

The Role of the Israel Air Force in the Operational Doctrine of the Israel Defense Forces: Continuity and Change

by

David Rodman

What role has air power traditionally occupied in the operational doctrine of the Israel Defense Forces (IDF)? Has this role expanded or contracted with the evolution of that doctrine? Has air power accomplished the tasks assigned to it in the past? Could it accomplish the tasks assigned to it in the present? These questions are of practical interest for at least two reasons. First, Israel has frequently employed air power to defend its vital interests. Indeed, perhaps more than any other state in the post-World War II era, it has relied on air power to protect its national security. The Israeli case, then, is a potentially rich source of data that could help to validate (or to invalidate) various propositions about the general utility of air power. Second, Israel could find itself embroiled in a future war, even though the Arab-Israeli conflict today appears to be moving, albeit in fits and starts, towards a comprehensive solution. The IDF, therefore, has devoted substantial thought to the role of air power in 21st-century warfare. Given the considerable effectiveness of Israeli air power on 20th-century battlefields, the military establishments of other states would do well to take account of the IDF's current perspective on the role of air power.

The purpose of this article is neither to contemplate the accuracy of various hypotheses about air power in light of the Israeli case nor to propose the lessons that the military establishments of other states should draw from contemporary IDF thinking. These chores are better left to genuine air power experts, a group in which the author certainly does not merit inclusion. Rather, the goals of this article are more modest: they are (1) to describe the role of air power within the IDF's past and present operational doctrines; (2) to analyze (very briefly) the performance of air power under the former and to speculate (again, very briefly) about its performance under the latter; and (3) to argue that a gradual, but crucial, shift has been underway for some time in IDF thinking about air power. To these ends, the first part of the article will examine air power's place in the IDF's traditional doctrine, while the second part will explore its place in the IDF's "new" doctrine. But one caveat must be made clear before moving on: this article treats only the conventional battlefield. Israeli air power's role in low-intensity conflict, not to mention its

possible part in a nuclear, biological, or chemical warfare scenario, lies outside the article's scope.

Air Power in the IDF's Traditional Operational Doctrine

The IDF's traditional operational doctrine took shape as a result of Israel's environment and experience prior to the 1967 Six-Day War.¹ The state's long and vulnerable borders, its lack of strategic depth, its meager manpower and material resources in relation to those of its Arab enemies, and its inability to secure formal allies who would come to its aid in an hour of need were the fundamental environmental constraints that influenced Israeli military thinking. The IDF concluded that, as a consequence of these constraints, Israel could neither permit itself to become involved in a draining war of attrition nor allow heavy fighting to take place on its territory. Either one of these occurrences could spell the end of the state's existence, and either one would undoubtedly damage severely its vital interests. Early on its history, therefore, the IDF adopted the principle that Israel's wars must not only be short, but they must also be fought on Arab territory. Offensive maneuver warfare, the IDF decided, constituted the operational doctrine most suitable to attain these ends.² The IDF's previous combat experience confirmed this judgment. The 1948-49 War of Independence and the 1956 Suez War had demonstrated the superior quality of the IDF in relation to the armies of its Arab enemies--not in terms of its equipment, which mostly turned out to be inferior, but rather in terms of its manpower, which proved to be better educated, more physically fit, more highly motivated, better trained, and better led. And, as the IDF recognized, offensive maneuver warfare is well suited to the side with superior manpower. The IDF's offensive maneuver warfare efforts in both the 1948-49 and 1956 wars, in fact, were great successes.

Initially, the IDF's operational doctrine assigned a very limited role to air power. The Israel Air Force (IAF) came into existence during the 1948-49 war. Since the IDF could devote neither the time nor the resources in the middle of a war to ponder the issue of how air power ought to fit into its operational doctrine, the IAF was employed in a strictly ad hoc manner, to meet the battlefield needs of the moment. By 1956, the IAF itself had thought about the role of air power in the IDF's operational doctrine, arguing that a fleet of multi-purpose aircraft should first gain air superiority through an opening strike against enemy airfields and then support the ground forces; but the IDF still considered air power to be marginal to Israel's national security, concentrating instead on forging an offensive maneuver warfare doctrine built around mechanized ground forces. Only after the IAF's strong performance in the Suez War did the IDF acknowledge the major contribution that air power could make to Israel's national security. To its credit, once it woke up to the value of air power, the IDF immediately gave careful thought to how air power could be best integrated into its operational doctrine.

The IDF assigned the IAF two central tasks.³ First, and most importantly, the IAF had to gain air superiority over Israel and the battlefield.⁴ Not only would air superiority protect the state's civilian populace and industrial assets from air attack, but it would also permit the IDF to mobilize rapidly and deploy swiftly its large reserve forces, which have always formed the bulk of its combat formations. Second, once this task had been accomplished, the IAF would then support the IDF's ground forces by flying battlefield air interdiction and close air support missions, and could then undertake additional duties, like long-range strike missions against sensitive military and industrial targets in the enemy's hinterland.⁵ During the air superiority phase of the IAF's war effort, the IDF expected to make do with little or no air support. Even after air superiority had been established, however, the IDF still felt that its ground forces by themselves should be able to overcome the enemy's ground forces. The flavor of this line of reasoning is nicely captured by former IDF Chief-of-Staff David Elazar's remarks at a symposium dedicated to the lessons of the 1973 Yom Kippur War.

The primary goal of the air force is to secure the skies throughout the country and above the combat forces. . . . I always believed that ground forces, secure from the enemy's air activity, should defeat enemy ground forces unaided.⁶

Under the IDF's traditional operational doctrine, in sum, the IAF had to eliminate the threat posed by enemy air power, but it did not have to intervene decisively in the land battle, though it surely had to lend a hand in that battle.

Air Superiority

The IAF has acquired air superiority in all of the Arab-Israeli wars fought since 1967.⁷ Throughout all of these wars, it has had virtually uncontested air superiority over Israel, arguably its most significant historical contribution to the state's national security. Arab air power has not been able to inflict damage on Israel's civilian populace or its industrial infrastructure. Nor has it been able to impede in any way the rapid mobilization and swift deployment of IDF reserve forces.

The extent of the IAF's air superiority over the battlefield, to the contrary, has varied from war to war. In the Six-Day War, the IAF quickly secured air superiority over the battlefield via a devastating opening strike against Arab air forces. During the first day of the war, the IAF largely destroyed on the ground the air forces of Egypt, Syria, Jordan, and Iraq in a series of well-planned and well-executed attacks on Arab air bases. It shot down many of the remaining Arab aircraft in air-to-air combat over the next few days. This combination of air-to-ground and air-to-air action rendered the Arab air forces essentially impotent. At no time did they present a serious threat to IDF ground forces, let alone affect the course of the war. In the 1969-70 War of Attrition, the IAF

initially achieved air superiority by inflicting unacceptable losses on the Egyptian Air Force in air-to-air combat and by destroying the Egyptian network of surface-to-air missile (SAM) and anti-aircraft artillery (AAA) batteries in the Suez Canal zone. But, later, the IAF became a victim of its own success, as uncontested "deep-penetration" strikes against military targets around Cairo triggered a massive Soviet intervention in the war. During the final months of fighting, the Egyptian-Soviet forces found it possible to construct a sophisticated SAM and AAA network, which vigorously contested Israeli air superiority. The War of Attrition, many observers suggest, ended in a standoff between the IAF and Soviet-Egyptian anti-aircraft defenses. In the Yom Kippur War, the IAF eventually established air superiority over the battlefield, but not before suffering heavy losses, particularly during the first few days of combat, to Egyptian and Syrian SAM and AAA batteries. After three weeks of heavy fighting, it had swept the Egyptian and Syrian air forces from the skies, mainly as a result of its overwhelming success in air-to-air combat, and it had pierced, albeit with considerable assistance from IDF ground forces, especially on the Egyptian front, Arab SAM and AAA defenses. Furthermore, as in the Six-Day War, due principally to IAF persistence, Arab air power did not present a serious threat to IDF ground forces, let alone affect the course of the war. In the 1982 Lebanon War, the IAF gained air superiority quickly, and in as spectacular a fashion as it had in the Six-Day War. It completely smashed Syria's anti-aircraft defense network in the Bekaa Valley in an extremely well-orchestrated attack; then it shot down scores of Syrian Air Force aircraft sent up to defend Syrian ground forces. Within days, the Syrians abandoned any hope of challenging the IAF for air superiority over Lebanon. With the exceptions of part of the War of Attrition and part of the Yom Kippur War, then, the IAF has maintained air superiority over the battlefield.

Air-to-Ground Attack

The effectiveness of the IAF's air-to-ground efforts, like the extent of its air superiority over the battlefield, has varied from war to war. In the Six-Day War, IDF ground forces won the crucial "break-in" battles against the Egyptian army in the Sinai without the benefit of air support. Similarly, they won the key night battle at Abu Agueila without air support. Collectively, these battles determined the fate of the war on the Egyptian front. Battlefield air interdiction and close air support strikes may have had a more significant impact on the defeat of the Syrian and Jordanian armies, but on the Syrian and Jordanian fronts, too, the lion's share of the credit for victory must go to the IDF's ground forces. At most, the IAF's air-to-ground attacks may have made the war somewhat less costly for Israel and somewhat more costly for its Arab foes. In the War of Attrition, the IAF's air-to-ground attacks, for all of their undisputed accomplishments at the tactical level, did not compel Egypt to terminate the fighting, although they may have prevented an intensification of the war. Indeed, in no Arab-Israeli war has Israeli air power occupied such a prominent role, and in no Arab-Israeli war has the outcome been so inconclusive from the

Israeli perspective. In the Yom Kippur War, the IAF's air-to-ground attacks had a less than desired effect on the battlefield, particularly during the first few days of fighting, when IDF ground forces were on the defensive.⁸ Later in the war, especially on the Egyptian front, IAF battlefield air interdiction and close air support strikes proved to be more effective, but they were not responsible for the IDF's successful counteroffensive on this front. Nor was the IAF's efficient long-range strike effort against military and industrial targets in the Syrian heartland responsible for the IDF's successful counteroffensive on the Syrian front. In the Lebanon War, IAF battlefield air interdiction and close air support strikes apparently inflicted considerable damage on Syrian and PLO forces. Nevertheless, IDF ground forces deserve the credit for defeating the Syrian and PLO forces, as well as compelling the latter to evacuate Lebanon. The essential point about the IAF's air-to-ground efforts in past Arab-Israeli wars, in short, is that they simply did not have a decisive impact on the outcomes of these wars, which is not very surprising, since the IAF had not been built to have this impact.

Air Power in the IDF's New Operational Doctrine

The IDF's new operational doctrine does not entirely depart from its traditional operational doctrine.⁹ The new doctrine, as a matter of fact, shares much in common with the traditional doctrine; it is the product of an evolutionary, rather than revolutionary, process that actually began in the wake of the Yom Kippur War, but that has really picked up tremendous momentum over the last decade. Outwardly, the IDF still remains committed to the concept of offensive maneuver warfare. Inwardly, however, it has started to acknowledge that this style of warfare alone may no longer represent an ideal solution on the modern, Middle Eastern battlefield. To put it another way, the IDF has begun to think earnestly in terms of the "saturated" battlefield, where the capability to employ firepower--particularly long-range, precision firepower--may be more important than the capability to maneuver. It follows from this line of thought that, if the IDF is called upon to fight a future war, it could well opt to defer offensive maneuver warfare by ground forces to a later stage of the war, holding off until the enemy's ground forces had been gravely weakened through an intense, standoff attrition effort that makes extensive use of air-delivered precision-guided munitions (PGMs). In a future war, the IDF's master plan could well bear a close resemblance to the Allied Coalition's plan in the Gulf War.

One result of this new operational doctrine is an enhanced role for the IAF. Its central tasks, to be sure, remain the same as those assigned to it under the IDF's traditional doctrine: (1) to gain air superiority over Israel and the battlefield and (2) to engage in air-to-ground attack in support of the ground forces. The emphasis on the second task, though, has been substantially heightened. Doctrinally speaking, today's IDF has begun to count upon the IAF to have a much greater impact on the land battle than in the past, and has

begun to count upon it to have this impact much sooner than in the past.¹⁰ The IDF may even expect the IAF to assist the ground forces before the latter has fully attained air superiority. The question is, then, can the IAF fulfill these tasks on the modern, Middle Eastern battlefield?

Air Superiority

There is no doubt that, in a future war, whether initiated by the IDF or enemy forces, the IAF would achieve air superiority over Israel. The IAF's already massive edge in air-to-air combat over its enemies has steadily grown over the last decade, with the introduction of better intelligence and battle management systems as well as better aircraft and missiles. Furthermore, the IAF's SAM and AAA capabilities have been significantly upgraded over the same period. It is very unlikely, therefore, that enemy aircraft would be able to penetrate Israeli air space in meaningful numbers. During the Gulf War, it may be recalled, Iraq did not even entertain the notion of using its air force against Israel, at least in part because it did not believe that its aircraft could survive to reach their intended targets. Similarly, the decisions of various Arab states to build up their arsenals of ballistic missiles in order to present a credible threat to Israel's hinterland speaks volumes about their perceived inability to contest Israeli air superiority.¹¹

There is also no doubt that, in a future war, whether initiated by the IDF or enemy forces, the IAF would gain air superiority over the battlefield. Only the speed with which the IAF accomplished this objective would be at issue: if the IDF started a war, and the situation on the ground permitted it to fight for air superiority before intervening heavily in the land battle, then air superiority would most probably be achieved rather early on in the war. On the other hand, if the IAF were forced to participate heavily in the land battle from the outset of a war, either because IDF ground forces had been caught off guard or because they simply were not performing well, then it would take longer for the IAF to achieve air superiority over the battlefield. Enemy aircraft, even if they could no longer be destroyed in large numbers by Six-Day-War-style attacks on their bases, would not be able to survive over the battlefield due to the IAF's dominance in air-to-air combat. Similarly, the IAF's capability to suppress and destroy enemy SAM and AAA batteries is undeniable. As impressive as the IAF's showing in this regard during the Lebanon War, its current capability extends far beyond its earlier prowess, especially given the introduction since that war of much more sophisticated intelligence and battle management systems as well as much more advanced aircraft and air-to-ground PGMs, including unmanned aerial vehicles specially dedicated to the anti-SAM and anti-AAA attack mission.

Air-to-Ground Attack

The IAF's current air-to-ground attack capability is far superior to its past capability. In a future war, its relatively large fleet of advanced anti-armor helicopters would be able to provide immediate and effective around-the-clock close air support to IDF ground forces, even in an environment that has not first been entirely cleared of SAM and AAA defenses. Moreover, the IAF's fixed-wing aircraft, with their wide range of state-of-the-art PGMs, would also be capable of furnishing effective close air support, particularly after air superiority over the battlefield had been won. But it is perhaps in the realms of battlefield air interdiction and long-range strike that the IAF's capability has witnessed its most impressive growth. In the Six-Day, Yom Kippur, and Lebanon wars, the IAF occasionally inflicted very heavy losses on advancing or retreating Arab forces in battlefield air interdiction strikes. Still, it could not genuinely prevent Arab reinforcements from reaching the battlefield, nor could it really prevent Arab forces from exiting the battlefield. In a future war, however, the IAF would be able to seal the battlefield, smashing those enemy reinforcements trying to get to it in around-the-clock attacks, and freezing other reinforcements far from the war zone. The same fate would befall those enemy forces attempting to leave the battlefield. As for the deep-strike mission, the IAF has in the past carried out some successful long-range strikes, particularly during the War of Attrition and the Yom Kippur War. Nevertheless, these strikes were sporadic and small scale, and did not have the desired impact on the behavior of Israel's foes. But, in a future war, the IAF would be capable of sustained and large-scale around-the-clock strikes against all fixed military and industrial targets--command and control centers, POL facilities, army camps, transportation centers, factories, and so forth--in an enemy's hinterland. It could also engage mobile targets, such as surface-to-surface missile (SSM) batteries, though these would be considerably more difficult to locate and disable. These long-range attacks would certainly degrade substantially, if not undermine completely, an enemy's ability to control and support its forces on the battlefield. Israeli air power, in short, could well have a decisive impact on the land battle in a future Arab-Israeli war.

Conclusion

The role of Israeli air power in the IDF's new operational doctrine is both similar to and different from its role in the IDF's traditional operational doctrine. On the one hand, the IAF's primary assignment is to gain air superiority over both Israel and the battlefield. In this sense, continuity exists between air power's role in the past and present operational doctrines. But, on the other hand, the IAF is expected to play a much greater role in the land battle under the IDF's new operational doctrine. At first glance, the enhanced role for air power may appear to be misguided, as the IAF has not had a decisive impact on the land battle in past Arab-Israeli wars. A closer look, however, reveals that the IAF of today, in contrast to the IAF of yesterday, has deliberately been built to accomplish this task. Furthermore, because Israeli society--like Western societies in general--has become steadily less willing to

accept the human costs of war, relying to a greater extent on a "force multiplier" such as the IAF makes sense. The danger here, of course, is that Israel could come to count too heavily on the IAF, forgetting that air power by itself cannot win wars. Israel already learned this lesson during the War of Attrition; hopefully, it will not have to relearn it in the future.

Notes

1. For the IDF's traditional operational doctrine see the following: Yoav Ben-Horin and Barry Posen, *Israel's Strategic Doctrine* (Santa Monica, CA: The Rand Corporation, 1981); 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), 534-78; Ariel Levite, *Offense and Defense in Israeli Military Doctrine* (Boulder, CO: Westview Press, 1989); 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), 497-541; and Avner Yaniv, *Deterrence Without the Bomb: The Politics of Israeli Strategy* (Lexington, MA: Lexington Books, 1987).

2. At times, to be sure, the IDF has engaged in other types of warfare. During the 1969-70 War of Attrition, the IDF fought a literal war of attrition with its Egyptian foe, while during the first stage of the 1973 Yom Kippur War, it waged a mobile defense against the Egyptian and Syrian armies. The IDF, in short, has had to accommodate itself to the military and diplomatic realities of the Middle East, which have not always permitted it to engage in offensive maneuver warfare.

3. Richard Hallion, the noted air warfare expert, has identified the four essential tasks of air power: (1) to win air superiority; (2) to engage in air-to-ground attack; (3) to help move ground forces to, from, and around the battlefield; and (4) to supply intelligence data. For his classification scheme see Richard P. Hallion, "Air Power Past, Present and Future," in Richard P. Hallion (ed.), *Air Power Confronts an Unstable World* (London: Brassey's, 1997), 3. The IAF, of course, has performed all four functions in the Arab-Israeli wars, but this article examines only the first two, because these have been by far its most important tasks.

4. For simplicity's sake, this article does not distinguish between air supremacy and air superiority. To be precise, however, the IDF intended for the IAF to achieve air supremacy over Israel itself and air superiority over the battlefield. For the distinction between air supremacy and air superiority see *ibid*, 5.

5. For the distinction between battlefield air interdiction and close air support missions see Richard P. Hallion, "Battlefield Air Support: A Retrospective Assessment," *Airpower Journal* 4, No. 1 (Spring 1990), 8-28.

6. Louis Williams (ed.), *Military Aspects of the Israeli-Arab Conflict* (Tel Aviv: University Publishing Projects, 1975), 249.

7. For professional accounts of the IAF in the Arab-Israeli wars since 1967 see Anthony Cordesman and Abraham R. Wagner, *The Lessons of Modern War* (Vol. 1): *The Arab-Israeli Conflicts, 1973-1989* (Boulder, CO: Westview Press, 1989); Trevor N. Dupuy, *Elusive Victory: The Arab-Israeli Wars, 1947-1974* (New York: Random House, 1978); Trevor N. Dupuy and Paul Martell, *Flawed Victory: The Arab-Israeli Conflict and the 1982 War in Lebanon* (Fairfax, VA: Hero Books, 1986); Chaim Herzog, *The Arab-Israeli Wars: War and Peace in the Middle East from the War of Independence through Lebanon* (New York: Random House, 1982); Edward N. Luttwak and Dan Horowitz, *The Israeli Army* (New York: Harper and Row, 1975); and Martin van Creveld, Steven L. Canby, and Kenneth S. Brower, *Air Power and Maneuver Warfare* (Maxwell Air Force Base, AL: Air University Press, 1994). For useful popular accounts see Eliezer Cohen, *Israel's Best Defense: The First Full Story of the Israeli Air Force* (New York: Orion Books, 1993); Robert Jackson, *The Israeli Air Force Story* (London: Tom Stacy, 1970); Lon Nordeen, *Fighters over Israel: The Story of the Israeli Air Force from the War of Independence to the Bekaa Valley* (New York: Orion Books, 1990); and Ehud Yonay, *No Margin For Error: The Making of the Israeli Air Force* (New York: Pantheon Books, 1993).

8. Some military experts later concluded that, had the IAF been allowed to launch a preemptive attack, it could have severely damaged the Egyptian and Syrian anti-aircraft defenses that gave it such trouble in the first days of the war at small cost to itself. American specialists, for example, calculated that the IAF could have destroyed 90 percent of Egyptian and Syrian SAM batteries "in a period of three to six hours for the loss of under ten aircraft." Once Arab anti-aircraft defenses had been penetrated, this line of reasoning goes, the IAF would have quickly achieved air superiority over the battlefield, allowing it to undertake effective battlefield air interdiction and close air support strikes. "Some authoritative writers have argued that the IAF could have delivered three thousand tons of bombs on enemy targets before the Arab attack reached full strength." For this scenario see Steven J. Rosen and Martin Indyk, "The Temptation to Pre-empt in a Fifth Arab-Israeli War," *Orbis* 20, No. 3 (Summer 1976), 271-2. For a different view about the potential results of an IAF preemptive strike see John R. Carter, *Airpower and the Cult of the Offensive* (Maxwell Air Force Base, AL: Air University Press, 1998), 52-65.

9. For the IDF's new operational doctrine see 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) and David Rodman, "The Doctrine and Force Structure of the Israel Defense Forces: Past, Present, and Future," *Israel Affairs* (forthcoming).

10. Out of perceived battlefield necessity, it should be noted, the IDF occasionally deviated from its traditional operational doctrine with respect to the utilization of the IAF. In the War of Attrition, to cite one example, the IAF was called upon to shoulder the burden of the war to a much greater degree than the IDF's traditional doctrine envisioned. In the Yom Kippur War, to cite another example, the IAF was called upon to assist the ground forces much sooner than that doctrine stipulated.

11. For the moment, Arab ballistic missiles do not represent much of a threat to the IDF itself, because most are not accurate enough to hit point targets. On the other hand, they do represent a genuine threat to the civilian populace and industrial infrastructure of Israel, especially if equipped with chemical or biological warheads, which is why the IDF has taken great pains to reinforce both its active and passive anti-ballistic missile defenses, including the IAF's long-range strike capability.