, 31 May 2013, <http://www.washingtoninstitute.org/policy-analysis/view/the-qusayr-rules-the-syrian-regimes-changing-way-of-war>; CTID, G2 TRADOC, “The Battle for al Qusayr, Syria,” US Army, June 2013, <https://info.publicintelligence.net/USArmy-TRISA-alQusayrBattle.pdf>; Nicholas Blanford, “The Battle for Qusayr: How the Syrian Regime and Hizb Allah Tipped the Balance,” CTC at Westpoint, August 2013, <https://www.ctc.usma.edu/posts/the-battle-for-qusayr-how-the-syrian-regime-and-hizb-allah-tipped-the-balance>; Jeffrey White, “Hizb Allah at War in Syria: Forces, Operations, Effects and Implications,” CTC at Westpoint, January, 2014, <https://www.ctc.usma.edu/posts/hizb-allah-at-war-in-syria-forces-operations-effects-and-implications>.
- 52 Amir Bohbot, “The Next War Against Hezbollah Will Look Completely Different” (Hebrew), *Walla News*, 23 March 2015, <http://news.walla.co.il/item/2839981>.

Ron Ben Yishai, “What The Third Lebanon War Will Look Like,” *Israel News*, 13 September 2015; <http://www.ynetnews.com/articles/0,7340,L-4700232,00.html>. Or Heler, “Hezbollah Has an Offensive Capability in our Territory” (Hebrew), *Israel Defense*, 13 September 2015, <http://www.israeldefense.co.il/he/content/%D7%9C%D7%97%D7%99%D7%96%D7%91%D7%90%D7%9C%D7%9C%D7%94-%D7%99%D7%9B%D7%95%D7%9C%D7%95%D7%AA-%D7%94%D7%AA%D7%A7%D7%A4%D7%99%D7%95%D7%AA-%D7%91%D7%A9%D7%98%D7%97%D7%A0%D7%95>.

- 53 The Islamic State, for example, has conducted mass-sacrificial raids into towns behind enemy lines. In one such raid into Kobane in June 2015, it employed 80 to 100 men, 2 suicide-vehicles and 3 or 4 suicide-personnel. 260 Kurds were killed and 300 wounded before this force was finally destroyed. “ISIL on 24-Hour ‘Killing Rampage’ in Syria’s Kobane,” *Al-Jazeera*, 27 June 2015; <http://www.aljazeera.com/news/2015/06/isil-24-hour-killing-rampage-kobane-150626144824173.html>. “79 is Killed in Ein al-Arab ‘Kobane’, and an Egyptian Captive Reveals the Mission Details,” *Syrian Observatory for Human Rights*, 28 June 2015; <http://www.syria.hr.com/en/2015/06/79-is-killed-in-ein-al-arabkobane-and-an-egyptian-captive-reveals-the-mission-details/>. Christopher Kozak with Jennifer Cafarella, “ISIS Counterattacks in Northern Syria,” *Institute for the Study of War*, 25 June 2015; <http://iswsyria.blogspot.co.il/2015/06/isis-counterattacks-in-northern-syria.html>.
- 54 Both Jabhat al-Nusra and the Islamic State routinely employ suicide-bombers – many driving vehicles (including armored vehicles) carrying 5 to 10 tons of explosives to break through enemy obstacles and fortifications in order to ‘prepare’ them for infantry assault. In summer 2014 Hamas employed suicide-bombers against IDF ground forces inside Gaza. There is no reason to assume they won’t study and adopt Jabhat al-Nusra and Islamic State methods which proved successful in Syria, Iraq and Sinai.
- 55 Hezbollah has more than ten times the number of rockets Hamas had in 2014 and can launch many more per day than Hamas. A portion of these rockets are precision-weapons. The computation is complicated and inherently imprecise, but given the statistics of the two recent bouts in Gaza (2012, 2014), to ensure total worst-case coverage the IDF would need to stock a few tens of thousands of interceptors costing at the very least 25,000 dollars each, perhaps more.

- 56 In 2014, in one offensive tunnel in Gaza, the IDF found motorcycles, suggesting a plan to reach targets much further in Israel than the adjacent border villages. <http://news.walla.co.il/item/2772074>.
- 57 Thus, for example, there was no need to hurry and launch a counter-attack in Sinai on the 8th of October before all the reserves had arrived and familiarized themselves with the tactical situation.
- 58 The few exceptions to the rule have all been in completely open and flat terrain against large, concentrated mechanized forces, such as in 1991 in the Saudi desert near Kuwait. Even then, in their single offensive action of the war, the Iraqis made some gains before being forced to halt and then being beaten back by a combined air and ground force.
- 59 Combat experience from Israel's wars, from American fighting in Vietnam, Somalia, and Iraq and NATO forces in Afghanistan, shows that on average, light infantry suffer heavier casualties than tank and armored infantry forces across the entire intensity spectrum of warfare. After repeatedly denying the utility of armored forces in guerrilla warfare and urban combat in theory, in practice most armies found themselves repeatedly compelled to send in heavy armor to support their infantry in these situations. Clinton J. Ancker, "Whither Armor?," *The Journal of Military Operations*, Vol.1, Issue 2 (Fall 2012), pp. 4-8.
- 60 Pnina Shuker, *The Perception of Societal Sensitivity to Casualties and Its Impact on War Management: Israel in the Second Lebanon War (2006)*, (Hebrew), MA Thesis, Bar Ilan University, Ramat Gan, 2013.
- 61 Another four divisions were employed against the Syrian forces in central and eastern Lebanon.
- 62 Private conversations with the authors. In view of the IDF's actions in the Second Lebanon War and in Gaza, this seems to be more than the private opinion of some individuals.
- 63 Rapaport, A., "The Army Suffers from Excessive Professionalism," *Israel Defense*, 31 July 2015, <http://www.israeldefense.co.il/he/search/node/%D7%92%D7%A8%D7%A9%D7%95%D7%9F%20%D7%94%D7%9B%D7%94%D7%9F>

- 64 IDF, *IDF Strategy*, p. 27.
- 65 The size of the territory and number of enemy militants were much larger than that faced by the IDF, but the American combat forces and their allies were also much larger than those available to the IDF.
- 66 *Ibid*, p. 27.

Recent BESA Center Publications

Mideast Security and Policy Studies

- No. 103 Time Is on Israel's Side, *Efraim Inbar*, August 2013 (Hebrew), September 2013 (English)
- No. 104 Armed and Dangerous: Why a Rational, Nuclear Iran Is an Unacceptable Risk to Israel, *Steven R. David*, November 2013
- No. 105 Mowing the Grass: Israel's Strategy for Protracted Intractable Conflict, *Efraim Inbar and Eitan Shamir*, December 2013 (Hebrew)
- No. 106 South Korea's Middle East Policy, *Alon Levkowitz*, December 2013
- No. 107 Israel and Kazakhstan: Assessing the State of Bilateral Relations, *Gil Feiler and Kevjn Lim*, May 2014
- No. 108 The Myth of Palestinian Centrality, *Efraim Karsh*, July 2014
- No. 109 The New Strategic Equation in the Eastern Mediterranean, *Efraim Inbar*, August 2014 (Hebrew), September 2014 (English)
- No. 110 The Ties between Israel and Azerbaijan, *Alexander Murinson*, October 2014
- No. 111 Israel's Air and Missile Defense During the 2014 Gaza War, *Uzi Rubin*, January 2015 (Hebrew), February 2015 (English)
- No. 112 Changing Japanese Defense Policies, *Eyal Ben-Ari*, February 2015
- No. 113 Obama, The Reluctant Realist, *Steven R. David*, June 2015
- No. 114 Israel's Role in the Struggle over the Iranian Nuclear Project, *Yossi Kuperwasser*, June 2015
- No. 115 Deterrence Campaigns: Lessons from IDF Operations in Gaza, *Moni Chorev*, October, 2015 (Hebrew), March 2016 (English)
- No. 116 Hamas: A Social Welfare Government or War Machine?, *Hillel Frisch*, November 2015
- No. 117 The Mediterranean as a Strategic Environment: Learning a New Geopolitical Language, *Eran Lerman*, February 2016
- No. 118 The ISIS Challenge in Syria: Implications for Israeli Security, *Hillel Frisch*, May 2016
- No. 119 Indian Responses to Israel's Gaza Operations, *S. Samuel C. Rajiv*, May 2016
- No. 120 The Return of the Russian Bear to the Middle East, *Shay Har-Zvi*, May 2016 (Hebrew)
- No. 121 Trends in US Congressional Support for Israel, *Amnon Cavari with Elan Nyer*, June 2016
- No. 122 Implications of US Disengagement from the Middle East, *Efraim Inbar*, June 2016
- No. 123 The Oslo Disaster, *Efraim Karsh*, August 2016
- No. 124 The Game of Camps: Ideological Fault Lines in the Wreckage of the Arab State System, *Eran Lerman*, September 2016
- No. 125 Medium-Intensity Threats: The Case for Beefed-Up IDF Ground Forces, *Eado Hecht and Eitan Shamir*, October 2016

Policy Memorandum

- No. 6 The National Security Council: Reflections upon the June 2012 Israel Ombudsman's Report (Hebrew), *Yehezkel Dror*, November 2012
- No. 7 The Gaza War, 2014 – Initial Assessment, *Efraim Inbar and Amir Rapaport*, December 2014 (Hebrew)
- No. 8 Perfect Storm in the Middle East, *Yaakov Amidror*, June 2015 (Hebrew), July 2015 (English)
- No. 9 Israel-Greece Relations, *Arye Mekeel*, September 2015 (Hebrew)
- No. 10 Space Wars, *Aby Har-Even*, May 2016 (Hebrew)

Colloquia on Strategy and Diplomacy

- No. 28 The IDF Force Structure (Hebrew) May 2014
- No. 29 Israeli-Palestinian Negotiations: Whereto? (Hebrew) August 2014