



## Israeli Hawk Missiles and the War in Ukraine

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**EXECUTIVE SUMMARY:** The United States has reportedly asked Israel to supply Ukraine with its long-retired Hawk missile defense system, despite the fact that the components of these systems are in serious disrepair and no longer operational. This request places Jerusalem in a difficult diplomatic position. While it wishes to stand with the Western bloc, it must also carefully manage its relationship with Moscow, which has the power to disrupt Israel's efforts to control hostile Iranian movements in Syria as well as threaten Israel's open channel to Russia's remaining Jewish population.

Israel's first modern air defense system, the Hawk antiaircraft missile system, was acquired amid internal IDF debate about the need for advanced air defense. At the time, some at Air Force headquarters, led by then Air Force commander Gen. Ezer Weizman, argued that the response to growing aerial threats to Israel should be primarily offensive—a debate that came several decades before a similar one over the possession of missile defense systems.<sup>1</sup>

Israel's first attempts to acquire advanced air defense systems from the United States were refused by President Eisenhower, who upheld the US embargo on arms sales to Israel that had been in force since the country's establishment. His successor, President Kennedy, was more attentive to Israel's needs, possibly because he wanted to compensate it for the refusal to provide surface-to-surface missiles as a counterweight to the ballistic missiles Egypt had developed at that time with the help of German scientists. In August 1962, Kennedy announced his willingness to provide Israel with five Hawk systems. This move heralded the

end of the US embargo on arms sales to Israel, as well as the IDF's transition from French to American weapons systems.

The Hawk ("Homing All the Way Killer") system was developed in the mid-1950s in response to the Soviet SA-2 antiaircraft system, which was being operationally deployed at the time in the Soviet Union and on its allies' soil. The Soviet air defense system won world fame in 1960 when it shot down an American U2 plane that was on a photographic sortie over Soviet territory.

In 1959, the US Hawk system completed the development phase and entered operational service in the ground force of the US Army. The systems were sold not only to Israel but also to many other US allies and friends, including Jordan, Egypt, Saudi Arabia, the United Arab Emirates, and Kuwait. The Hawk system was also sold to Iran, which at the time was under the rule of the Persian Shah and a close US ally.

The Israeli Air Force received its first Hawk system in 1965. Tragically, its initial operational launch, during the Six-Day War in 1967, resulted in the mistaken downing of an Israeli Ouragan plane whose pilot did not identify himself to air traffic control—apparently because he had been hit during an operational sortie over Egyptian forces in the Sinai. The system's first real success came in 1969, when an Israeli Hawk missile downed an Egyptian MiG-21 during the War of Attrition.

In August 1982, during the First Lebanon War, the Israeli Hawk system scored an unprecedented achievement on a worldwide level when it succeeded in shooting down a MiG-25 patrol and photographic-reconnaissance plane flying at a speed of Mach 2.5 and a height of 70,000 feet—far beyond the Hawk's original capabilities and beyond the ability of the Air Force's warplanes of the period. For the purposes of this operation, improvements had been made to the Israeli Hawk system that enhanced its performance beyond the nominal performance levels of the original system. The Israeli Air Force's Hawk system ultimately downed 36 planes and helicopters over the course of Israel's wars, from the Six-Day War to the Second Lebanon War.

With the entry of the more advanced Patriot air defense system into the Air Force's order of battle at the end of 1973, the Hawk systems began to go out of use. The systems were gradually retired while new Israeli-produced defense systems were added. The last system was retired in 2013. The components of the disabled systems—missiles, radars, and command-and-control systems—were put in open storage without any effort to preserve them. (Presumably the missile

engines were destroyed in a controlled fashion, since protracted storage of such engines, which are solid fuel-based, poses a substantial security danger.)

The Israeli Hawk system recently returned to the headlines in the form of a reported request by the United States that Israel provide some of its remaining Hawk missiles to the US for subsequent delivery to Ukraine.<sup>2</sup> Ukraine, which is now fighting Russia for its existence, is under ongoing Russian cruise missile attacks on its military and civilian infrastructure. Since September 2022, the Russians have also been using Iranian long-range Shahed 131/136 drones (well known for the massive damage they caused to Saudi oil facilities in September 2019) as cruise missiles in every regard. An offensive by these cruise missiles—both Russian and Iranian—is inflicting numerous casualties among Ukrainian civilians and causing heavy damage to its infrastructure, particularly its national electricity networks. These assaults could undermine Ukraine’s ability to continue fighting the war.

Ukraine’s air defense systems were seriously damaged in February 2022 by Russia’s opening air strike. What remains is insufficient— and, from a technical standpoint, unable—to intercept the thousands of missiles and drones launched by the Russians. Hence Ukraine’s supporters are making a great effort to reinforce its Soviet-era air defense systems with Western ones.

So far, Ukraine has received two kinds of German air defense systems (an anti-aircraft artillery system and a short-range missile defense system roughly comparable to Iron Dome) and an American short-range air defense system. The Americans continue to equip Ukraine with other systems, including the more modern Patriot system.

Recently, Spain—one of the only countries still using the Hawk—announced that it would convey such systems to Ukraine. This is presumably the background to the report that the Americans have asked Israel to support and complement the Spanish move by facilitating the transfer to the US of Hawk components billeted in Israel so they can be renovated and delivered to Ukraine.

Ukraine began asking Jerusalem for Israeli weapons systems at the outset of the war. So far these requests have been met sparingly, and the aid provided has consisted of noncombat material such as protective or medical equipment. Since the war’s outbreak there have been reports of Ukrainian government requests that Israel supply it with Iron Dome systems. At the end of October 2022, after the devastating Russian attack on Ukraine’s electricity infrastructure wreaked heavy damage and caused the loss of production and transmission capability, Ukraine’s

ambassador to Israel urgently requested almost the entire range of defensive systems developed in Israel for defense and export purposes, including Iron Beam (the laser system currently being developed), the Barak 8, the Patriot, Iron Dome, David's Sling, and the Arrow.

Iron Beam will not be operational for a few more years, and the 2 and 3 models of the Arrow systems are designed to protect against long-range ballistic missiles and have no real capability against cruise missiles and drones of the kinds now assaulting Ukraine. Barak 8, Iron Dome, and David's Sling are currently deployed operationally to defend Israel, and in light of military instability amid the threats from Iran and its allies in Lebanon and Gaza, any delivery of them would detract from Israel's preparedness for a war that could break out at short notice. The Israeli government would be taking an unreasonable risk by agreeing to deplete its supply of defensive missiles and transfer them abroad.

Beyond the security dimension of the issue of supplying defensive systems, there is also a real diplomatic dilemma here. Israel sees itself as part of the Western bloc, but it has a vital interest in preserving amicable relations with Russia—both because of the Russians' ability to disrupt Israel's military efforts to prevent Iran's takeover of Syria, and because of the need to retain an open channel to the remaining Jewish community in Russia, which numbers about a million people. Hence Israel maintains a policy of neutrality and also, for a certain period after the outbreak of the war, made efforts at mediation. Accordingly, the great majority of Ukraine's requests for Israeli military assistance have been rejected so far. The Defense Ministry's position is that Ukraine's requests "are considered on a case-by-case basis."

It appears that Spain's decision to provide Ukraine with serviceable Hawk systems from its order of battle was backed by an American decision to contribute systems from other Hawk users as well—primarily from its own stockpiles and later from other friendly countries as well. If so, it is likely that the American appeal was made not only to Israel.

Practically speaking, it would not appear that Israel has Hawk components that can be renovated. As noted, the Hawk systems were moved to open storage under the sky, where they have been for more than 10 years. They are now no more than rusty wrecks, and the rocket engines were probably destroyed so as not to endanger their surroundings. Put simply, Israel does not seem to have anything to offer on the Hawk issue.

An article by Barak Ravid quotes anonymous Israeli officials who claim that “hundreds of Israeli Hawk interception missiles that are in storage can be renovated and used operationally.” It is not clear on what basis that claim was made. For it to be correct, the missiles would have had to go into shift storage, which requires resources – though it would have made no sense to extract them for a system that ended its life in the Air Force and whose chances of being exported were close to zero, to put it mildly.

There appear to be objective technical factors that preclude a positive response to the American request. At the same time, there could be a situation where the United States asks for a symbolic “token” from the remnants of the Israeli Hawk missiles whatever their condition, not because they can be renovated but because Israeli willingness to provide them to Ukraine would undercut Jerusalem’s neutrality policy and link Israel to the group of countries that are funneling weapons to Ukraine. This could be dangerous for Israel, which has been warned several times by Russia not to provide weapons to Ukraine. The deputy head of Russia’s National Security Council and former president, Dimitry Medvedev, has admonished Israel that supplying weapons “to the Kyiv region” would be “a very rash move that will destroy diplomatic relations.”<sup>3</sup>

The Israeli political echelon, headed by Benjamin Netanyahu, will have to maneuver very carefully between the desire and need to remain part of the camp of Western countries and the resolve to avert a crisis in relations with Russia. The task is not to be on “the right side of history” but on the right side of Israel’s security and economic policy needs.

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<sup>1</sup>N. Gutmann, “From Then to the Hawk,” *Air Force Bulletin*, no. 162, April 23, 2005, <https://www.iaf.org.il/1527-24096-he/IAF.aspx> (Hebrew).

<sup>2</sup> B. Ravid, “Scoop: US asked Israel for its Hawk missiles to send to Ukraine,” *Axios*, January 25, 2023, <https://www.axios.com/2023/01/25/israel-ukraine-hawk-missile-biden-administration-request>.

<sup>3</sup> O. Yaron, “These are the advanced defense systems that Ukraine wants from Israel, and the countries that have already received them,” *Haaretz*, October 20, 2022, <https://www.haaretz.co.il/news/security/2022-10-20/ty-article/.premium/00000183-f54c-d736-abc3-fffc2bdc0000> (Hebrew).