



Sword and Shield of Zion: The Israeli Air Force in the Arab-Israeli Conflict, 1948–2012 by David Rodman.

Portland, OR: Sussex Academic Press, 2013. Pp. xiii, 153. ISBN 978–1–84519–583–0.

Review by Christopher Rein, US Air Command and Staff College (christopher.m.rein.civ@mail.mil).

Defense analyst David Rodman's concise overview of the past, present, and future Israeli Air Force (IAF) makes a compelling argument for its central role in providing national security for the oft-troubled state. While the book is not a rigorously researched academic history of the IAF's part in the various wars and Intifadas that have plagued Israel since its founding in 1948, Rodman makes good use of the available secondary sources to shed light on how Israel views and employs airpower, and what the near future of the IAF may be.

The author argues that airpower has been uniquely suited to Israel's strategic situation—its small population, lack of easily defensible borders, and small territory. These have led Israel to invest in an advanced air force as both a “force multiplier” (16) for its conscript army and an on-call force that could blunt an attack while the nation mobilized its reserves. The book has relevance to NATO's current situation vis-à-vis a resurgent Russia as well as for any air force making the transition from conventional to low intensity operations.

Sword and Shield of Zion reads more like a collection of essays than a single narrative. Its two-part introduction, titled, respectively, “Israeli National Security and Airpower” and “Israeli Airpower and the Arab-Israel Conflict,” provides succinct explanations that may be the best things in the book. Chapter 1, “Airpower and Maneuver Warfare,” concerns specifically the part played by the IAF in the Six-Day (1967) and Yom Kippur (1973) conventional wars. It does not attempt an in-depth analysis. Chapter 2, “Attrition Warfare,” covers the 1970 War of Attrition and the incursions into Lebanon (2006) and Gaza (2008–9). Chapter 3 treats “Airpower, Counterinsurgency, Special Operations and Counterinsurgency Operations.” Chapter 4, “An Airborne Revolution in Military Affairs,” describes the IAF's use of unmanned aerial vehicles (i.e., drones). Chapter 5 concerns “Ground-based Air Defense and Space-based Reconnaissance.” Chapter 6 explains the “Infrastructure of the Israeli Airforce.” In his conclusion, Rodman reflects on “The Past and Future Contributions of Airpower to Israeli National Security.” All of the volume's twenty images illustrate hardware. Sadly, the book contains no maps, which would have been especially helpful during the author's tour of the IAF's current installations.

Rodman identifies the IAF's primary missions as including the “trinity” of air superiority, interdiction, and close air support, along with tactical airlift (including personnel recovery and casualty evacuation), strategic strikes, and reconnaissance. Several critical deployments of strategic airpower are omitted or only briefly mentioned. These include the 1981 attack on the Iraqi nuclear complex at Osirak, the 2007 cyber-enabled strikes on Syrian installations (57–58), and the massive 1991 two-day airlift of some fourteen thousand Ethiopian Jews (61–62). Tactical support missions get fuller coverage. The author is at his best when assessing the IAF's value and responsibilities in the context of joint-force operations:

The attainment of air supremacy over Israel proper, as well as the attainment of air superiority over the battlefields, not only spared the state's civilian populace and industrial assets, but also cleared the air, so to speak, for the IDF's land forces to come to grips with their Arab counterparts. Indeed, because of the

radically different set of circumstances under which the IDF began the 1967 and 1973 wars, the IAF actually played a more important part in the latter victory, in the sense that it provided the crucial time and space for the IDF's land forces to mobilize and deploy for battle. Those land forces, not the IAF, however, ultimately defeated the Arab armies in both wars. (38-39)

The book has three significant shortcomings. The first was, perhaps, unavoidable. Rodman's preoccupation with current and future operations required him to use hard-to-corroborate open-source materials to support his argument and even to report "rumors" (61) about the IAF's special operations capabilities. Other authors¹ have dealt with this dilemma more successfully.

The book's second flaw is its too flattering portrayal of the IAF (109), highlighting its humanitarian operations, while eliding the tremendous collateral damage Israeli airstrikes have inflicted on civilian populations. This may reflect the paucity of primary sources or classification issues. In any case, Rodman relies heavily here on interviews with IAF personnel and leaders.

Finally, there is precious little detailed analysis of the IAF's relationship with the US Air Force, which has, since the 1970s, provided most of its inventory. Rather than describing in detail the American role during Operation Nickel Grass of rushing airframes to Israel when attrition threatened its survival, Rodman narrows his focus to the modifications the IAF has made, particularly to sensors and software, to create effectively an "American-Israeli" hybrid aircraft (116). He correctly notes that the Israeli Aircraft Industries' Kfir ("Lion Cub") fighter-bomber was a much altered French Dassault Mirage 5, but speculates that the American F-35, which Israel has agreed to purchase, "will probably become the most heavily modified aircraft of all in IAF service" (117).

The author is unclear about how exactly "American drone operations in Iraq and Afghanistan in particular have benefitted heavily from Israeli input" (86). Did US efforts during the Vietnam War jump-start Israeli programs? Are the Israelis now in the lead and providing significant technological aid to the United States? And how have intense Israeli espionage efforts (unmentioned here) influenced and possibly hindered technological exchanges between the two nations?

Rodman's prescriptions for the future are astute and thought-provoking. He suggests that the Israeli integration of ground-based defense into the IAF offers a model for western militaries, whose separation of ground- and air-based air defenses has often complicated coordination efforts, with such unfortunate consequences as the downing of coalition fighters by Patriot missiles during the Iraq wars. Rodman believes as well that Israel's long lead in drone technology "suggests that [potential opponents'] aircraft (or drones) would be unable to penetrate Israeli airspace in meaningful numbers" (112). This optimistic appraisal overlooks the potentials of drone technology in the wrong hands. State actors and terror groups alike are already attempting to exploit the technology to counter western militaries' control of airspace. Some analysts think "swarming" tactics or low-tech drones armed with weapons of mass destruction could pose a threat that conventional air forces like the IAF are ill equipped to counter.

David Rodman has written a useful introduction to the IAF's current (through 2012) and possible future roles in guaranteeing Israeli national security. It will appeal to both defense professionals and interested lay readers. It may also find a place in professional military education classrooms. That said, it will not supplant existing, more detailed and richly researched studies of the Israeli Air Force.

1. Notably, Brian Glyn Williams in *Predators: The CIA's Drone War on al Qaeda* (Washington: Potomac, 2013).