



ISRAEL'S NATIONAL SECURITY DOCTRINE: AN INTRODUCTORY OVERVIEW

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Throughout its history, Israel has faced acute challenges to its national security. Despite this condition, it has never officially articulated all the elements of its national security doctrine. Yet Israel's response to these challenges has not been haphazard. A set of basic security concepts has informed the state's conduct with respect to low-intensity conflict, full-scale conflict, and weapons of mass destruction warfare. The "operationalization" of some of these concepts has been remarkably stable over time, while it has evolved markedly in others to take account of the state's changing internal and external circumstances.

No state in the post-Second World War era has been more concerned with its national security than Israel--and it is not hard to fathom why. In the first half century of its existence, it fought six full-scale wars with its Arab neighbors: the 1948-49 War of Independence; the 1956 Sinai Campaign; the 1967 war; the 1969-70 War of Attrition; the 1973 war; and the 1982 Lebanon war. Israel, in other words, averaged more than one full-scale war per decade in its first five decades of life. Additionally, it participated at least passively in the 1991 Gulf War, when Iraq repeatedly bombarded its territory with ballistic missiles, and may have participated actively in searching out and destroying these missiles in western Iraq.(1) Furthermore, despite Israel's formal peace treaties with Egypt and Jordan as well as its present uncontested superiority in the realm of conventional warfare, the threat of future full-scale Arab-Israeli wars remains a real one.

Israel's national security dilemma, however, has extended--and still extends--far beyond the conventional battlefield. At the low end of the unconventional warfare spectrum, Israel has been subjected to almost continuous violence in the form of terrorism and guerrilla warfare (mainly Palestinian and Lebanese, but often sponsored by Arab states and Iran), insurrection (primarily Palestinian), and border skirmishing (along its frontiers with Egypt, Jordan, Syria, and Lebanon).

At the high end of the unconventional warfare spectrum, Israel has faced the prospect of chemical warfare since the early 1960s, following Egypt's use of poison gas in Yemen, but most ominously during the Gulf War. Nuclear and biological warfare emerged as genuine threats in the late 1970s and early 1980s. So seriously did Israel take the threat of nuclear warfare in the early 1980s that it sent the Israel Air Force (IAF) to destroy Iraq's Osirak nuclear facility in spring 1981.(2)

The lack of a formal national security doctrine notwithstanding, the combined effects of the state's environment and experiences convinced Israeli defense planners to formulate a set of basic security concepts.(3) On the one hand, these concepts have been Israel's response to the geographic, diplomatic, and resource environment in which it has had to survive. On the other hand, they have also been shaped by the state's experiences in both wartime and peacetime.

Developed at various points in time, and not integrated into a set of closely linked propositions that could be called a systematic and coherent "theory" of national security, these concepts have nevertheless clearly driven Israeli thinking and conduct over the course of the state's existence. They can be organized, in no particular order, under eight distinct headings: geography; manpower; quantity versus quality; offensive maneuver

warfare; deterrence; conventional versus unconventional threats; self-reliance; and great power patronage. The aim of this article is to describe and analyze these concepts from a historical perspective--that is, to trace their evolution and to consider their salience to Israel's national security over the years.

But a couple of caveats must be stressed up front. First, as suggested by the labels of the headings, this article defines national security in a rather narrow sense. A state's national security doctrine, in its broadest sense, encompasses the totality of those military, diplomatic, economic, and social policies that are explicitly intended to protect and promote the state's national security interests. For the purpose of this article, however, the concept of national security is restricted essentially to the domain of national defense. This article, to put it differently, focuses chiefly on Israel's military doctrine. Second, despite the restricted scope of its inquiry, this article cannot claim to offer a comprehensive review of this doctrine. It can claim only to examine, more modestly, the basic concepts that have constituted the core of the doctrine.

GEOGRAPHY

Historically, Israel's military doctrine has been heavily influenced by its geographical situation. Though it had been victorious in the 1948-1949 War of Independence, acquiring considerably more territory than had originally been allotted to it under the 1947 United Nations Partition Resolution, Israel nevertheless emerged from the war with troublesome borders. Very long and largely flat on the Israeli side, they could not be adequately defended, as demonstrated by the routine ease with which even inexperienced Arab infiltrators crossed into Israel's territory during the early years of statehood. Moreover, Israel had no strategic depth. The state's width varied from just a few miles at its narrowest to just a few score miles at its widest. All of its major population centers, industrial assets, and military facilities were potentially within easy reach of Arab armies.

This geographical situation early on led Israeli defense planners to the conclusion that Israel could not afford to "host" either a full-

scale war or a sustained low-intensity campaign on its territory. A sustained low-intensity campaign, they reasoned, would inevitably result in substantial damage to Israeli society, while a full-scale war could undermine the very survival of the state. This thinking gave birth to the concept that fighting must be transferred to Arab territory to the greatest possible extent, certainly in the case of a full-scale war.

This concept, in turn, had profound implications for Israel Defense Forces (IDF) operational and tactical principles (to be discussed under the heading of Offensive Maneuver Warfare). Suffice it here to say that, with respect to full-scale war, Israel's territorial situation from 1949 to 1967 forms part of the explanation for its emphasis on preventive and preemptive war during these years. Unlike many other states, which have either borders that make it possible for them to prevent attacking armies from penetrating into their interiors (e.g., Switzerland) or the territorial depth for their own armies to fall back, regroup, and drive attacking armies out of their interiors (e.g., Russia), Israel inside its pre-1967 borders possessed neither of these luxuries. Hence, it fought a preventive war in 1956 and a preemptive war in 1967.⁽⁴⁾

With respect to low-intensity conflict, Israel's geographical situation from 1949 to 1967 prompted its emphasis on retaliation. Because the IDF had neither the manpower nor the material resources to seal the state's borders against armed infiltrators, Israeli defense planners concluded that Israel required the "cooperation" of the surrounding Arab states to bring peace to its borders. Israel, therefore, attempted to compel the Arab states to stem infiltration by imposing costs on their societies and armies through retaliatory raids.

The outcome of the 1967 War radically altered the territorial status quo in the Arab-Israeli conflict. Not only had Israel thoroughly smashed the Egyptian, Jordanian, and Syrian armies, but it had also captured significant chunks of Egyptian, Jordanian, and Syrian territory. It conquered the Sinai and the Gaza Strip from Egypt, the West Bank from Jordan, and the Golan Heights from Syria. These territorial acquisitions provided

Israel with some strategic depth. Its major population centers, industrial assets, and military facilities no longer remained within easy reach of either Arab armies or irregular forces. Furthermore, despite the extent of its territorial acquisitions, Israel now had defensible borders. Not only did these borders follow militarily impressive topographical obstacles, like the Suez Canal and Jordan River, and incorporate militarily significant high ground, like the Judean and Samarian highlands, but the length of the borders themselves had been shortened.

While the post-1967 War territorial status quo did not have a great impact on the IDF's operational and tactical principles, it nevertheless did affect Israel's military doctrine. Two of the three full-scale wars that Israel has fought in the post-1967 era have been initiated by the Arabs, while Israel initiated two of the three wars fought in the pre-1967 era. Indeed, the lone Israeli-initiated war since the 1967 War occurred across the only border--the border with Lebanon--where Israel lacked strategic depth, the only border where its citizens were routinely exposed to terrorist incursions and rocket attacks.⁽⁵⁾ Israel's decisions to initiate (or to refrain from initiating) war, to be sure, have never been made solely on the basis of military considerations; however, it does seem that the acquisition of defensible borders and strategic depth in the post-1967 era has curbed, to a certain extent, Israel's propensity to engage in preventive and preemptive war.

Israel's approach to low-intensity conflict, on the other hand, does not seem to have changed noticeably as a consequence of shifting borders, since retaliation as a means of influencing enemy conduct has remained a central tool for dealing with low-intensity conflict in the post-1967 era. And, with regard to the proliferation of nuclear, biological, and chemical warfare threats to Israel over the past quarter century, strategic depth and defensible borders do not appear to have made any tangible difference to the state's national security.

The primary contribution of the post-1967 borders to Israel's national security, then, is that they have insulated the state against a catastrophic reversal in a full-scale

conventional war. In the 1973 War, the depth and defensibility provided by the Sinai and Golan Heights gave the IDF the room and the time that it needed to recover from its early surprise and setbacks. But control of the Sinai, the Gaza Strip, the West Bank, and the Golan Heights have also created problems of their own. For starters, Israel's conquest of the Sinai and Golan Heights served as the basis of Arab decisions to initiate both the War of Attrition and the 1973 war.⁽⁶⁾ Furthermore, mass Palestinian violence from the late 1980s to the present, as well as guerrilla warfare and terrorism in the South Lebanon security zone from 1985 to 2000, has called into question the degree of strategic advantage derived by dominating territory that contains a hostile population.

Consequently, Israeli national security doctrine has steadily moved in the direction of exchanging territory for formal peace treaties (e.g., with Egypt and Jordan) or informal understandings (e.g., with Lebanon) that are accompanied by acceptable security guarantees, including international monitoring, demilitarized zones, early warning stations, bilateral security coordination, and so forth. The decreased emphasis on control of territory as a national security asset also means that, should Israel fight a full-scale war in the future, its aims are unlikely to include territorial conquest, at least long-term conquest. Rather, the IDF is likely to focus on the destruction of Arab military forces and, perhaps, on the destruction of the economic and political infrastructures of Arab states as a more effective method of ensuring Israel's national security.

MANPOWER

In 1948, Israel had a Jewish population of 600,000-650,000 people. Collectively, the surrounding Arab states had a population that numbered into the many millions. From a military perspective, this extreme demographic imbalance, which even mass Jewish immigration to Israel would not be able to redress, meant that the Arab world could maintain sizable professional armies. Israel could not hope to do so, for an attempt to maintain a sizable professional army of its

own would drastically inhibit the state's ability to build a healthy economy.(7)

Israeli defense planners overcame this demographic obstacle by opting to turn the IDF into a militia-like army in the wake of the War of Independence. During peacetime (i.e., in the absence of full-scale war), the IDF would consist of a small number of professional soldiers, supplemented by a larger pool of conscripts doing their mandatory military service. These professionals and conscripts would be joined by a limited number of reservists, each of whom would be liable for one to several months of military service annually, depending on his or her specialty.(8) Unless he or she joined up as a professional soldier, each Israeli who had been drafted into the IDF would become a reservist after the completion of his or her mandatory service. Indeed, Israelis once fondly quipped that they were a nation of soldiers on leave for 11 months of the year. The number of soldiers in the peacetime IDF, therefore, would be kept to a minimum so as not to disrupt the state's economic progress.

The forces of the peacetime IDF have had two basic functions. First, they have been in charge of Israel's day-to-day security. Responsibility for day-to-day security, in the main, has meant dealing with low-intensity conflict, whether border skirmishing with an Arab army, counterinsurgency tasks against a terrorist organization, or mob insurrection. Second, they have had to prepare for full-scale war. To this end, they have had to make sure that reserve units, which have always formed the bulk of the IDF's warfighting potential, could be quickly and smoothly organized and deployed for battle. Maintaining an efficient mobilization system has been crucial to this endeavor. War readiness has also entailed such tasks as training conscripts and reservists, maintaining equipment in usable condition, and updating operational and tactical plans.

By and large, a militia-like IDF has served Israel's national security well. Not only has the IDF done an admirable job of protecting the state in both low-intensity conflicts and full-scale wars, but it has also done so without causing long-term economic disruption.

Nevertheless, this elegant solution to Israel's manpower problem has carried with it a military and diplomatic price tag. Militarily speaking, the IDF experienced a near disaster at the outset of the 1973 war, because its standing forces were too small to cope effectively with the Egyptian and Syrian surprise attack. Diplomatically speaking, once mobilized for war, the IDF must be either demobilized or unleashed in short order. Israel's economy simply cannot survive an indefinite mobilization, waiting for the often slow wheels of diplomacy to turn. Jerusalem, then, has never had the luxury of time in a crisis.

While Israel still remains strongly committed to a militia-like IDF, signs of change in this regard have been in the air since at least the early 1990s. Senior officers have frequently voiced the opinion that they would like to see the IDF become a "slimmer and smarter" organization. The precise meaning of this term with respect to future manpower requirements is not clear, but it seems to indicate a desire to rely more on professional soldiers and less on conscripts and reservists.(9)

Two major reasons account for the preference for a more professional army. First, as a consequence of both natural growth and mass immigration, Israel's Jewish population has passed the five million mark. The state, according to many officers, now has a surfeit of military manpower, suggesting that the IDF may eventually be able to do without mass conscription.(10) Second, as warfare has become an increasingly high-technology affair, it has also become more difficult for part-time soldiers to operate and maintain state-of-the-art hardware and software. Several branches of the IDF, particularly the air force, the navy, and military intelligence, though they retain significant reservist elements, have long relied principally on professional soldiers, precisely because of the ultra-sophisticated nature of the hardware and software with which they fight. Likewise, the IDF's special operations units are more professional than in the past, reflecting the more demanding and politically delicate role that they now play in Israel's defense.

The IDF, unquestionably, is going to retain and rely upon a large cadre of reservists for the foreseeable future--it would still need them if a full-scale war were to erupt.(11) But, as high technology "force multipliers," including advanced electronic systems and precision-guided munitions (PGMs), continue to proliferate on the battlefield, the reservist component of the IDF is likely to shrink as conscription becomes somewhat more selective and as more professional soldiers join the ranks.

QUANTITY VERSUS QUALITY

The Arab-Israeli conflict has traditionally been characterized by an imbalance of military resources, certainly in the realm of conventional warfare. Simply put, Israel has had--and will continue to have--fewer soldiers and arms than the Arab world. In response to its quantitative inferiority, the IDF has consistently sought to achieve qualitative superiority with regard to both soldiers and arms.

Israeli manpower has always been more physically fit, more highly educated, and more strongly motivated than its Arab counterparts. Israeli defense planners, who recognized this fact from day one, have consistently sought to cultivate Israel's manpower asset.(12) The IDF has capitalized on this superiority in several ways. First, the IDF has always been known for its very rigorous and realistic training, particularly of combat troops. The training of pilots in the IAF, to cite just one example, is known to be more demanding than the training of pilots in any other air force in the world, not to mention any Arab air force. Second, the IDF has always placed great emphasis on the careful selection and training of combat officers. The meticulousness of the selection process and training of these officers probably exceeds that of any other army in the world. Third, the IDF early on adopted a mode of warfare at the operational and tactical levels (to be discussed under the heading of Offensive Maneuver Warfare) specifically intended to maximize its manpower advantage.

Arms superiority, on the other hand, is a more recent phenomenon. The ultra-

sophisticated arms with which the IDF is currently equipped frequently obscures the fact that, before the 1967 War, Israeli arms were generally not superior to--and were often inferior to--those in Arab hands. While the Arabs received rather up-to-date Soviet arms, Israel usually had to make do with secondhand Western weapons. Only in the quality of its air force, tank, and intelligence units could the IDF's arsenal really be said to match that of the Arab states in qualitative terms. The IDF achieved technological superiority in the air only after the 1967 War, when the United States began to supply the IAF with America's frontline combat aircraft. Similarly, the IDF gained technological superiority on the water only after the 1967 War, when the Israel Navy (IN) incorporated the then novel fast missile boat, equipped with an indigenously developed ship-to-ship missile, into its order of battle. In the realm of land warfare, technological superiority would only be achieved in the wake of the 1973 War, largely through local production of arms (to be discussed under the heading of Self-Reliance).

The result of Israel's persistent quest to achieve and maintain qualitative superiority in manpower and arms has been readily evident on the battlefield. Despite suffering reverses in both full-scale wars and low-intensity conflicts, the IDF has never been bested by any Arab military force. It has been the undisputed battlefield victor in every full-scale war, with the exception of the War of Attrition, which ended in a stalemate along the Suez Canal.(13) It has also performed well in defending Israel during periods of low-intensity conflict, even though it has never been able to deliver knock-out blows to Arab terrorist organizations or mobs.

Today, the IDF remains absolutely committed to the concept of qualitative superiority in manpower and arms. Arguments to the effect that the quality of its soldiers has declined over recent decades notwithstanding, the IDF's manpower is as well prepared for war as ever.(14) Technologically speaking, the IDF is perhaps more committed than ever to the idea of maintaining its "qualitative edge" over Arab armies. This emphasis on quality, however,

should not conceal the fact that the IDF's attitude toward quantity changed after the 1973 War. Its traumatic experience in that war, especially during the early days, when it incurred heavy losses in men and machines, convinced the IDF that "quantity has a quality all its own." Over the past quarter-century, the IDF has grown significantly in size, to the point where its arsenal now contains approximately 800 combat aircraft, 4,000 tanks, and 2,000 artillery pieces.⁽¹⁵⁾ These figures make its arsenal among the largest in the world. Still, the commitment to a slimmer and smarter IDF should lead to a reduction in the quantity of arms over time.

OFFENSIVE MANEUVER WARFARE

It may seem paradoxical that Israel, a state that has never deliberately sought to expand its territory at the expense of its Arab neighbors has been committed to offensive maneuver warfare.⁽¹⁶⁾ But the IDF's embrace of this type of warfare at the operational and tactical levels has been quite sensible.⁽¹⁷⁾ To understand why, it is necessary to see that territorial, economic, manpower, diplomatic, and quantitative versus qualitative considerations have all blended together to favor this kind of warfare.⁽¹⁸⁾

Not only has Israel sought to wage wars on Arab territory for the aforementioned reasons (discussed under the heading of Geography), but it has also sought to wage short wars. Israel's preference for short wars, like its preference for wars on Arab territory, is not hard to fathom. Short wars, needless to say, cause less economic disruption than long wars. Since the Israeli economy has been particularly sensitive to the dislocating effects of war, Jerusalem has had a powerful incentive to terminate wars as quickly as possible. Moreover, the Jewish people's tragic past and Israel's small population have provided an equally powerful incentive to end wars quickly so as to keep their human costs to a minimum. Finally, Jerusalem has reasoned that terminating wars sooner rather than later reduces the prospect of foreign military and diplomatic intervention on behalf of the Arab world.

Not only has offensive maneuver warfare offered an elegant solution to Israel's

territorial, economic, human, and diplomatic difficulties, but it has also played to the IDF's military strength vis-à-vis Arab armies. This type of warfare, after all, puts a premium on quality. Based as it is on rapid movement, offensive maneuver warfare advantages the combatant whose forces are better trained, better motivated, and better led. Numbers, on the other hand, have much less of an impact on the outcome of this type of warfare than on the outcome of attrition warfare.

The IDF's actual battlefield experience has repeatedly reinforced its commitment to offensive maneuver warfare.⁽¹⁹⁾ During the final stage of the War of Independence, the IDF routed the Egyptian army, driving it out of the Negev, in an offensive maneuver campaign. In its early years, therefore, the IDF built itself around mechanized infantry units of the kind that had defeated the Egyptian army. In the 1956 Sinai Campaign, during which Israeli forces again routed the Egyptian army, capturing the whole of the Sinai in a few days, the IDF's air and tank units played a conspicuously impressive part. Thus, after the war, offensive maneuver warfare in the IDF became synonymous with the primacy of aircraft and tanks.

The spectacular victories of its air and armored units in the 1967 War simply reinforced the IDF's commitment to offensive maneuver warfare at the operational and tactical levels. Israel's acquisition of defensible borders and strategic depth in this war did little to temper the IDF's resolute focus on offensive maneuver warfare.⁽²⁰⁾ Nor did the reverses suffered by its air and tank forces at the hands of Arab anti-aircraft and anti-tank weapons in the opening days of the 1973 War undermine the IDF's fundamental devotion to this type of warfare.

To the present day, the IDF continues to advocate strongly offensive maneuver warfare; however, it has modified its operational and tactical models in the aftermath of the 1973 War. One of the more significant changes involves the shift to a more balanced mix of forces--that is, giving previously neglected branches of the army, especially artillery, infantry, and engineers, a more prominent role in the IDF's operational and tactical designs. Another of the more

significant changes involves a considerably greater reliance on firepower to accomplish military objectives than in the past. Signs of a new emphasis on firepower became unmistakable by the outbreak of the 1982 Lebanon War.⁽²¹⁾ But only in the 1990s did the IDF really begin to acknowledge explicitly (though rather quietly) that mobility alone may no longer represent an ideal solution on the modern Middle Eastern battlefield.

In light of the "saturated" nature of this battlefield, where room for maneuver has been degraded by the vast numbers of weapons in Middle Eastern arsenals, the next war--if there would be one--may well see the IDF defer offensive maneuver warfare until it has undertaken a brief but very intensive preparatory bombing campaign, using short- and long-range air-, sea-, and ground-launched PGMs, against Arab military, political, and industrial targets. Regardless of who began the war, the IDF might first seek to weaken its opponent to such an extent that an offensive maneuver warfare campaign could be carried out at low cost to itself. If called upon to fight in the future, in other words, the IDF may try to re-fight the Gulf War. It has certainly equipped itself to do so (see the discussion under the heading of Self-Reliance).

DETERRENCE

Like most states, Israel has aspired to defend its national security interests through peaceful means. It has sought, to put it differently, to deter its Arab opponents rather than to fight them. To this end, it has employed both general and specific deterrence.⁽²²⁾ Furthermore, it has practiced deterrence in the realms of both conventional and unconventional warfare.

Historically, Israeli deterrence has focused most heavily on the prevention of full-scale conventional war. Israel's general deterrent posture has been built around the concept of projecting an image of overpowering strength. Jerusalem has been fond of saying that, although Arab states can choose to start a war, Israel will determine the scope and intensity of any war. This refrain has manifestly been meant to communicate to the Arab world the

message that it should not initiate war, because Israel will inflict such a defeat on it that the costs of going to war will outweigh any benefits of doing so. Israel's specific deterrent posture, on the other hand, has been fashioned around the concept of laying down explicit "red lines" that, if crossed, would draw a firm military response.

Jerusalem has long made it known, to cite one instance, that the movement of any foreign army into Jordan would be cause for war--an idea, incidentally, that now has legal sanction as a consequence of being incorporated into the 1994 peace treaty between Israel and Jordan. Jerusalem has also long made it known, to cite another instance, that a maritime blockade of its sea lanes would trigger war. Indeed, the Arab violation of both of these red lines in 1967 explains in part Jerusalem's decision to launch a preemptive war.

In contrast to its deterrent posture in regard to conventional war, Israel's deterrent posture in regard to low-intensity conflict as well as in regard to weapons of mass destruction warfare has been less clearly formulated. Perhaps the concept of "massive retaliation" captures best Israel's deterrent posture in the area of unconventional warfare. To deter low-intensity conflict, Jerusalem has consistently promised to retaliate disproportionately against terrorist organizations. To deter the use of weapons of mass destruction, Jerusalem has essentially promised to do the same to any state employing such arms against Israel.⁽²³⁾ To make its threat of retaliation more credible here, Jerusalem has slowly but surely made its capability to wage nuclear warfare more "transparent."

Israel's violence-filled history would suggest, at first glance, that its deterrent posture has not deterred its Arab opponents. Evidence exists to support this contention. Israeli deterrence, after all, failed before the 1967, 1969-1970, 1973, 1982, and 1991 wars. Furthermore, Israeli deterrence of low-intensity conflict, which has included the execution of prior threats of massive retaliation, has not provided a long-term cure for this seemingly chronic irritant. Yet, the claim that Israel's deterrence has been a mirage is too simplistic. Since it is possible

only to discern when deterrence fails--but never when it succeeds--Israel's deterrent posture can easily be made to look like a grand failure.

But, when the fact that neither Arab states nor terrorist organizations have ever expressed any compunctions about using whatever violence is necessary to advance their exterminatory agenda is taken into account, Israel's deterrence record begins to look rather better. Though Iraq, for example, was not deterred from firing ballistic missiles at Israel during the Gulf War, it did not arm these missiles with biological or chemical warheads, despite a capacity to do so. Israel's threat of nuclear retaliation, it may safely be assumed (even if it cannot be proven), deterred Iraq from using weapons of mass destruction. Whether its overall record is judged a success or a failure, however, Israel's deterrent posture is unlikely to change fundamentally any time soon.

CONVENTIONAL VERSUS UNCONVENTIONAL THREATS

Israel has been plagued by the threat of both low-intensity conflict and full-scale war throughout its entire history. It has also faced the threat of weapons of mass destruction warfare for much of its lifetime. Nevertheless, the relative impact of these threats on Israel's national security doctrine has changed significantly over time. The most useful distinction to make in this connection is between the pre- and post-1973 War eras.

In the pre-1973 War period, Israel's national security doctrine focused overwhelmingly on the threat of full-scale war. Israeli defense planners, to be sure, recognized that low-intensity conflict in the form of border skirmishes with Arab states and Palestinian terrorism constituted a chronic threat, one which the IDF had to be prepared to counter. Given Egypt's stock of chemical weapons, they also took the threat of weapons of mass destruction warfare seriously enough in the early 1960s to launch a sabotage campaign against Cairo's efforts to build ballistic missiles.(24) Still, contrary to the threat posed by conventional war, they did not view either of these threats as representing genuine dangers to Israel's survival.

The allocation of the state's defense resources in the pre-1973 War period proves that Israeli defense planners viewed full-scale war as the gravest threat to Israel during these years. True, a small proportion were invested in "perimeter defense," in the form of border outposts, border patrols, anti-terrorist units, and minefields. And, true, a small proportion of defense resources were invested in the development of nuclear arms (as a "weapon of last resort") and to equipping the IDF with anti-chemical warfare gear. But most resources were invested in the means necessary to wage conventional (offensive maneuver) warfare--that is, aircraft, tanks, armored vehicles, artillery, and so on.

In the post-1973 war era, Israeli defense planners have continued to view conventional war as the principal threat to the state's survival. That the IDF currently maintains no less than 12 armored divisions and 4 mechanized divisions is eloquent testimony to this fact.(25) Since the 1973 War, however, low-intensity conflict and weapons of mass destruction warfare have come to be seen as much more serious threats to the state's welfare than in the past.(26) The former's upgraded status initially grew out of the Palestinian intifada of 1987-93 and the rise of Hizballah in the 1990s. The latter's upgraded status derives from the proliferation of ballistic missiles and weapons of mass destruction throughout the Middle East over the past two decades.

The rise of unconventional warfare threats at both ends of the violence spectrum has been reflected in Israel's defense resource allocations since the 1973 War. While the state continues to invest the bulk of its resources in preparations for conventional war, more and more resources have been sunk into preparations for unconventional warfare, particularly from the 1980s onward. With the outbreak of the intifada in the late 1980s, the IDF created special operations units specifically dedicated to low-intensity conflict tasks.(27) It formed Sayeret Shimshon and Sayeret Duvdevan, for instance, for the sole purpose of taking out Palestinian death squads and terrorist leaders. These *mista'arvim* (or Arab-masquerader) units have recently seen action again in the intifada. Likewise, the IDF

formed Sayeret Egoz specifically to wage a counterinsurgency battle against Hizballah.

Even more impressive has been Israel's answer to the threat of weapons of mass destruction warfare. To deter Arab states from using such weapons, Israel appears to have acquired a large and diverse nuclear arsenal of its own.(28) This arsenal reportedly incorporates--but may not be limited to--bombs that can be dropped from aircraft, warheads that can be delivered by ballistic missiles, and warheads that can be delivered from submarine-launched cruise missiles.(29) Israel, in other words, now seems to possess a secure "second strike" capability. With respect to active defense measures, the state has developed a whole range of arms and intelligence-gathering systems to defeat weapons of mass destruction (to be discussed, along with its ballistic and cruise missile production, under the heading of Self-Reliance).

Moreover, since the late 1990s, if news reports are credible, the IDF has talked about building a "Strategic Command," consisting of intelligence, air force, and special operations units, which would undertake missions far from Israel's borders, to defend the state against weapons of mass destruction (and international terrorism).(30) Finally, passive defense measures have not been forgotten. The IDF created a Home Front Command after the Gulf War to help Israel's population protect itself against weapons of mass destruction. The rise of unconventional threats, in short, has made the IDF into a very different army from the one that emerged from the 1973 War.

SELF-RELIANCE

Partly in response to the anti-Semitic myth of the Jew as a cowardly weakling and partly in response to the need to defend the local Jewish community against hostile Arab elements, the pre-state Jewish community consistently put great emphasis on self-reliance in military affairs. Armed Jews ready and able to use force to protect their lives and property materialized at the outset of the Zionist effort. This emphasis on self-reliance would be inherited by Israel.

The concept of self-reliance may be divided into three separate components: self-reliance in manpower, self-reliance in training and doctrine, and self-reliance in arms. On only three occasions has Israel utilized foreign military manpower, and on only one of these occasions has this military manpower proven to be of importance to the state's fortunes in war. The first--and consequential--occasion occurred during the War of Independence, when Jewish and non-Jewish volunteers, known collectively as Machal, served in the fledgling IDF. These foreign volunteers made up a disproportionate percentage of the soldiers in branches of the IDF requiring specialized technical skills, like the air force and the navy. It may be an overstatement to argue that Machal members had a decisive impact on the outcome of the war, but they certainly contributed more than their fair share to Israel's victory.

The second occasion occurred during the Sinai Campaign, when Jerusalem requested that France station interceptor aircraft at IAF airfields to prevent Egyptian bombers from hitting Israel's cities, while the third occasion occurred during the Gulf War, when Jerusalem requested that American- and Dutch-manned Patriot anti-aircraft missile batteries be dispatched to shoot down Iraqi ballistic missiles aimed at Israel's cities. The French aircraft proved to be unnecessary, as no Egyptian bombers appeared in Israeli skies, while the Patriot missile batteries provided little more than psychological reassurance to the Israeli public. In terms of manpower, then, Israel has achieved a tremendous degree of self-reliance.

The same applies in the case of training and doctrine. A few IDF officers have studied abroad at Western military academies, and a few IDF soldiers have trained abroad with Western armies, primarily in order to learn how to operate new weapons systems. The IDF, however, has always justly prided itself on the fact that, unlike the armies of most post-Second World War states, it has never sought foreign guidance in the areas of training and doctrine. Everything that the IDF knows about low-intensity conflict, everything that it knows about full-scale war at the operational and tactical levels, and

everything that it knows about weapons of mass destruction warfare, it learned on its own, often through trial and error.

Self-reliance in arms is a more complex story, however. Israel has always had its own arms industry. Indeed, the Jewish community manufactured a wide range of small arms and other equipment prior to the birth of the state. And this arms industry has advanced steadily to the point where, today, it is as sophisticated as any in the world.⁽³¹⁾ Yet, Israel remains heavily dependent on foreign--that is, mostly American--arms to ensure its national security. The reason why is to be found in Israel's evolving industrial strategy.

Israel has been subject to two damaging arms embargoes in its history: the first during the War of Independence, when the United States and Great Britain stopped the flow of weapons, and the second on the eve of the 1967 War, when France--Israel's main arms supplier at the time--cut off further deliveries to induce Jerusalem to forgo military action.⁽³²⁾ Psychologically speaking, these embargoes reinforced Israel's quest to achieve as much arms self-reliance as possible.

From 1949 to 1967, Israel's arms industry, though small in size, registered some notable accomplishments--perhaps none more significant than constructing two nuclear bombs immediately prior to the 1967 War.⁽³³⁾ In the aftermath of this war, its arms industry made considerable strides by manufacturing combat aircraft and naval vessels, in addition to the wide assortment of ammunition, small arms, artillery, missiles, and electronics that it had already developed. But explosive growth in the size and sophistication of the state's arms industry would really occur after the 1973 War.

In the three decades since this war, Israel's arms industry has designed and manufactured an enormous array of arms--an amazing accomplishment for a state of its size. In the area of spaceborne systems, it has produced reconnaissance satellites and booster rockets.⁽³⁴⁾ It has produced intermediate-range ballistic missiles (the Jericho series) and long-range cruise missiles, both of which are apparently capable of carrying indigenously developed nuclear warheads, as well as an anti-ballistic missile defense

system (based around the Arrow missile). Israel's arms industry produces all kinds of electronic systems, including radar, communications gear, intelligence-gathering instruments, night vision devices, and targeting pods. A full-range of airborne (e.g., Python IV, Derby, Popeye, MSO, and Pyramid), shipborne (e.g., Barak and Gabriel), and landborne (e.g., Lahat and Gill) PGMs are in production.

Furthermore, Israel's arms industry is the acknowledged world leader in the area of unmanned aerial vehicles (UAVs), manufacturing variants for both intelligence-gathering (e.g., Heron, Hermes, and Searcher Mk II) and attack (e.g., MOAB and Harpy) missions. It may also be the world's most successful industry in developing upgrading techniques to improve and extend the life of older weapons' systems. Finally, the arms industry produces a full-range of land warfare systems, including tanks (the Merkava series), armored fighting vehicles (e.g., Achzarit), artillery systems (guns, rockets, and mortars), small arms, ammunition, and so on.⁽³⁵⁾

Israel has had the resources to design and manufacture all of these products because of its conscious decision, taken in the 1980s, to rely on other states, mainly the United States, for aircraft and naval vessels. The Lavi affair of the mid-1980s, when Israel ultimately could not come up with the money necessary to manufacture this locally designed aircraft, cemented this decision.⁽³⁶⁾ The industrial strategy of eschewing the production of air and naval platforms, of course, is the source of its heavy dependence on foreign arms. Though the Israel of the twenty-first century has the technological knowledge, the industrial infrastructure, and the money to produce aircraft and naval vessels, Jerusalem has shown no inclination to do so. It seems to have reconciled itself to the notion that, even if Israel did design and produce aircraft and naval vessels, the state could never afford to build the numbers that would free it entirely of dependence on foreign sources of supply.

GREAT POWER PATRONAGE

Perhaps aware that the state could never be completely self-sufficient, Israel's first prime minister, David Ben-Gurion, set forth what

has become a cardinal principle of Jerusalem's national security doctrine: Israel should always have at least one great power patron.⁽³⁷⁾ A small state with limited resources, he sensibly concluded, simply could not afford to find itself isolated in the world community during wartime. To protect Israel's national security interests, he continued, the military, economic, and diplomatic support of a great power, preferably the United States, would be absolutely vital.

Jerusalem has always taken Ben-Gurion's dictum to heart. In each of the three Arab-Israeli wars in which Israel fired the first shot--the Sinai Campaign, the 1967 War, and the Lebanon War--Israel first received either the open or tacit consent of its patron. In 1956, Israel's patron at the time, France, actually joined with it and Great Britain to attack Egypt. In 1967 and 1982, Jerusalem secured initial American approval for its military plans. Indeed, great power support has been considered so important that, in the 1969-1970 and 1973 wars, Israel's military plans were actually subordinated to American foreign policy interests. The IDF's use of force in wartime, then, has always been highly sensitive to the wishes of its patrons.⁽³⁸⁾ Consequently, it has had the assistance of a great power patron in each Arab-Israeli war, except for the War of Independence.

As a corollary to his dictum about great power support during wartime, Ben-Gurion also advised that Israel never engage a great power in battle. For the most part, Jerusalem has followed his advice; however, on a few prominent occasions, it has felt that Israel's national security interests dictated a different course. During the War of Independence, the IDF clashed with British forces, most notably near the end of the war, when five Royal Air Force planes were shot down by Israeli air and ground forces.⁽³⁹⁾ In every Arab-Israeli war from the 1967 War to the Lebanon War, the IDF engaged Soviet military forces.⁽⁴⁰⁾ What is undoubtedly the most famous Soviet-Israeli encounter occurred near the end of the War of Attrition, when five Soviet air force planes were shot down in a brief dogfight with IAF aircraft. At any rate, though, these

exceptional cases had no long-term strategic consequences.

In the future, Israel's fundamental attitude toward great power patronage is not likely to undergo a change. Jerusalem will continue to view a strong patron-client relationship with Washington as crucial to Israel's national security interests. Similarly, Jerusalem's basic attitude toward military confrontations with great powers is not likely to change. It will seek to avoid such encounters to the extent possible without threatening Israel's core national security interests.

CONTINUITY AND CHANGE

Israel's national security doctrine, then, has been marked by both continuity and change over the state's lifetime. On the one hand, Israel has remained steadily committed to concepts like deterrence through the promise of massive retaliation, short wars on Arab territory, qualitative superiority in personnel and arms, maximum feasible self-reliance in personnel and arms, and securing the active support of a great power. But, on the other hand, Israel's national security doctrine has also undergone evolutionary change over the decades. Although Israel has always expressed a willingness to trade land for peace, control of territory has become a steadily less valuable national security asset in recent decades, especially as the costs of low-intensity conflict and the specter of weapons of mass destruction warfare have grown apace. To a greater extent than ever before, therefore, Israel now seeks to achieve strategic depth and defensible borders through peace treaties that contain firm security guarantees rather than through control of territory.

Similarly, while the IDF is still built primarily to engage in offensive maneuver warfare, it has also equipped itself to engage in alternative modes of combat, as its acquisition of an extensive range of stand-off PGMs and ultra-sophisticated electronic systems attests. Moreover, as the immediate threat of full-scale conventional war has receded, it has devoted more and more resources to countering the threats posed by low-intensity conflict and weapons'-of-mass-destruction warfare.

Israel in the twenty-first century may have entered the “post-heroic” phase of its existence.⁽⁴¹⁾ The same may be said of its national security doctrine--a doctrine that is presently striving to come to grips with domestic and foreign realities that are substantially different from those of earlier decades. The threats that this doctrine will be called upon to address in the future may well require less glorious and more dispiriting solutions than in the past. The spectacular air and armored battles of the past century may no longer be the defining component of Israel’s warfare in this century. If the past is any guide to the future, however, Israel’s national security doctrine will contain solutions that prove up to the task of defending the state’s survival.

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NOTES

1. For the claim that Israeli troops operated in western Iraq during the Gulf War in an anti-ballistic missile capacity see the web site dedicated to Israeli special operations units at <<http://www.isayeret.com>>. This site, apparently maintained by past or present members of the Israeli special operations community, contains a vast amount of information on Israeli special operations units. While this recent report of active Israeli participation in the Gulf War awaits definitive confirmation, it certainly has a ring of plausibility and authenticity about it.
2. For an account of the Israeli raid see Amos Perlmutter, Michael Handel, and Uri Bar-Joseph, *Two Minutes Over Baghdad* (London: Vallentine, Mitchell, & Co., 1982).
3. General overviews of Israel’s traditional de facto national security doctrine include the following: Yoav Ben-Horin and Barry Posen, *Israel’s Strategic Doctrine* (Santa Monica, CA: The Rand Corporation, 1981); Eliot A. Cohen, Michael J. Eisenstadt, and Andrew J. Bacevich, *Knives, Tanks, and Missiles: Israel’s Security Revolution* (Washington,

DC: The Washington Institute for Near East Policy, 1998); Michael Handel, “The Evolution of Israeli Strategy: The Psychology of Insecurity and the Quest for Absolute Security,” in Williamson Murray, MacGregor Knox, and Alvin Bernstein (eds.), *The Making of Strategy: Rulers, States, and War* (New York: Cambridge University Press, 1994), pp. 534-578; Bard E. O’Neill, “Israel,” in Douglas J. Murray and Paul R. Viotti (eds.), *The Defense Policies of Nations* (Baltimore, MD: The Johns Hopkins University Press, 1994), pp. 497-541; Israel Tal, *National Security: The Israeli Experience* (Westport, CT: Praeger, 2000); and Avner Yaniv, *Deterrence Without the Bomb: The Politics of Israeli Strategy* (Lexington, MA: Lexington Books, 1987).

4. The fundamental distinctions between preventive and preemptive war are those of timing and urgency. A preventive war is undertaken to impede a potential, long-range military threat from developing into an actual, immediate military threat. A preemptive war is undertaken to counteract an actual, immediate military threat.

Although Israel had multiple reasons for going to war against Egypt in 1956, the Sinai Campaign constituted a preventive war in the sense that Jerusalem sought to impede the Egyptian army’s ability to upgrade its future combat potential. Egypt had recently received large quantities of sophisticated Soviet weapons from Czechoslovakia, and Israel did not want these arms to be integrated into the Egyptian order of battle. The 1967 War, in contrast, constituted a preemptive war in the sense that Jerusalem went to war to ward off an imminent threat to Israel’s very existence. Jerusalem’s decision to attack rested upon the Arab world’s mobilization for war, its intentions to exterminate Israel, and the failure of international diplomacy to remove the threat to Israel.

5. The Lebanon War falls into the category of a preventive war in the sense that at least part of the rationale behind Jerusalem’s invasion of Lebanon revolved around terminating Syrian and PLO hegemony in that country in an effort to reduce what was perceived to be a steadily growing threat to Israel’s northern border.

Admittedly, Israel most likely would have launched a preemptive strike at the outset of the 1973 War if not for American diplomatic pressure against such a move. Still, part of Israel's willingness to allow itself to absorb an Arab attack stemmed from its belief that the IDF's control of the Sinai and Golan put Israel in a strong position to defeat an Arab onslaught. While the IDF high command favored a preemptive strike, it had assured Jerusalem that Israel would not lose the war if the Arabs struck first. For Jerusalem's thinking about whether to launch a preemptive strike see, for example, Michael Brecher, *Decisions in Crisis: Israel, 1967 and 1973* (Berkeley: University of California Press, 1980).

6. This statement is not meant to imply that Israel bears responsibility for the outbreak of these wars. Quite the reverse, the Arabs began them in efforts to regain their lands without signing peace treaties with Israel, even though the latter had displayed a clear readiness to return most, if not all, of the conquered territories in exchange for formal peace. Moreover, it is quite possible that, in the absence of the Israeli conquests, the Arab world might have seized on some other pretext(s) to initiate wars.

7. A sizable professional army could also separate itself from civilian society, as has happened in other states around the world, a development that both Israel's military and civilian leadership have always sought to prevent. The IDF, in fact, has always been called upon to assist in the construction of civilian society. It has helped, for example, to absorb new immigrants and to harvest crops. Over the decades, its role in building civilian society has diminished somewhat, but it still exists to this day. To get a taste of the IDF's historical contributions to Israeli society see Tom Bowden, *Army in the Service of the State* (Tel Aviv: University Publishing Projects, 1976).

8. Unlike most armies around the world, the IDF has always drafted women. Traditionally, they have occupied non-combat support roles, but today female soldiers are permitted to serve in combat units. To the surprise of certain skeptical male IDF officers, several women have already begun to serve in elite

units, making it into the air force as pilots or navigators in fighter-bomber squadrons or into the navy as naval commandos.

9. For indications that the IDF does not intend to rely as heavily on reservists in the future as it has in the past see Ron Ben-Yishai, "Israel No Longer Relies Solely on the Reservists," *Yediot Achronot*, 13 January 1999 and Arie O'Sullivan, "IDF Plan Calls for Greater Readiness," *The Jerusalem Post*, 3 February 1999. These articles were taken from *The Jerusalem Post* <<http://www.jpost.com>> and Israeli Ministry of Foreign Affairs <<http://www.mfa.gov.il>> web sites.

10. The IDF also appears to have resigned itself to the fact that, as Israel has become a wealthier and more self-indulgent society, many Israelis have become less committed to the communal, self-sacrificing spirit of their fathers and mothers. Moreover, the IDF has expressed deep reservations about integrating what it considers to be problematic groups in society, especially ultra-Orthodox Jewish students, into its ranks.

11. Furthermore, despite the general decline of a communal, self-sacrificing spirit, most Israelis continue to see military service as an important right of passage into society; therefore, social pressure alone would suggest that the idea of mass conscription is not currently in danger of being swept aside.

12. For an exhaustive treatment of how the IDF has cultivated its manpower see Reuven Gal, *A Portrait of the Israeli Soldier* (Westport, CT: Greenwood Press, 1986). A more critical view can be found in Stuart A. Cohen, "Portrait of the New Israeli Soldier," *MERIA Journal*, Vol. 1, No. 4 (December 1997).

13. An interesting attempt to quantify the superiority of Israeli manpower in the 1967, 1973, and 1982 wars appears in Trevor N. Dupuy, *Understanding War: History and Theory of Combat* (New York: Paragon House Publishers, 1987).

14. Harsh criticisms of the quality of IDF troops may be found in Martin van Creveld, *The Sword and the Olive: A Critical History of the Israeli Defense Forces* (New York: Public Affairs, 1998) and Emanuel Wald, *The Wald Report: The Decline of Israeli National Security Since 1967* (Boulder, CO: Westview

Press, 1992). To cite just one anecdotal piece of evidence in support of the claim that the quality of IDF soldiers remains very high see Shlomo Aloni, "Israel's Roving Warriors," *Air Forces Monthly*, Classic Aircraft Series No. 5 (2001), p. 36. In this article, Aloni reports that, in recent air combat exercises against United States Navy pilots, who are highly trained aviators themselves, IAF pilots chalked up a "kill ratio" of about 20:1.

15. The numbers and types of arms in Israel's conventional warfare arsenal can be found in Shai Feldman and Yiftah Shapir (eds.), *The Middle East Military Balance 2000-2001* (Cambridge, MA: The MIT Press, 2001). Israel is also reputed to have a considerable stock of nuclear weapons and ballistic missiles, though no reliable information about numbers is presently to be found in the public domain.

16. It is possible to distinguish between two broad types of warfare: maneuver and attrition. Maneuver warfare is characterized by a fast-moving campaign in which army A seeks to penetrate into the rear areas of army B in order to bring about the collapse, rather than total destruction, of army B. To the contrary, attrition warfare is characterized by a static or slow-moving campaign in which army A seeks to whittle away army B to the point of total destruction. For a more detailed treatment of the distinction between maneuver and attrition warfare see John J Mearsheimer, *Conventional Deterrence* (Ithaca, NY: Cornell University Press, 1983).

17. The operational level refers to the way an army arranges and employs its combat branches, such as its air force. The tactical level refers to the way an army arranges and employs its combat units, such as its air force squadrons. On the distinction between the operational and tactical levels of warfare see Edward N. Luttwak, *Strategy: The Logic of War and Peace* (Cambridge, MA: Harvard University Press, 1987).

18. The following is not intended to suggest that the IDF has never waged anything but offensive maneuver warfare. Out of necessity, the IDF has had no choice but to wage defensive and attrition warfare at times. It waged both defensive and attrition warfare,

for instance, during the aptly named War of Attrition.

19. An overview of the Israel's experience with offensive maneuver warfare can be found in Ariel Levite, *Offense and Defense in Israeli Military Doctrine* (Boulder, CO: Westview Press, 1989).

20. The IDF did tinker with the concept of static defensive warfare, particularly in the form of the Bar-Lev Line, a string of small fortresses built along the Suez Canal to prevent an Egyptian "land grab" and to provide shelter to troops stationed at the front. This line, which really had a greater diplomatic than military purpose, did not signal a weakening of the IDF's traditional commitment to offensive maneuver warfare, however.

21. This new emphasis on firepower, it should be noted, has also affected the IDF's response to low-intensity conflict. From the 1978 incursion into South Lebanon, through its battles with Hizballah in the 1980s and 1990s, down to the recent Palestinian-instigated violence in Israel, the West Bank, and the Gaza Strip, the IDF has frequently employed considerable firepower against guerrilla and terrorist targets.

22. A nuanced treatment of Israeli deterrence may be found in Uri Bar-Joseph, "The Conceptualization of Deterrence in Israeli Thinking," *Security Studies*, Vol. 7, No. 3 (Spring 1998), pp. 145-181.

23. For accounts of Israeli nuclear deterrence see Louis René Beres (ed.), *Security or Armageddon: Israel's Nuclear Strategy* (Lexington, MA: Lexington Books, 1986); Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998); and Shai Feldman, *Israeli Nuclear Deterrence: A Strategy for the 1980s* (New York: Columbia University Press, 1982).

24. Israel's foreign intelligence service, the MOSSAD, assassinated or intimidated a number of ex-Nazi scientists working for Cairo and damaged industrial facilities linked to Egypt's ballistic missile project.

25. Feldman and Shapir (eds.), *The Middle East Military Balance 2000-2001*, p. 173.

26. For this trend in Israeli thinking see, for example, Cohen, Eisenstadt, and Bacevich, *Knives, Tanks, and Missiles* and Stuart A.

Cohen, "Small States and Their Armies: Restructuring the Militia Framework of the Israel Defense Force," *The Journal of Strategic Studies*, Vol. 18, No. 4 (December 1995), pp. 78-93.

27. Israel's special operations units, of course, have always played a major role in the state's counterinsurgency warfare efforts; however, until recently, Israeli special operations units were rarely set up for the particular purpose of engaging in low-intensity conflict. Their role in counterinsurgency warfare was traditionally viewed as secondary to their role in conventional wars. For in-depth information on many of Israel's de-classified special operations units, including their tasks in both conventional and unconventional warfare, see the web site at <<http://www.isayeret.com>>.

28. Because Israel has never admitted that it has nuclear arms, all of the information regarding its arsenal currently in the public domain must be considered speculative.

29. For this last claim see the newspaper articles about Israel's acquisition of German-built *Dolphin*-class submarines at the web site <<http://www.dolphin.org.il>>.

30. On the proposed Strategic Command see Douglas Davis, "Report: Israel Approves New Plan to Deal with International Terrorism," *Jewish Telegraphic Agency*, 2 February 1999. This article appeared on the JTA web site <<http://www.jta.org>>.

31. General treatments of Israel's arms industry may be found in Aaron S. Klieman, *Israel's Global Reach: Arms Sales as Diplomacy* (Washington, DC: Pergamon-Brassey's, 1985) and Stewart Reiser, *The Israeli Arms Industry: Foreign Policy, Arms Transfers, and Military Doctrine of a Small State* (New York: Holmes & Meier, 1989). See also Sharon Sadeh, "Israel's Beleaguered Defense Industry," *MERIA Journal*, Vol. 5, No. 1 (March 2001), pp. 64-77.

32. Israel has also been subjected to short-term American embargoes on occasion, generally at times when Washington has been upset with Jerusalem's conduct. But these short-term embargoes have not been meant to harm Israel's national security, and they have had little, if any, effect on Jerusalem's foreign policy.

The French embargo had the opposite effect of the intended one, as it reinforced Jerusalem's decision to opt for war.

33. This claim is advanced in Cohen, *Israel and the Bomb*.

34. An overview of Israel's military and commercial satellite programs appears in Gerald Steinberg, "Commercial Observation Satellites in the Middle East and Persian Gulf," in John C. Baker, Kevin M. O'Connell, and Ray A. Williamson (eds.), *Commercial Observation Satellites: At the Edge of Global Transparency* (Santa Monica, CA: The Rand Corporation, 2001). A draft of Steinberg's chapter may be found at his personal web site <<http://faculty.biu.ac.il/~steing/index.shtml>>.

35. To get a sense of the range of products offered by Israel's arms industry see Feldman and Shapir (eds.), *The Middle East Military Balance 2000-2001*, pp. 170-171. An additional testament to the quantity and quality of products offered by its arms industry is the fact that, over the last five years alone, Israel has sold arms to no less than 46 states, including the United States, Germany, Great Britain, and China. For a list of Israel's clients and their purchases see pp. 165-170.

36. For a thorough review of this affair see Dov S. Zakheim, *Flight of the Lavi: Inside a U.S.-Israeli Crisis* (Washington, DC: Brassey's, 1996).

37. Aaron S. Klieman, *Israel and the World after 40 Years* (Washington, DC: Pergamon-Brassey's, 1990) describes and evaluates the basic principles of Israel's foreign policy, particularly as they relate to its national security interests.

38. On the way in which the American-Israeli patron-client relationship has functioned since the 1967 War see, for example, David Rodman, "Patron-Client Dynamics: Mapping the American-Israeli Relationship," *Israel Affairs*, Vol. 4, No. 2 (Winter 1997), pp. 26-46.

39. For this British-Israeli clash see Zeev Tzahor, "The 1949 Air Clash Between the Israeli Air Force and the RAF," *Journal of Contemporary History*, Vol. 28, No. 1 (January 1993), pp. 75-101.

40. Soviet-Israeli military encounters are chronicled in David Rodman, "Red Star

versus Star of David: Soviet-Israeli Combat in the Arab-Israeli Wars,” *Midstream* (forthcoming).

41. This phrase belongs to Eliot Cohen. See Eliot A. Cohen, “Israel after Heroism,” *Foreign Affairs*, Vol. 77, No. 6 (November-December 1998), pp. 112-128.

