NOTES


AN INSIDER’S STORY OF ISRAELI MILITARY TECHNOLOGY


Reviewed by Guido G. Weiss

On June 2002, at the President’s Residence, Uzi Eilam received the Israel Security Prize for Lifelong Achievement. This was a mark of recognition for his extensive achievements, which he documents in his book.
Uzi Eilam was born in Kibbutz Tel Yosef, in 1934, in Mandatory Palestine. His military experience began before he finished high school, when in tenth grade he took part in and commanded the military training program for youth known as Gadna. Throughout his career he has been involved in Israeli weapons development. He served as commander of the military R&D department, director of MAFAT (the Administration for Weapons Development and Technological Infrastructure), and director-general of the Israel Atomic Energy Commission. More recently Eilam was appointed a senior research fellow at the Institute for National Security Studies of Tel Aviv University.1

Israel has become one of the most inventive countries in the world in fields ranging from computer technology to agriculture. Israeli technological innovation has been a focus of recent books such as Start-up Nation and Israel in the World: Changing Lives through Innovation. In Eilam’s Arc, Uzi Eilam reveals how Israel reached the forefront of military technological innovation. The Israeli military industry is also well known for resourcefulness and resolve, from the days of underground arms manufacturing in Mandatory Palestine to marketing cutting-edge technology in competition with global arms powerhouses.

Time and time again voices within the Israeli defense community have called for projects that appeared too ambitious but proved to be achievable. Well-known Israeli weaponry includes the Uzi submachine gun, the Ofek satellite, and the Arrow and Iron Dome missile-defense systems. Israel is in fact the eighth largest arms exporter in the world behind the United States, Russia, China, Britain, France, Italy, and Germany.2 Eilam describes how these achievements emerged despite scant resources, as Israel made use of creative innovation as well as years of behind-the-scenes diplomacy. As he notes, “We needed to find new ways to close the technological gaps between Israel and the superpowers” (81).

A central theme throughout this book is the constant fractiousness among elite Israeli decision-makers. Regardless of the issue, within the military community there were recurrent, emotionally fraught struggles between those who proposed solutions to perceived problems and those who opposed them. These struggles concerned budgets, weaponry, procurement, and organizational structure. Prominent examples include the battles over what weapons to produce and how to use them, as in the cases of the Galil assault rifle, the roller bridge, the Merkava tank, and the Ofek satellite. One ongoing point of contention was whether to build Israeli equipment domestically or purchase it abroad. This was and remains a central issue in the sphere of Israeli military technology. Eilam also describes the ambitious advent of Israeli weapons companies such as Israel Military Industries, Rafael, Israel Aerospace Industries, and others as part of a joint public-private effort to industrialize the IDF.

According to Eilam, Israel’s use of diplomacy was of the utmost importance in carrying out weapons acquisitions from the United States and European actors.
He recounts how diplomatic initiatives were implemented both through official and informal channels and notes that billionaire Shaul Eisenberg was “responsible for all contacts with China,” as Beijing became a customer for Israeli Python missiles. Eilam’s summary of R&D relations between Israel and the United States, major European powers, India, and other Asian countries is based completely on his own dealings with the countries in question. Along with participating in overseas missions, he played a vital role in hosting representatives of various unnamed countries in Israel for security visits.

As Israel built defense ties with foreign governments, those with the United States, supported by vital military aid, would prove to be the most significant. Eilam views the U.S. aid to Israel as bittersweet—crucial, but also hampering Israeli potential. On the one hand, the United States has helped Israel cope with the reality of limited resources. He notes at one point: “Cuts in the defense budget were accompanied by an increase in the importance of American aid” (124). On the other hand, Israeli innovation and export potential have been curbed because of the flood of U.S. weaponry and its conditions of acceptance. Eilam remarks: “It seemed that the American consideration was to prevent Israel from rapidly developing home-grown technology with its own export potential” (134).

Eilam’s own working relationship with the United States took into consideration its technological development, primarily rooted in the Cold War era. More specifically, Israel applied U.S. technology against Arab militaries which primarily used Soviet weaponry. Eilam tells of U.S. congressional and military delegations that visited Israel immediately following the Yom Kippur War to discuss battle experiences and captured Soviet weaponry, including tanks, missiles, and armored vehicles. The Israelis gave these delegations detailed reports comparing Soviet and American systems. The book also highlights the “treasure hunt” in the United States, involving Israel’s complicated correspondence with Washington while trying to acquire advanced weapons technologies.

Eilamimaginatively uses biblical quotations as segues, such as “Out of the north evil will come” (Jeremiah 1:14) when discussing security threats. As for securing Israel, the land will not “have peace for forty years” (Judges 3:8). Eilam also refers with intriguing vagueness to his various missions, using lines such as “a two-day visit to a Scandinavian country for high-level meetings...between Israel and the country in question,” or “a secret visit to Israel by the defense minister of an African country” (130). Finally, Eilam offers fascinating accounts of his encounters with key Israeli and American figures such as Yitzhak Rabin, Ariel Sharon, Shimon Peres, Bill Clinton, and others.

The title of this book, however, is misleading. *Eilam's Arc* is not an academic work solely explaining “how Israel became a military technological powerhouse”; it is, rather, a personal record of Eilam’s rise from the lowest rung of Israeli weapons development to the highest echelons. Eilam does not shy away from expressing his
personal approval or disapproval of such Israeli figures as Sharon, Israel Tal, and Mordechai Gur, as well as his views on defense issues. The most relevant example concerns the late Gen. Tal, an expert in tank warfare who led the development of the Merkava tank. Eilam not only offers criticisms of numerous development issues such as the Suez roller bridge and antitank systems, but also of Tal’s professional behavior. Regarding antitank systems, Eilam remarks: “Tal enjoyed complete sovereignty over all things related to Israel’s ground forces, and all we could was to clench our teeth and remain silent” (105).

Overall, Eilam’s book provides a personally and emotionally charged portrayal of the Israeli high-tech military industry. Drawing on decades of firsthand experience in influential positions, Eilam’s account clearly supplies a vital piece of the puzzle on Israeli technological development, and his book is essential for those interested in the subject. He concludes with a policy recommendation: Israeli decision-makers should not rely on the global export market but should instead prioritize the “development of technologies exclusively for Israel.”

NOTES


Guido G. Weiss is pursuing an MA in Islamic and Middle Eastern studies at the Hebrew University of Jerusalem.

A PERFECT ANTIDOTE FOR IGNORANCE


Reviewed by Joseph S. Spoerl

Except for its preface and afterword, this book consists of the texts of lectures in a ten-year series initiated by the Roman Catholic archbishop of Chicago, Joseph Cardinal Bernardin (1928–1996, archbishop of Chicago 1982–1996). In 1995, after years of joint projects between Catholic and Jewish leaders in Chicago, and two years after Vatican recognition of Israel, Cardinal Bernardin traveled to Israel and the Palestinian territories with a delegation of Catholics and Jews from the Chicago area. During this visit, Cardinal Bernardin delivered an address in the