



Israel's Strategic Gamble in Lebanon

by Yaakov Lappin

Perspectives Paper No. 2,321, December 11, 2024

EXECUTIVE SUMMARY: The acceptance by Israel of a ceasefire arrangement on the war front with Hezbollah in Lebanon constitutes a strategic “bet”. Israel will need to take a multifaceted approach to the arrangement that is based on enhancing defensive capabilities while, at the offensive level, committing to proactively preventing Hezbollah's re-entrenchment in southern Lebanon. This strategy, while compelling, is not without its paradoxes, particularly regarding the potential for escalation that could follow Israeli enforcement of the arrangement.

One key aspect of the Israeli gamble on a ceasefire arrangement with Hezbollah on the northern front seems to be a set of significant imminent improvements of its air defense systems. The arrival of the Iron Beam laser system, developed by Rafael Advanced Defense Systems together with Elbit, marks a revolutionary advancement in Israel's defensive arsenal. Integrated directly into the existing Iron Dome batteries, which have been operational since 2011, the Iron Beam uses a 100-kilowatt laser to intercept rockets, mortar shells, unmanned aerial vehicles (UAVs), and missiles – at the speed of light.

One of the most compelling advantages of the Iron Beam is its cost-effectiveness. Each laser shot costs only a few dollars – the price of the electricity required – compared to approximately \$50,000 for each Tamir interceptor missile used by the Iron Dome. This economic efficiency disrupts the financial advantage previously held by terrorists firing rockets and UAVs. The Iron Beam not only reduces

operational costs but also does not require ammunition replenishment, ensuring continuous protection.

Furthermore, the laser system offers rapid response capabilities, striking targets within seconds - much faster than kinetic interceptors. If it can be established that the Iron Beam destroys incoming threats before they cross into Israeli air space, this could enable the Israeli Air Force and IDF Home Front Command to decrease the number of disruptive rocket alerts in the future.

While the Iron Beam has a range of about eight to ten kilometers and can engage only one threat at a time, it complements the Iron Dome, which can intercept multiple threats simultaneously over longer distances. The combination of these systems enhances Israel's layered defense strategy.

This advancement has opened the door for future developments, including mobile ground-based lasers to protect maneuvering military units and airborne systems capable of intercepting threats above cloud cover over enemy territory. An aerial laser system being developed by Elbit has already demonstrated success. In 2021, this system downed UAVs while flying at an altitude of 3,000 feet. If development goes according to plan, the airborne laser is expected to have an interception range of approximately 20 kilometers.

In addition to the Iron Beam, the Israel Defense Forces has been testing radar-guided Vulcan cannons. The M61 Vulcan cannon, capable of firing around 6,000 rounds per minute and mounted on armored personnel carriers, aims to counter the growing threat of UAVs. Hezbollah has been leveraging its proximity to Israel to exploit detection loopholes, flying UAVs at low altitudes from southern Lebanese valleys to evade existing interception systems like the Iron Dome. The Vulcan cannons are expected to bolster Israel's short-range air defense, protecting sensitive locations and filling gaps in current capabilities.

On the offensive front, Israel is determined to capitalize on its recent achievements against Hezbollah by preserving the new security reality in northern Israel. This involves an active policy of precise airstrikes and targeted ground operations designed to prevent Hezbollah from reestablishing a foothold in southern Lebanon, including preventing Hezbollah and its Iranian patrons from trying to rebuild invasion bases in southern Lebanese Shiite villages and replenishing its

rocket arsenal. By continuously disrupting Iranian supply routes to Hezbollah – be they land corridors, air smuggling operations, or maritime channels from Syria and Lebanese ports – Israel aims to hinder Hezbollah's ability to rebuild its arsenal and terror infrastructure.

A critical aspect of this strategy is American recognition of Israel's right to enforce United Nations Security Council Resolution 1701, which effectively gives the resolution "teeth" for the first time. Recognizing that the Lebanese Armed Forces (LAF) and the United Nations Interim Force in Lebanon (UNIFIL) have been totally unable to implement the resolution, Israel is committed to take unilateral action to prevent Hezbollah's resurgence if necessary – and reserve its right to operational freedom.

Adapting tactics from other arenas, the IDF would aim, under this scenario, to "mow the lawn" – meaning periodic, intelligence-driven operations to disrupt hostile activities and prevent force build-up.

However, this proactive stance, while welcome, presents a paradox. While Israel's enforcement actions would be designed to prevent long-term security threats from reappearing, they may also lead Hezbollah to retaliate, potentially leading to escalation and renewed rocket fire in the north within a short time. Hezbollah still retains residual firepower capabilities, despite an assessment that more than 80% of its arsenal has been destroyed. Assertive future Israeli operations could trigger attacks on northern Israeli communities.

This conundrum necessitates careful consideration by the Israeli cabinet and IDF leadership. Should future critical action to prevent Hezbollah's rearmament instigate the very hostilities it aims to avoid, it will likely be necessary to return to higher intensity conflict. However, this is not an inevitable scenario in the near term.

By decisively weakening Hezbollah's capabilities and preventing its return to southern Lebanon, Israel can reshape the security landscape in its favor. This will require not only military action but also the leveraging of technological defensive advancements to maintain a strategic edge. The successful integration of systems like the Iron Beam and Vulcan cannons represents a significant step toward neutralizing emerging threats such as UAVs, which Hezbollah employed over the

course of the past year to target sensitive locations in attacks that led to painful casualties.

Israel's strategic "bet" on establishing a new reality in Lebanon will likely evolve into a complex and multifaceted endeavor. By enhancing its defensive capabilities with cutting-edge technologies, and by adopting proactive offensive measures to prevent Hezbollah's resurgence, Israel aims to secure its northern border and protect its citizens. Yet this strategy must navigate the paradox of enforcement potentially leading to escalation. Future attempts by Hezbollah and Iran to rebuild are a certainty so long as the radical Shiite Islamic Republic is led by its current jihadist regime.

Yaakov Lappin is an Israel-based military affairs correspondent and analyst. He provides insight and analysis for a number of media outlets, including Jane's Defense Weekly and JNS.org.