DefenseTech Week

Dec. 1st–2nd, 2025

Tel Aviv University

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THE WALL STREET JOURNAL.

Israel's Latest Military Tech: Tested in Gaza, Wanted by the West

Europeans look to Israel's arms industry as threat from Russia looms, despite criticizing Israeli conduct during the war

By Anat Peled

TEL AVIV—Israel is leveraging the war in Gaza to market its latest military technology.

U.S. and European buyers are lining up.

Officials from countries including Germany, Norway and the U.K. flocked to a conference sponsored by the Israeli Defense Ministry this week that showcased battlefield technology tested in the furnace of Israel's military campaigns, including in Gaza, Lebanon and Iran.

European interest in advancements in military hardware comes amid a push by the continent to rearm in the face of Russian aggression—and despite concerns among some countries represented at the event over Israel's prosecution of the war in Gaza.

On a big screen in the crowded auditorium this week, two attack drones were shown flying into a building in the Palestinian enclave, sending smoke billowing along the Gaza coastline.

"You see the first one hitting on the left side...and then the second one goes to its own target," Ran Gozali, CEO of UVision Air, an Israeli defense-technology company, told the audience."These are some of the clips that we were approved to share."

Attendees included U.S. government representatives, executives from private industry and foreign investors. A formal delegation came from India, while Uzbekistan, Singapore and Canada sent officials. Norway, which pulled investments in Caterpillar over the use of the company's bulldozers in Gaza, sent a diplomatic official, organizers said. The Norwegian Embassy in Israel didn't respond to a request for comment.

The turnout—much larger than the previous year, according to the organizers—reinforced how Israeli military technology retains its allure regardless of the country's diplomatic isolation over Gaza.

The International Criminal Court has issued arrest warrants for alleged war crimes against Israeli Prime Minister Benjamin Netanyahu and Yoav Gallant, the country's former defense minister, who attended the conference. Both men have denied wrongdoing, and Israel has contested the legitimacy of the charges.

Europe is wrestling with concerns that the U.S. is becoming a less reliable partner in the North Atlantic Treaty Organization and is under pressure to invest more in its own defense.

The wake-up call for Europe came with Vice President JD Vance's speech at the Munich Security Conference in February, which chastised the continent's governments for what he called censorship and the isolation of populist parties, signaling a changed trans-Atlantic environment, said Sebastian Von Ribbentrop, managing partner at JOIN Capital, a Europe-based venture capital company, who attended the conference. Now with Russia flying drones over NATO members in Europe, people at the conference said some countries feel they are running out of time.

"The threat is closer," he said. "There is a sense of urgency there."

Many European states imposed arms embargoes on Israeli companies during the war, fully or partially limiting military imports and exports, in opposition to the humanitarian cost of the conflict, which has killed more than 70,000 in Gaza, according to Palestinian health authorities, who don't distinguish between combatants and civilians.

In September, the U.K. blocked an Israeli Defense Ministry delegation from attending an arms trade

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fair. A U.K. government spokesperson said that "British Embassy officials attended the conference as they routinely do around the world to engage counterparts and advance U.K. interests."

This past summer, Germany halted shipments of military equipment to Israel that could be used in Gaza, before lifting the embargo after the current cease-fire took effect.

Germany, a staunch supporter of Israel and with a 580$ billion military-spending plan over the next decade, sent one of the largest delegations to the Israeli conference. Participants wore pins with united German and Israeli flags. Officials at the German Embassy in Israel didn't respond to a request for comment.

On Wednesday, an Arrow 3 air-defense system that Germany purchased from Israel for about 4$ billion became fully operational, becoming the first Arrow system to be deployed outside of Israel and the U.S., both countries said. It was the largest arms deal in Israel's history.

Israeli arms exports broke a record in 2024, after the outbreak of the war in Gaza, reaching 14.8$ billion despite calls to boycott Israeli weapons. Europe was the biggest buyer of Israeli defense technology last year, accounting for %54 of exports compared with %35 in 2023, according to data from Israel's Defense Ministry.

Germany said this week that the Arrow 3 air-defense system it purchased from Israel was fully operational. Anat Peled/WSJ

With the fighting in Gaza largely halted, and Europe ratcheting up its military spending, many countries appear more comfortable doing business with Israel openly, according to European and Israeli investors and startups who attended the conference.

A delegation from the European Union mingled in the same room with uniformed Israeli military generals and fighter pilots who took part in the war.

In another corner, attendees posed for photos next to the Israeli-owned defense company Rafael's Iron Beam, a laser system designed for low-cost interception of drones and missiles. Israel used a smaller, mobile version of the system dozens of times during the war, particularly on its northern front with Lebanon.

Many Europeans are concerned Russia could expand its military activity on the continent if it notches a strategic victory in Ukraine. European governments agreed to break with decades of low spending on defense in June, raising their annual targets to %3.5 of gross domestic product, up from %2. They also agreed to an additional %1.5 in nonlethal spending related to defense, the first time NATO has explicitly set such a target.

Israeli military contractor Elbit announced in November that it landed a 2.3$ billion contract with an international client. It didn't disclose the client or the product, saying only that it would deliver a strategic solution. In July, Romania announced a deal for more than 2$ billion for an air-defense system from Rafael.

One side event at the conference connected Israeli startups with investors from Europe, including Germany and Austria, and provided tips on how to overcome European bureaucracy.

However, using kinetic-warfare experience as a selling point can backfire. In July, when weapons manufacturer Rafael's marketing campaign used footage of its Spike Firefly loitering munition to show the weapon hovering and then exploding to kill a person in Gaza, it sparked an angry online backlash and the company took down the clip. But at the conference this week, Israeli startups were eager to tout their technology as battle-tested.

"Israel in the war, for good or for bad, proved what worked and what didn't," said Alon Lifshitz, founding partner of Aurelius Capital, a venture-capital firm based in Tel Aviv and New York that specializes in dual-use technologies and cybersecurity for national-security applications.

Corrections & Amplifications

Germany has a 580$ billion military-spending plan over the next decade. An earlier version of this article incorrectly said 580$ million. (Corrected on Dec. 5)

Appeared in the December 2025 ,5, print edition as <Israel's War-Tested Tech Draws Buyers>.

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After two years of war, Israeli weapons makers showcase their new tech

By Daniel Estrin

Israel has tested all kinds of new weaponry in the last two years of war. This week, it revealed some of that technology and other weapons it has created for future wars. Despite a global outcry over the huge civilian death toll in Gaza, Israel is selling the tech to other countries. NPR>s Daniel Estrin reports from Tel Aviv.

DANIEL ESTRIN, BYLINE: A lot of the military tech on display this week at an expo at Tel Aviv University looked like something out of a sci-fi movie, like a new high-powered laser that looks like a huge camera lens.

ARI SACHER: This is the turret from our system called Iron Beam.

ESTRIN: Ari Sacher from the Israeli arms manufacturer Rafael. Israel says it will begin to deploy the Iron Beam by the end of the month. The laser can knock rockets, mortars and cruise missiles out of the sky.

SACHER: It takes a very powerful beam of light. We heat the target, we deep fry it, and then (claps hands) the target (imitates explosion) blows up by itself.

ESTRIN: When the Gaza war broke out following a Hamas attack two years ago, the military began using all kinds of new drones for surveillance and targeting. Daniel Almog>s company, eyesAtop, provides the Israeli military, the IDF, with handheld screens that soldiers use to coordinate multiple kinds of drones.

DANIEL ALMOG: So that any new drone the IDF wants to introduce, the pilot can fly on Day 1, like a Jedi.

ESTRIN: A screen on display shows a recording of a flight over a Palestinian village in the Israeli-occupied West Bank. Almog explains what the system can do.

ALMOG: You want to close the kill chain with the single operator. So through our orchestration system, you can call in a kamikaze drone or a strike - a heavy-lift strike drone like this to drop a munition on the target.

ESTRIN: Israel also began using unmanned vehicles on the ground in Gaza, Lebanon and Syria, made by a company called Ottopia. They roll into enemy territory, scan and identify targets using AI, and keep the soldier out of harm>s way, says founder Amit Rosenzweig.

AMIT ROSENZWEIG: He or she can drink coffee while using a joystick to control a tank or an APC or whatever it is that he or she needs to control to get the job done.

ESTRIN: Palestinians in Gaza have posted videos like this one, when a person spots a military robot on wheels...

(SOUNDBITE OF ARCHIVED RECORDING)

UNIDENTIFIED PERSON: (Non-English language spoken).

ESTRIN: ...And videos of armored personnel carriers laden with explosives. Again, Rosenzweig.

ROSENZWEIG: Some videos were published where you can see something like a large vehicle, an APC, that that>s the purpose of such vehicle is, yes, to go somewhere and explode, not necessarily to take down a building, but maybe take down a bad guy.

ESTRIN: Israel>s war with Hamas in Gaza, where tens of thousands of Palestinian civilians have been killed, has drawn worldwide criticism, including accusations of genocide, which Israel rejects.

UNIDENTIFIED PROTESTER: (Chanting) There is no innovation in a genocidal nation.

ESTRIN: Outside the expo, about 30 Israeli university students and faculty protested. Anthropology professor Ofra Goldstein-Gidoni.

OFRA GOLDSTEIN-GIDONI: The drones - which seems to be very high-tech and great - but basically, using AI, all this clever technology, many people were killed by drones. And the thing is that we are all complicit here in Israel.

ESTRIN: To protest the war, some countries said they would restrict arms sales to Israel. But officials from more than 20 countries attended this Israeli defense expo, organizers say. Israeli Colonel Yishai Kohn says defense exports are soaring.

YISHAI KOHN: In general, Israel>s export has been breaking its record for the past three years each year in a row. And we expect that this year will end with a new record, too.

ESTRIN: Israel>s Arrow defense system, which countered Iranian missiles this year, was deployed today in Germany, which sees Russia as a growing threat and sees this tech as essential. Daniel Estrin, NPR News, Tel Aviv. Transcript provided by NPR, Copyright NPR.

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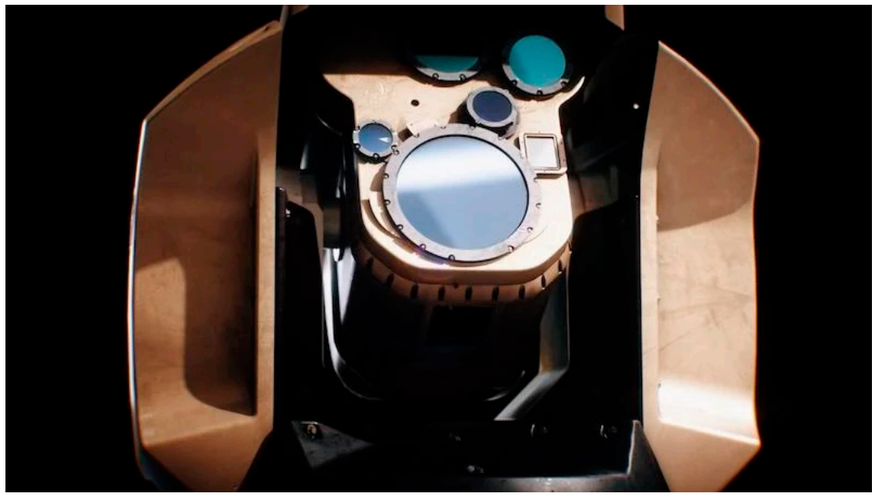
AVIATION WEEK NETWORK

Israel Foresees Iron Beam IOC Before Year's End

By Robert Wall



Israel says the Rafael Iron Beam high-energy laser weapon system should deliver a formal initial operational capability (IOC) before year>s end after completing system development. The handover is planned for Dec. 30, Brig. Gen. Daniel Gold, the head of Israel's Directorate of Defense Research

AFP

Israel's defence ministry has announced the completion of a laser air defence system known as "Iron Beam", which will be deployed by the end of December.

AFP

> "The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield."
>
> — DANIEL GOLD
>
> The head of Israel's defence ministry research and development

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GLOBES

Israeli defense-tech startups attract $1b in investment

Senior defense official: Funding in 2025 has been greater than all previous years combined, and the year is not over yet.

By Dean Shmuel Elmas

Israeli defense startups working with the Ministry of Defense Directorate for R&D (DDRD) (MAFAT) have attracted over 1$ billion in financing rounds, mergers and acquisitions in 2025. A senior defense official tells "Globes," "The funding in 2025 has been greater than all previous years combined, and the year is not over yet." In 2024, which was also a record year, only about 150$ million was raised. In total, all funding raised by startups in the field in recent years (prior to 2025) amounted to about 422$ million.

The amount is also impressive on an international scale. Crunchbase data published a few days ago shows that the total funding raised by defense startups worldwide since the beginning of 2025 amounted to 7.7$ billion in nearly 100 deals. The main driver was the %9 growth in global defense budgets to about 2.7$ trillion - the most significant annual jump in the last 30 years, the Stockholm International Peace Research Institute (SIPRI) reports.

"The two years of war has benefited startups"

Growth is occurring despite the fundamental challenge of the field, in which there is a single customer in Israel: the Ministry of Defense. The leading user is the Israel Defense Forces (IDF), as well as security agencies and many armies around the world.

Col. Yishai Kohn, Head of MAFAT's Planning, Economics & IT Department tells "Globes," "When a startup wants customers to buy from it, there are several possible customers, and we are a single address. At the same time, due to the supervision of the field worldwide, there is a reluctance to invest in security technologies that are not dual (military and civilian), and until two years ago, there was no talk of <defense tech.> The two years of war have benefited startups, due to the conflicts on the battlefield."

Since the start of the war in October 2023, more than 130 Israeli startups have been integrated into the war effort: about %50 in autonomy and AI (including drones), about %25 in sensors and detectors (some against drones and some for deep-tech detectors), and the rest for navigation, electronic warfare, and quantum solutions.

"We have no ability or desire to influence business, it's a free market," stresses Col. Kohn. "We try to cooperate as much as legally permissible with all the players, and not to say anything bad about anyone. If, for example, we verify that a company has received orders from us, we will verify. This is important for investors. We just recently met with a German fund, which asked. Our response provides credibility."

This credibility with foreign customers is reflected in the fact that out of the 1$ billion raised, some 400$ million came from US company Ondas Holdings. The company, which operates in the fields of autonomous drones, security robotics, and advanced communications solutions, has made a series of acquisitions in Israel - the most notable of which was the acquisition of Sentrycs, which specializes in anti-drone solutions based on protocol manipulation (Cyber Over RF), for 225$ million. This is a company whose product is also used by the IDF.

One unicorn and hundreds of millions of dollars in funding

Another standout in the field this year is Classiq, which develops software tools for quantum computing, and raised 110$ million - some of it from overseas investors. Drone company Heven became Israel's first-ever unicorn in the defense industry, after raising 100$ million at a company aluation of 1$ billion, with US quantum computing company IonQ leading the investment. A similar amount was raised by Kela, which was founded in 2024, and is developing a platform for connecting civilian technologies to military systems. Investors included Sequoia, Lux Capital, and IQT - the investment arm of the CIA.

Ondas> significant presence reflects a broad trend in the industry, in which most startups are not systems of systems, but the industry is moving towards that. The US company is accumulating technologies through acquisitions, but it is not the only one. Israeli drone company UVision recently acquired Israeli company SpearUAV, which develops tactical attack drones launched from a capsule. SpearUAV raised 20$ million in a Series B round in May last year at a valuation of 80$ million.

UVision did not disclose the amount of the acquisition, but "Globes" has learned that it was not

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lower than the previous 80$ million valuation. This is a significant step, but not the only one that UVision has taken in its efforts to become a systems house. About two months ago, together with US company Mistral, UVision closed a huge deal to supply suicide drones to the US Army for 982$ million. At the same time, the company is working closely with German giant Rheinmetall, to supply hundreds of UVISION>s "Hero" series of walkie-talkies to a NATO member state. The international media estimates the deal is worth hundreds of millions of euros.

The third major Israeli defense tech company is Kela, which is developing a range of SCM (command and control) capabilities on a relatively small scale, which will bring together startups, by using open architecture. The company is striving to become as extensive an integrator as possible that will accumulate, for example, radar, SIGINT, and interception technologies, and if the move is successful, Kela will become a real rival of Elbit Systems, which operates in the field.

Beating the defense giants in tenders

What each of these companies has in common is their close cooperation with the Ministry of Defense, which benefits them not only in Israel. In the first half of 2025 alone, no fewer than 12 Israeli startups signed export agreements in G2G (government-to-government) frameworks - a record that several years ago, would have seemed like a distant dream, when most of the attention in the field was on cybersecurity.

Col. Kohn notes that when the Ministry of Defense works with a startup, it does not take equity. "We view ourselves as an R&D body. Sometimes, we issue companies with large supply orders, which is not negligible for us either, but this is a calculated risk designed to provide them with security. The companies show investors the supply order."

One of MAFAT's more complicated tasks, especially during the pressures of the war, is to persuade the security forces to use the systems. "Capacity is limited, it is impossible to take on 200 drone companies, but it is developing. In the counter-drone field, we run field trials and place them on the border. The limitations are not only in money, but also in the operational scope that is possible."

At the MAFAT Defense Tech conference in cooperation with the Yuval Ne>eman Science, Technology and Security Workshop at Tel Aviv University, the head of MAFAT, Brig. Gen. (res.) Dr. Danny Gold recalled a tender for attack drones, which was won by several startups that formed a consortium to compete with Israel's biggest three defense companies (IAI, Elbit and Rafael).

More budgets alongside state-guaranteed investment funds

2026 will be challenging in terms of security, yet it is not expected to be similar in terms of operational conflict and the orders for the previous two years. Therefore, the Ministry of Defense has taken three key steps: First and foremost, Dr. Gold decided that at least %10 of the Ministry of Defense>s R&D budget in 2026 will go to startups and not to the three large companies, which are already flourishing due to increased demand from abroad.

In addition, the Ministry of Defense has joined forces with the Ministry of Finance to establish two state-guaranteed investment funds totaling NIS 200 million. "This will be a different year than the previous one," says Col. Kohn. "The startups are not expected to achieve the same backlog of orders. Given the fact that the large companies have record-breaking exports, it is right to continue to promote the (startup) ecosystem."

The final measure relates to the API - the Defense Exports Control Department. The Ministry of Defense plans to remove barriers to marketing some classified products to more than 100 countries.

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BARRON'S

Israel To Deploy 'Iron Beam' Laser Defence By End 2025

By AFP - Agence France Presse

Israel>s defence ministry announced on Monday the completion of a laser air defence system known as "Iron Beam", which will be deployed by the end of December.

"The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield," Daniel Gold, head of defence ministry research and development, told a defence summit in Tel Aviv.

"With development complete and a comprehensive testing programme that has validated the system>s capabilities," he added, promising to deliver "initial operational capability" by the end of the year.

The announcement comes as Israeli military steps up its strikes against the militant group Hezbollah and its infrastructure, despite a ceasefire that began just over a year ago.

Contacted by AFP, the defence ministry refused to provide more details on what exactly would happen on that date.

The announcement marks a major milestone in a project more than a decade old, developed jointly with the state-owned arms company Rafael and Israeli private defence group Elbit.

The laser system seeks to enhance Israel>s interception of drones and other projectiles, and will supplement other aerial defence capacities such as the more well-known Iron Dome.

Iron Dome offers short-range protection against missiles and rockets. The David>s Sling system and successive generations of Arrow missiles are Israeli-American technology built to bring down ballistic missiles.

During the -12day war launched by Israel against Iran in June, the country>s missile defence system failed to intercept all the projectiles fired by Tehran toward Israeli territory.

Israel has since acknowledged being hit by more than 50 missiles during the war with Iran, resulting in 28 deaths.

The new system is "a ground-based high-power laser air defence system designed to counter aerial threats", Rafael said.

The company added that the system has the "unique advantage of rapidly neutralising threats using laser technology at negligible cost".

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BREITBART NEWS

Israel to Deploy 'Iron Beam' Laser Shield by Year's End, Vows to 'Change Battlefield Rules'

Israel will deploy its first full-power Iron Beam laser defense battery by year's end, with senior defense officials declaring the system will "fundamentally change the rules of engagement on the battlefield" as the Jewish state braces for continued clashes with Iran and its terror proxies.

By Joshua Klein

Speaking on Monday at the DefenseTech conference in Tel Aviv, Brig. Gen. (Res.) Dr. Danny Gold — head of the Defense Ministry's Directorate of Defense Research & Development (DDR&D) — said the high-energy laser system, known in Hebrew as Or Eitan, has completed development and will be handed over to the IDF on December 30.

Gold said his directorate is "prepared to deliver initial operational capability" to the military, emphasizing that Israel is "already advancing the next generations" of laser defenses even as the first battery enters service.

Maj. Gen. (Res.) Amir Baram, Director General of the Defense Ministry, used the same stage to frame Iron Beam's rollout directly within the war sparked by Hamas's October 7, 2023 massacre and the sustained regional confrontation with Hezbollah and other Iran-backed militias.

"For years Israel was known as a cyber nation," Baram said, warning that "all fronts are still open and our enemies are learning and preparing day by day," and insisting that Israel has now become a "defense-tech nation" built on combat-driven innovation.

Baram described what he called a "direct feedback loop from the frontline to engineers," arguing that Israeli soldiers under fire are now shaping weapons programs in real time. He cited the decision last year to push a lower-power Iron Beam prototype into emergency field use within days of a deadly Hezbollah drone strike on a Golani Brigade base in northern Israel.

That wartime gamble quickly paid off. Defense officials say the laser system proceeded to shoot down dozens of Hezbollah drones over a matter of weeks, convincing the ministry to accelerate the move from limited trials to full-scale deployment of the 100-kilowatt version now being turned over to the IDF.

According to technical specifications published by the Israeli business daily Globes, the flagship Iron Beam 450 uses a 100-kilowatt high-energy laser fired through a 450-millimeter aperture to burn through rockets, mortars, and drones at ranges of roughly 10 kilometers. Unlike missile interceptors, no projectile ever leaves a launcher — the beam hits incoming threats at the speed of light — and Globes reported that each laser shot costs only a few dollars, compared to tens of thousands for an Iron Dome interceptor.

Israeli engineers acknowledge the laser's limitations in heavy haze, dust, and cloud cover, and officials are careful to stress that Iron Beam will not replace the country's missile defenses. Instead, the laser is being integrated as another layer alongside Iron Dome, David's Sling, and the Arrow systems, with Iron Beam expected to handle smaller, short-range threats while missile batteries take on heavy barrages and long-range launches.

To protect both civilians and maneuvering forces, the program is structured as a family of systems. As Globes noted, the heaviest Iron Beam units will guard borders, bases, and strategic infrastructure, while more mobile versions mounted on trucks and armored vehicles will follow Israeli forces and intercept drones at the tactical edge.

Globes also reported that Rafael envisions pairing its lighter "Lite Beam" configuration with the Trophy active-protection system — the anti-tank missile shield mounted on Israeli and U.S. armored vehicles — to create a combined defense against both drones and anti-armor fire for maneuvering units.

In remarks reported by Jewish Insider ahead of an upcoming Misgav Mideast Horizons podcast episode, Rafael Chairman Yuval Steinitz called the program a "laser revolution," stressing that major powers spent decades trying to make battlefield lasers practical. "For the first time in human history, we are able to shoot down missiles, rockets, even artillery shells and mortar shells — not with projectiles, not with missiles or artillery shells, but with light," Steinitz said, adding that smaller Iron Beam variants have already intercepted roughly 50 Hezbollah UAVs in recent fighting.

Israeli officials also say the laser's speed-of-light engagements could sharply reduce the need for Israelis to sprint to shelters during many attacks, since rockets and drones can be destroyed almost immediately after launch, often while still over enemy territory. Gold said the system is expected to "fundamentally change the rules of engagement on the battlefield," calling Iron Beam a central pillar of Israel's future defensive doctrine.

Baram emphasized that the laser shield is entering service amid a much broader defense-tech build-up aimed at countering Iran's missile and drone network. He highlighted 21 government-to-

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government defense agreements signed in 2024 and said the ministry has invested 1.2 billion shekels in startups, with more than 300 companies working with DDR&D and over 130 pulled directly into wartime operations since October 7. Tel Aviv, he noted, now ranks among the world's top defense-tech hubs, with Israeli firms signing major deals across Europe, Asia, and North America for systems stress-tested in combat.

As Breitbart News previously reported when Israel first confirmed Iron Beam's operational use earlier this year, the system is meant to give Jerusalem both a technological edge and an economic answer to the region's expanding rocket and drone arsenals. By turning low-cost enemy fire into targets for a near-zero-cost laser shot, Israel aims to sustain a long war without absorbing the crushing interceptor costs that defined past conflicts.

the algemeiner

The Future of War: Israel Takes Global Lead on Military Innovation With New AI Division, Iron Beam Laser System

By David Swindle

The Israel Defense Forces (IDF) announced this week a revolutionary reorganization of the technology and artificial intelligence capabilities of the Jewish state's military, unveiling new plans to prepare for future warfare with cutting-edge advancements.

Israel's major defense overhaul, unveiled on Tuesday, comes in preparation for the deployment of the long-anticipated "Iron Beam" laser interceptor system, which will be delivered to the military at the end of the month.

Under the name "Bina" — Hebrew word "intelligence" — the IDF has chosen to shut down its Lotem Unit from the C41 Corps, replacing it with the Artificial Intelligence (AI) Division and the Spectrum Division. The latter will focus on communications and electronic warfare with an emphasis on threats from Iran, China, and Russia.

The AI Division will grow through merging other sections within the IDF, including Mamram (the abbreviation for the Center of Computing and Information Systems) and software development units Shahar and Mitzpen. This consolidation of AI-development related divisions intends both to intensify security and avoid accidentally duplicating research efforts. The project will align with Israel's Project Nimbus cloud computing program supplied by Amazon and Google.

The IDF also announced the ICT Division, which will focus on satellite warfare in outer space.

According to the military, about 50 percent of the new divisions are composed of women soldiers, with female officers comprising 40 percent of the senior command including two of the five top leadership positions.

Brig. Gen. Yael Grossman now heads ICT and the Cyber Defense Division, and Brig Gen. Racheli Dembinsky will head the Spectrum Division. Others in leadership positions include Chief Signals Officer Brig. Gen. Omer Cohen and Maj. Gen. Aviad Dagan.

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"I have no doubt that the world is heading towards a space war, especially after the US and China defined space as a possible war arena," Dr. Moshik Cohen, CEO for defense technology company AIPEX which focuses on missiles, told the Israeli publication Globes.

"Rival powers are already using it on the battlefield," Cohen continued. "The Chinese have developed a way to detect stealth aircraft using satellites, and the Russians have jammed GPS signals from US satellites, which have dropped thousands of smart bombs on earth and blocked satellite communications for the Ukrainians. At the same time, the US is promoting Golden Dome, which will consist of a network of low-flying satellites able to perform military missions such as intercepting ballistic and hypersonic missiles and blocking enemy communications."

Dagan said that the new divisions aspired to use technology to "turn one tank into 100 tanks, one soldier into 100 fighters."

On Monday, meanwhile, Danny Gold, the head of the Israeli Defense Ministry's Directorate of Defense Research and Development, revealed that the military would soon receive the "Iron Beam" laser interception system, a project a decade in development.

"With development complete and a comprehensive testing program that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on Dec. 30, 2025," Gold said. "The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield. Simultaneously, we are already advancing the next-generation systems."

Created by Rafael Advanced Systems Ltd., the Iron Beam is intended to supplement rather than replace Israel's Iron Dome and other air defense systems, focusing especially on smaller targets. As long as the weapon maintains a power source then it cannot run out of ammunition. However, the system does not function optimally in situations with clouds or low visibility.

The IDF chose to rename the laser weapon from Magen Or (Light Shield) to Or Eitan (Eitan's Light) in honor of Cpt. Eitan Oster, a member of the Egoz Commando Unit killed in October 2024 while fighting the Hezbollah terrorist group in Lebanon.

Brig. Gen. Benny Aminov also announced this week an Israeli breakthrough in countering enemy drone attacks.

"We are now working on interception solutions using drone-based systems that enable response to swarm scenarios while accelerating the development of new directed-energy weapons," Aminov said. "The issue of low-altitude threats is an example of a challenge that requires our defense establishment to fundamentally change its operational approach, responding within compressed time frames, spiral development, accelerating testing during the development process, and bridging small defense-tech companies with major defense contractors."

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GLOBES

Iron Beam to become operational this month

MAFAT head Brig. Gen. (res.) Danny Gold told DefenseTech Week 2025 in Tel Aviv that the laser defense system will be delivered to the IDF on December 30.

By Dean Shmuel Elmas

Ministry of Defense directorate of defense R&D (DDR&D) (MAFAT) head Brig. Gen. (res.) Danny Gold announced today that Israel's laser air defense system Or Eitan (Iron Beam), has completed development and trials procedures and will be delivered to the IDF on December 30. Gold was speaking at DefenseTech Week 2025 held by MAFAT in collaboration with Tel Aviv University's Yuval Neeman Workshop for Science, Technology and Defense.

Gold said that the Iron Beam system would, "Change the rules of the game of the battlefield. In the field of defensetech, the game has changed - startups are now competing <head to head> with the big companies and are winning. Only recently, a number of startups that joined forces competed against all the big industries in a MAFAT tender and were chosen to provide the IDF with an array of attack drones."

Ministry of Defense director general Maj. Gen. (res.) Amir Baram told the conference about preparations for another expected operation against Iran. "All fronts are still open and our enemies are learning and preparing day by day. This period brings with it uncertainty and risks, but also great strategic opportunities for those who understand the moment. The Ministry of Defense is deep in work on developing the next generations of breakthrough technology for a future confrontation with Iran, in defense and attack, and is developing additional capabilities.

"Insights from soldiers in the field directly shape the technological solutions for their operational needs. We have a direct feedback loop from the front line to defense industry engineers and this creates a strong supply chain. This is what defenstech means in Israel."

Major fall in effectiveness during haze

The laser defense system, developed by Rafael Advanced Defense Systems, which is the prime contractor for the laser program, includes three main systems.

The first and largest is Iron Beam 450, an upgrade to the original system, which includes a 450 millimeter aperture beam director instead of 250 millimeters. This provides the system with an upgraded operating range, higher accuracy and extremely high efficiency. Iron Beam is the only system of its kind in the world with laser power as high as 100 kilowatts. The combination of high energy with the aperture beam director allows a range of about 10 kilometers, and high accuracy despite the limitations of the laser.

"Iron Beam is ready"

Iron Beam completes trials ahead of delivery to IDF

These limitations include a significant decrease in efficiency during cloudy and hazy conditions, while its major advantage is that each interception costs 10-5 compared with 30,000$ for each Iron Dome interception. Iron Beam works using a a single strong beam that diverges. It launches 200-100 such beams and when the system detects that one beam has hit its target, it instructs all the beams to be on an identical frequency and focus on the target.

Due to the limitations of the laser, Iron Beam and Iron Dome will be deployed side by side, complementing each other. Israel>s Ministry of Defense revealed earlier this year that the Iron Beam system carried out operational interceptions during the war. With the bigger 450 millimeter aperture, Iron Beam will be deployed near borders, population centers and strategic infrastructures to protect them from missiles, rockets, drones and mortars.

Rafael has also produced Iron Beam M - a mobile version of the laser system. This is a smaller version of Iron Beam with a 250 millimeter aperture and 50 kilowatts power, which can be installed on an X88 truck, and as a result of the reduced power, its range is also about half that of the regular Iron Beam. With its rapid deployment capabilities, Iron Beam M will provide protection for maneuvering forces and strategic infrastructures with all its systems are on the same truck. Due to its lower power, it will be able to deal with rockets, drones, and mortars.

An even smaller version is Lite Beam with 10 kilowatts power. It is even lighter and more mobile than Iron Beam M and is designed to be installed on 4X4 vehicles or armored personnel carriers, and to provide mobile tactical protection for maneuvering forces against drones. Combined with Rafael>s Trophy system for protection against anti-tank missiles, Lite Beam will significantly enhance protection for maneuvering forces.

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BÁO VÀ PHÁT THANH, TRUYỀN HÌNH
Nghệ An

Israel is about to hand over the Iron Beam defensive laser to the IDF.

Or Eitan (Iron Beam) has completed development and testing and is expected to be delivered to the IDF on December 30th; it is a 100 kW laser with a range of approximately 10 km, costing 10–5$ per interception, and is deployed as a support system for Iron Dome.

The Or Eitan (Iron Beam) laser defense system has completed its development and testing and is expected to be delivered to the Israel Defense Forces (IDF) on December 30th. According to the Israeli Ministry of Defense, Iron Beam is a -100kilowatt laser system with a range of approximately 10 km, optimizing interception costs to 10–5$ per interception, compared to around 30,000$ for an Iron Dome interception. Due to its technological characteristics, Iron Beam will be deployed in parallel to complement Iron Dome.

Overview and Official Statement

At DefenseTech Week 2025 in Tel Aviv, Brigadier General Danny Gold, head of the Defense Research & Development Directorate (DDR&D) of the Israeli Ministry of Defence (MAFAT), asserted that Iron Beam will "change the rules of the game on the battlefield." He stated that in the field of defense technology, startups are now able to compete on equal footing with large corporations. According to him, a recently formed startup alliance beat leading corporations in a MAFAT tender and was selected to supply the IDF with a fleet of attack drones.

Technical analysis

Iron Beam, developed by Rafael Advanced Defense Systems, consists of three key components. The first and largest system is Iron Beam 450, an upgraded version of the original configuration, using a 450 mm aperture beamguide instead of 250 mm. This upgrade increases range, accuracy, and performance. According to published information, Iron Beam is currently the only system to achieve 100 kilowatts of power.

In principle, the system uses a powerful, divergent beam, firing 200–100 beams. When the sensor detects that a beam has hit the target, Iron Beam synchronizes all beams to the same frequency and concentrates the energy on the target. This configuration allows for the creation of a sufficiently high energy density in a short time to damage low-altitude, close-range flying targets such as rockets, UAVs, and mortar rounds.

The stated range of effectiveness is approximately 10 km. A notable limitation is the reduced effectiveness in adverse weather conditions such as cloud cover or fog. Conversely, a clear advantage is the low interception cost (10–5$ per interception) compared to missile-based interception solutions like Iron Dome ($approximately 30,000$ per interception).

Deployment and operational tasks

Due to the inherent limitations of laser technology, Iron Beam will be deployed in parallel with Iron Dome to complement each other. The plan is for the 450 mm aperture system to be positioned near borders, populated areas, and strategic infrastructure to protect against missiles, rockets, UAVs, and mortar rounds. The Israeli Ministry of Defense has previously stated that Iron Beam has had successful interceptions in combat.

Technical and tactical evaluation

Cost/effectiveness: Each interception costs 10–5$, offering a cost-effective operating advantage over missile interceptor solutions.

Weather limitations: effectiveness is significantly reduced in cloudy or foggy conditions; therefore, supplementary deployment is necessary alongside the Iron Dome.

Defense stratification: 450 mm configuration for critical areas; M and Lite Beam versions for mobility, force protection, and infrastructure protection as needed.

The December 30th handover date marks the transition from testing to deployment, with a focus on close-range defense against targets such as rockets, UAVs, and mortars, while also supplementing the existing air defense network.

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MILITARY AFFAIRS

Israel Introduces the Iron Beam Laser System for Next-Gen Air Defense

Israel completes development of the Iron Beam laser air-defense system, set for IDF delivery in December 2025, designed to intercept rockets, shells and small UAVs.

By John Baker

Israel has completed the development of a new advanced air-defense system known as Iron Beam, which relies on high-energy laser technology. The announcement came from Daniel Gold, head of the Defense Ministry's Directorate of Defense Research and Development.

Gold said that after finishing development and successfully carrying out a full cycle of trials confirming the system's effectiveness, the ministry is ready to hand Iron Beam over to the Israel Defense Forces. The first deliveries are scheduled for December 2025 ,30.

According to a statement released by the Defense Ministry's press service, Gold commented that Iron Beam is expected to significantly reshape battlefield dynamics. He noted that the system's capabilities had been validated through a comprehensive test program and that the ministry is prepared to transfer the first unit to the IDF on the specified date.

He added that Israel's defense establishment is also pushing ahead with new technological solutions for future conflicts, including developments in space, offensive platforms, and defensive systems.

Iron Beam is designed to intercept short-range rockets as well as mortar and artillery shells using focused laser beams. The system is also expected to destroy small unmanned aerial vehicles.

BHARAT NEWS

Israel 'Deeply Engaged' In Developing Breakthrough Tech For Future Confrontations With Iran: Top General

Maj Gen (Res.) Amir Baram stressed the necessity of adaptation in both strategy and technology, warning, «anyone who fails to adapt is eventually left behind.»

Tel Aviv:Israel is "deeply engaged" in developing next-generation breakthrough technologies for potential future confrontations with Iran, a top Israeli general said on Monday. Maj Gen (Res.) Amir Baram, Director General of the Israel Ministry of Defence (IMOD), made the remarks while inaugurating the second International DefenseTech Week at Tel Aviv University here.

"All fronts are still open, and our enemies are learning and preparing. This transitional period brings uncertainty and risks, but also significant strategic opportunities for those who understand the moment," he said, underlining Israel>s geopolitical and security situation.

He was referring to the multi-front conflicts Israel has witnessed in recent months. Israel fought a -12day war with Iran in June this year while at the same time engaging Hamas in Gaza. Besides Hezbollah in Lebanon, Yemen>s Houthis have emerged as another challenge.

"We are deeply engaged in developing next-generation breakthrough technologies for potential future confrontations with Iran, in both defensive and offensive capabilities, while advancing additional operational capacities," he said. He stressed the necessity of adaptation in both strategy and technology, warning, "anyone who fails to adapt is eventually left behind".

Speaking at the event, Brig. Gen. (Res.) Daniel Gold, Head of the Israel Ministry of Defence (IMOD) Directorate of Defence Research & Development, said that a new laser interception system, known as Iron Beam, will be delivered to the military on December 30.

"With development complete and a comprehensive testing programme that has validated the system>s capabilities, we are prepared to deliver initial operational capability to the IDF on December 2025 ,30," he said. Noting that Israel was known worldwide as a <Cyber Nation> for years, Maj Gen (Res.) Amir Baram declared that Israel has "evolved into a true <Defence-Tech Nation>".

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euronews.

Israel plans to deploy Iron Beam laser defence system by year-end

The first operational high-power laser beam will be deployed this year, providing a cost-effective and rapid solution for drones and unmanned aerial vehicles.

By Ferenc Szekely

Israel will deploy its Iron Beam laser defence system by the end of the year, following the high-power system>s completion of operational testing in September, becoming the first country to field a combat-ready laser air defence system.

The -100kilowatt system successfully intercepted missiles, mortar shells, unmanned aerial vehicles and other aircraft during weeks of trials, demonstrating its ability to destroy targets with precision within seconds, the Israeli Defence Ministry stated.

Iron Beam will provide Israel with a fifth layer of air defence, supplementing the Iron Dome, David>s Sling and Arrow 2 and 3 systems.

While existing systems achieve interception rates of %95-90 against offensive missile systems, their performance against drones and unmanned aerial vehicles has been lower, shooting down only about %50.

One of the most dangerous threats to Israel is the Iranian Shahed unmanned aircraft in its multiple iterations.

The Shahed 136 drone has a carbon-fibre body, making it difficult to track on radar, and an electric motor that allows it to fly silently for up to 2,000 kilometres.

The Shahed 149 can carry 13 bombs, while the 191 can be equipped with two missiles with a total payload of 50 kg. Both are capable of destroying civilian infrastructure.

The Shahed, developed by Iran>s Revolutionary Guard Corps, has been used to hit several communities in northern Israel, with successful attacks recorded in Eilat, the Jordan Valley and elsewhere.

One unmanned aircraft reached Prime Minister Benjamin Netanyahu>s home in Caesarea from Lebanon.

Israeli soldiers on the northern border have struggled to respond effectively to the drone threat. However, a lower-powered version of the Iron Beam laser was already used in combat in October 2024, shooting down some 35 to 40 Hezbollah drones

What makes it so cheap?

Iron Beam combines laser weaponry with its own sensors, fire control system, radar, electro-optical sensors and high-resolution tracking cameras, as well as a fire control computer.

The system offers low-cost protection against sophisticated offensive threats. A shot costs only a few cents in electricity for a -100kilowatt discharge, compared to 100,000$-10,000$ or more per rocket.

The laser requires no expendable ammunition, eliminating costs for explosives, propellant, guidance systems and composite bodies. It also requires no logistical supply chain, warehousing or shipping, and cannot run out of stock.

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Devdiscourse
Discourse on Development

Israel's Defense-Tech Revolution: Adapting for Tomorrow's Battles

Israel is intensively focusing on developing advanced technologies to address future confrontations with Iran. The country has evolved into a <Defence-Tech Nation,> enhancing its capabilities in aerial defense, cyber operations, and more. The launch of Iron Beam, a new laser interception system, is scheduled by late 2025.

Israel is at the forefront of developing state-of-the-art technologies aimed at addressing future confrontations with Iran, according to a top Israeli general, Maj Gen (Res.) Amir Baram. Speaking at Tel Aviv University during the second International DefenseTech Week, Baram emphasized both defensive and offensive innovations.

Amidst a complex geopolitical landscape involving multi-front conflicts with Iran, Hamas, Hezbollah, and Yemen>s Houthis, Baram underscored the necessity for strategic adaptation. He highlighted the importance of innovation as a driver for Israel>s defense strategy, warning that stagnation could lead to obsolescence.

A major advancement announced at the event was the upcoming delivery of the Iron Beam, a laser interception system, which is part of Israel>s continued evolution into a <Defence-Tech Nation.> This reflects Israel>s broader commitment to expanding its capabilities across aerospace, cyber defense, and more, while securing significant contracts globally.

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DEFENCE INDUSTRY EUROPE

Israel completes Iron Beam laser system development and sets timeline for first IDF delivery

Israel is intensively focusing on developing advanced technologies to address future confrontations with Iran. The country has evolved into a <Defence-Tech Nation,> enhancing its capabilities in aerial defense, cyber operations, and more. The launch of Iron Beam, a new laser interception system, is scheduled by late 2025.

By Martin Chomsky

Brig. Gen. (Res.) Dr. Daniel Gold announced that development of the Iron Beam laser system has been completed, with the first operational capability scheduled for delivery to the Israel Defense Forces on 30 December 2025. He made the remarks at the International DefenseTech Week in Tel Aviv, an event led by the Ministry of Defense's Directorate of Defense Research & Development in collaboration with the Blavatnik Interdisciplinary Cyber Research Center at Tel Aviv University.

Dr. Gold said: "The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield. With development complete and a comprehensive testing program that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on December 2025 ,30. Simultaneously, we are already advancing the next-generation systems."

He added: "The defense-tech landscape has fundamentally shifted — startups are now competing directly with major defense contractors and winning. Recently, several startups competed against all major defense industries in a DDR&D procurement competition and were selected to supply the IDF with advanced attack UAV systems."

Dr. Gold also stated: "In line with the Ministry's strategy, we are actively developing the next generation of technological surprises for future conflicts — across space, offensive, and defensive domains — and will operationalize them at the appropriate time. The DDR&D serves as a production engine for the next generation of game-changers, combining the capabilities and scale of major defense industries with the operational excellence demonstrated by startups throughout this war. This is the foundation of our strength moving forward."

The summit drew on lessons from Israel's current military operations and highlighted new advances in emerging defence technologies. It showcased developments that organisers said are shaping the future of global security.

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Ahmedabad Mirror

Israel military to get US Iron Beam system

Israel 'deeply engaged' in developing breakthrough technology for future confrontations with Iran

A new laser interception system, known as Iron Beam, will be delivered to the Israeli military on December 30 to bolster its air defence, a senior defence ministry official announced here on Monday.

"With development complete and a comprehensive testing programme that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on December 30, 2025," said Brig. Gen. (Res.) Daniel Gold, Head of the Israel Ministry of Defence (IMOD) Directorate of Defence Research & Development.

"Simultaneously, we are already advancing the next-generation systems," he added.

Iron Beam is a ground-based high-power laser air defence system designed to counter aerial threats, including rockets, mortars, and UAVs.

Speaking at the second International DefenseTech Summit at Tel Aviv University here, the Israeli general said that the Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield.

The system has been in development for over a decade.

Israel is "deeply engaged" in developing next-generation breakthrough technologies for potential future confrontations with Iran, a top Israeli general said on Monday.

Maj Gen (Res.) Amir Baram, Director General of the Israel Ministry of Defence, said that Israel is "deeply engaged" in developing next-generation breakthrough technologies for potential future confrontations with Iran.

INDIA

Israel Showcases Cutting-Edge Defense Tech at Tel Aviv University

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CTECH

Iron Beam laser interceptor to enter IDF service December 30

Defense officials frame laser deployment as part of Israel's evolution into a "Defense-Tech Nation."

Israel's Ministry of Defense announced on Monday that it will deliver the country's most advanced high-energy laser air-defense system, the "Or Eitan," known internationally as Iron Beam, to the Israel Defense Forces on December 30.

The date, revealed by Brig. Gen. (res.) Dr. Danny Gold, head of the Defense Ministry's Directorate of Defense Research & Development (DDR&D), comes after years of development and months of wartime acceleration. "Development of the 'Or Eitan' laser system has been completed," Gold said. "We are preparing to deliver the first capability to the IDF on December 2025 ,30, and at the same time are already working on the next generations."

The Iron Beam system, designed to intercept rockets, drones, and other aerial threats with a high-power laser, has long been viewed as a strategic breakthrough, promising near-zero-cost interceptions and instantaneous engagement times. Gold's announcement, delivered at the DefenseTech summit held at Tel Aviv University, positions the system not as an experimental platform but as an operational asset scheduled for deployment within weeks.

The announcement came as senior Israeli defense officials used the summit to describe a rapidly evolving national security environment shaped by the ongoing war and the lessons drawn from it. Maj. Gen. (res.) Amir Baram, Director General of the Ministry of Defense, framed the December delivery of Iron Beam as part of a wider technological transformation.

"For years, Israel was known worldwide as a 'Cyber Nation,'" Baram said in his opening remarks to the conference. "Today, we have evolved into a true 'Defense-Tech Nation.'" He pointed to a broad portfolio of capabilities now under development, ranging from unmanned systems and electronic warfare to quantum-resistant communications and space technologies, and argued that Israel's strategic posture depends on staying ahead of adversaries who are "learning and preparing day by day."

Baram said that more than 300 startups are currently working with DDR&D, including over 130 that joined operational efforts during the war. In 2024 alone, the Ministry signed 21 government-to-government defense agreements worth billions of shekels and invested 1.2 billion shekels in startups. "All fronts are still open," he warned. "This transitional period brings uncertainty and risks, but also significant strategic opportunities for those who understand the moment."

The DefenseTech Summit drew senior military, academic, and industry figures from Israel and abroad. But the focal point of the gathering was the confirmation that Iron Beam is no longer a distant project, it is a system the IDF expects to field imminently.

Gold suggested that the December 30 delivery is only the beginning. The laser program is already moving into follow-on generations, informed by what he described as unprecedented achievements during recent military operations. These advances, he said, offered "a glimpse into the 'surprises' pool, powerful, groundbreaking Israeli technologies that are the result of development by the people of the Defense Intelligence Agency for generations."

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IE INTERESTING ENGINEERING

Killing drones for cents: 'World's first' 100 kW combat laser ready for deployment

The ~100kilowatt system is designed to destroy targets within seconds and at a fraction of the cost of traditional missile-based defenses.

By Kapil Kajal

Israel plans to deploy its first operational high-power laser air-defense system by the end of the year, marking a significant shift in how the country counters drones, rockets, and other aerial threats, the Defense Ministry said.

The system, known as Iron Beam, completed operational testing in September and will become the world's first combat-ready laser interceptor.

The ~100kilowatt system is designed to destroy targets within seconds and at a fraction of the cost of traditional missile-based defenses.

High-power drone-killing laser weapon

During several weeks of trials, Iron Beam successfully intercepted rockets, mortar shells, unmanned aerial vehicles, and other airborne threats, according to the ministry.

Defense officials said the laser demonstrated "precise and reliable" performance in scenarios meant to replicate combat conditions.

Iron Beam will add a fifth tier to Israel's multilayered air-defense architecture, which includes Iron Dome, David's Sling, and the Arrow 2 and Arrow 3 systems.

While those systems have achieved interception rates of %90 to %95 against rockets and ballistic missiles, they have been less effective against drones and low-flying unmanned aircraft, sometimes reaching only about %50, Israeli officials say.

The new laser is designed to counter small, slow targets flying close to the ground, an area in which traditional radar-guided interceptors often struggle.

Need for a new weapon

Israel has faced an increasing threat from Iranian-made Shahed drones, which have been used repeatedly in attacks by Hezbollah and other Iran-backed groups.

The Shahed136-, a loitering munition with a carbon-fiber body and electric motor, is difficult to detect on radar.

Larger variants carry heavier payloads: the Shahed149- can release up to 13 bombs, while the Shahed191- can fire two precision-guided missiles with a combined payload of about 50 kilograms.

Shahed drones have struck multiple communities in northern Israel, including Eilat and the Jordan Valley.

One drone, launched from Lebanon, reached Prime Minister Benjamin Netanyahu's home in Caesarea, Israeli officials said. Soldiers along Israel's northern border have struggled to stop the growing number of UAV incursions.

A lower-powered variant of the Iron Beam was already pressed into service during fighting in October 2024, when it intercepted 35 to 40 Hezbollah drones, according to military officials.

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SSBCrackNEWS
Defence, Science & Technology News

Israel Unveils 'Iron Beam' Laser Air Defense System Amid Ongoing Tensions

Israel's defense ministry has revealed the completion of a state-of-the-art laser air defense system named "Iron Beam," which is slated for deployment by the end of December. This advancement comes at a critical juncture as Israel escalates military actions against Hezbollah and its infrastructure, even amid a ceasefire that has been in place for over a year.

During a recent defense summit in Tel Aviv, Daniel Gold, head of the ministry's research and development division, articulated the potential impact of the Iron Beam system. He asserted that it is set to "fundamentally change the rules of engagement on the battlefield." After extensive testing that confirmed its efficacy, Gold pledged to deliver the system's "initial operational capability" by the end of the year, although the defense ministry has not provided additional details regarding its operational implementation.

The Iron Beam initiative marks a significant milestone for Israel's defense technology, the result of more than a decade of collaborative development involving state-owned Rafael and private defense firm Elbit. The new laser system aims to bolster Israel's capacity to intercept aerial threats such as drones and incoming projectiles, serving as a complement to existing systems like the Iron Dome.

The Iron Dome has been instrumental in providing short-range protection against missiles and rocket attacks, while other systems, including David's Sling and various Arrow missile generations, focus on intercepting ballistic missiles with a blend of Israeli and American technology. The introduction of Iron Beam promises a cost-effective alternative for dealing with aerial threats, utilizing advanced laser technology for rapid neutralization of targets.

This announcement follows a challenging period for Israel's missile defense systems. Earlier this year, during a -12day confrontation with Iran, Israel faced a significant shortfall in its missile defense capabilities, with over 50 missiles reportedly breaching its defenses and resulting in 28 casualties.

As geopolitical tensions continue to escalate, the rollout of the Iron Beam laser system could represent a crucial transformation in Israel's defense posture, equipping the nation with enhanced tools to protect its airspace and respond to evolving threats.

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yahoo! news

'Defense-Tech Nation': Israel prepares new spectrum of weapons for Iran conflict

By YONAH JEREMY BOB

Defense Ministry's Amir Baram warned that "Iran's rapid force buildup in air defense and ballistic missile capabilities" driven by "its extremist ideology" means that "all fronts are still open."

Israel is working on new technologies for the next potential war with Iran, Defense Ministry Director-General Amir Baram said on Monday.

Speaking from the Defense Tech conference jointly sponsored by the ministry and Tel Aviv University, Baram warned that "Iran>s rapid force buildup in air defense and ballistic missile capabilities" driven by "its extremist ideology" means that "all fronts are still open" and the IDF must be ready for additional rounds of fighting.

"Enemies are learning and adapting. We are at a pivotal point before a new paradigm takes place," said Baram.

Separately, Baram revealed for the first time what led the ministry and the IDF to finally deploy the Iron Beam laser defense system in the field in October 2024.

On October 13, Hezbollah succeeded in killing a large number of soldiers from the Golani Brigade, when a drone it launched struck them in their mess hall in their base in the North.

Israel deploys Iron Beam, turns into <defense-tech nation>

Within days, Baram said the decision came down to taking the risk to deploy the Iron Beam.

The rationale was that the risk of deployment was not lower than the risk of non-deployment, in which Hezbollah was succeeding in striking Israel with many drones.

Iron Beam shot down nearly 40 drones over the coming two weeks, and the IDF recently announced the full-scale deployment of the tool.

Next, Baram addressed Israel>s uniqueness in advanced defense technologies and noted, "For years, Israel was known worldwide as a <Cyber Nation.> Today, we have evolved into a true <Defense-Tech Nation.'

Our innovation portfolio now spans the full spectrum of advanced capabilities: Aerial Defense Systems, Unmanned Vehicles, Electronic Warfare, Quantum-Resistant Communications, Intelligence and Surveillance Systems, Cyber Defense, and Space Technologies."

He added, "In 2024 alone, we signed 21 Government-to-Government agreements worth billions, and the Ministry invested 1.2 billion shekels in startups alone. Of the +300 startups working with the DDR&D, remarkably, over 130 joined operations during this war."

Moreover, Baram stated, "Tel Aviv now ranks as the world>s third leading Defense-Tech hub. Israel>s major defense companies have secured significant international contracts across Europe, Asia, and North America. Small and mid-sized companies have achieved remarkable growth, with contracts worth hundreds of millions of dollars each."

Further, he said Israel promotes a unique ecosystem that only a few can replicate, born of existential security challenges and shaped over decades of operational experience.

Direct feedback loops connect the frontline, engineers, and industry partners, creating a robust chain from battlefield needs to deployed solutions. These are combat-proven systems. This is what Defense-Tech means in Israel."

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SHEPHARD

First capability of Israel's Iron Beam laser to be delivered by the end of December

Iron Beam is a family of high-energy laser weapon systems currently in development by Rafael Advanced Defense Systems and is designed to provide a low-cost kinetic effect against aerial threats at short distances.

By Damian Kemp in London, UK

Confirmation from the Israeli Ministry of Defense (MoD) that initial operational capability for Iron Beam will be delivered to the Israeli Defense Forces (IDF) on 30 December completes the schedule previously promised by company and government officials.

Brig Gen (Res) Dr Daniel Gold, head of the MoD Directorate of Defense Research and Development (DDR&D), confirmed the date when speaking at the International DefenseTech Week summit this week.

"With development complete and a comprehensive testing programme that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on [30 December 2025]," Gold said.

THE TIMES OF ISRAEL

Military R&D head says drone threat on borders 'moving toward a solution'

By Emanuel Fabian

The head of the Defense Ministry's military research and development unit says the threat of drones crossing Israel's borders is "moving toward a solution."

"In recent weeks, we have achieved a technological breakthrough in enemy drone detection, and we are now working on interception solutions using drone-based systems that enable response to swarm scenarios while accelerating the development of new directed-energy weapons," says Brig. Gen. Benny Aminov at the International DefenseTech Summit at Tel Aviv University.

"The issue of low-altitude threats is an example of a challenge that requires our defense establishment to fundamentally change its operational approach, responding within compressed timeframes, spiral development, accelerating testing during the development process, and bridging small defense-tech companies with major defense contractors," he says.

"Enemies continue to evolve in this learning competition. This drives us to develop robust solutions, and it is here that directed-energy weapons demonstrate their unique strength. Their distinctive characteristics enable us to address even the unknown unknowns — threats we don't yet know we face," Aminov adds.

Beyond the threat of attack drones from Iran, Yemen, Iraq and Lebanon, in the past year, there have been frequent attempts to bring weapons and drugs over the Egyptian border using drones, with the military struggling to detect and shoot down the relatively small devices.

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NDTV At Israel Defence Tech Conference 2025 | Brinker CEO On How India Can Combat Disinformatio

At the Israel Defence Tech Conference 2025, Brinker CEO highlighted that India faces significant risks from growing disinformation, especially after recent events like Operation Sindoor. Brinker's AI-driven narrative intelligence platform can identify sources and languages used to spread false information. Emphasizing that democracies are particularly vulnerable, the CEO stressed the urgency for India to take strong action against disinformation. He also warned that AI platforms like ChatGPT already contain misleading narratives and expressed openness to collaborating with local Indian partners to combat this challenge.

Israel Flexes New & Upgraded Iron Beam as IDF Readies Lethal Defense Tech For New Iran War?

Israel unveils the upgraded Iron Beam laser defense system, designed to intercept missiles, drones, and rockets with unprecedented precision and speed. As tensions rise with Iran, the IDF is preparing to deploy this advanced lethal technology to safeguard against aerial threats in any future conflict Watch the video to know more.

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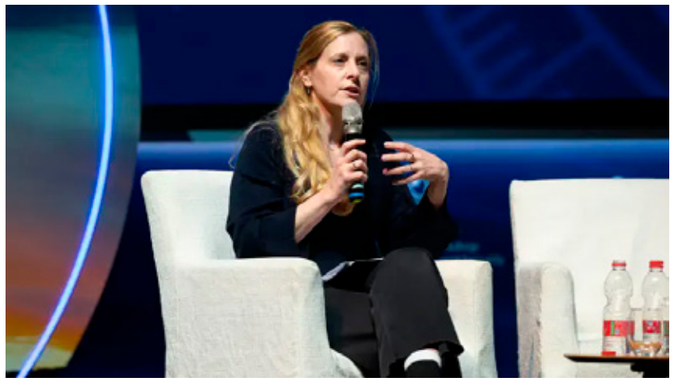
ISRAEL NATIONAL NEWS

Defense Ministry: 'Defense-Tech now extends to mental health and resilience'

Dr. Alona Barnea, Director of the Neurotechnology Division at the Israel Ministry of Defense, says that 'mental health has become a national phenomenon.'



Dr. Alona Barnea, Director of the Neurotechnology Division at the Israel Ministry of Defense (IMOD) Directorate of Defense Research & Development (DDR&D), addressed the International DefenseTech Summit led by the IMOD's DDR&D, in collaboration with the Yuval Ne'eman Workshop for Science, Technology & Security at Tel Aviv University.

Dr. Barnea further stated: "What has changed over the past two years is an unprecedented scale of mental health casualties - mental crisis has become a national phenomenon. The tools at our disposal are no longer sufficient, which is why we are leading the defense-tech sector into the realm of mental health and cognitive resilience.

"Before October 7th, we focused primarily on integrating artificial intelligence with the human brain. Since the war, we have channeled these capabilities toward strengthening mental resilience. The number of startups in this field has surged beyond expectations - we discovered that mental health is relevant to nearly every company we work with, enabling us to adapt existing technologies into solutions for this domain.

"We are rethinking how we treat and prevent post-trauma, aiming to create change at both the individual and national levels. It's important to emphasize: these technologies are not meant to replace therapists, but rather to expand reach. AI and big data will serve as tools for extracting deeper insights from therapeutic processes, identifying new patterns, and enabling therapists to improve treatment quality and reach more people who need it," she said.

ynet ידיעות אחרונות

Israel to receive first Iron Beam laser defense system by year's end

Head of the Israeli Directorate of Defense Research & Development, Brig. Gen. (Res.) Dr. Danny Gold, said at the Defense-Tech conference in Tel Aviv that <we are already deep into work on the next generations of surprises for war'

By Gal Ganot, Tal Shahaf

The head of the Directorate of Defense Research & Development, Brig. Gen. (Res.) Dr. Danny Gold, announced Monday at the Defense-Tech conference in Tel Aviv that the directorate, together with Rafael and Elbit, will deliver the new laser weapon system Iron Beam (known in Hebrew as "Eitan Or" in memory of fallen soldier Eitan Oster) to the Air Force's air-defense branch by the end of the year.

According to Gold, the "first capability" will be handed over to the IDF on December 2025 ,30. He added that "simultaneously we are already working on the next generations." The IDF next needs to carry out integration and training o the laser defense system.

"The Or Eitan laser system is expected to change the rules of the battlefield, and it is ready to be handed over to the IDF following completion of development and the testing sequence that proved the system's capabilities," Gold said. "In the defense-tech world the game has changed — today startups compete head-to-head with major defense firms and prevail. Only recently a number of startups teamed up, competed against all the major defense industries in a directorate tender, and were selected to supply an attack-drone array to the IDF."

He added: "According to the Defense Ministry's strategy, we are now deeply working on the next-generation surprises for the coming war — in space, in offense, and in defense — and we will deploy them at the right time.

He said that the directorate "is a production line producing the next surprises, the next game-changers, combining the power of large defense industries with the amazing operational performance shown by the startups during the war — this is our foundation of strength going forward."

In 2024, the Defense Ministry signed 21 government-to-government (G2G) deals worth billions in the defense-tech sphere. It also invested 1.2 billion shekels in startups, with over 300 currently working

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with the Defense Research & Development Directorate — more than 130 of them having participated in operational activity during the war, said Defense Ministry CEO Maj. Gen. (ret.) Amir Baram at the same conference Monday.

"For years, Israel was known as a 'cyber nation.' Today, we are a 'defense-tech nation,' " Baram said. "Our innovation capabilities span the entire spectrum — from air-defense systems, autonomous tools, electronic warfare, quantum technologies, advanced intelligence systems, cyber, to space technologies."

Baram said that Tel Aviv is now ranked as the third largest defense-tech hub in the world. "Our large defense industries signed major international contracts across Europe, Asia and North America. Even the small and medium-sized firms are growing at a dizzying pace with contracts worth hundreds of millions of dollars."

Addressing Israel's geopolitical and security situation, Baram said: "All fronts are still open, and our enemies are learning and preparing day by day. This era brings with it uncertainty and risks, but also strategic opportunities for those who understand the moment. Reality never stays the same — not in strategy, not in technology — and anyone who does not adapt will ultimately be left behind."

"The Defense Ministry is deeply engaged in developing next-generation breakthrough technology for future conflict with Iran, both on offense and defense, and is developing additional capabilities," according to Baram. "Right now, as we gather here, Israeli defense-tech technologies are protecting lives worldwide. This is not just talk — it's reality. Our existential needs and security challenges created a unique ecosystem that few in the world can replicate, where cutting-edge defense-tech systems meet decades of real operational experience. These systems have been proven on the battlefield. Insights from soldiers at the front directly shape the technological solutions to their operational needs. We have a direct feedback loop from the frontline to the defense-industry engineers — and this creates a strong supply chain. That is the meaning of defense-tech in Israel."

The second International Defense-Tech Summit is an initiative of the Directorate of Defense Research & Development in the Defense Ministry, in cooperation with the Yuval Ne'eman Workshop for Science, Technology and Security at Tel Aviv University. This year's summit focuses on technological innovation in light of wartime lessons.

Among the participants: head of the Directorate of Defense Research & Development in the Defense Ministry, Brig. Gen. (ret.) Dr. Danny Gold; the chair of the Cyber Research Center at Tel Aviv University; Maj. Gen. (ret.) Professor Yitzhak Ben-Israel; head of the Space Administration at the Directorate of Defense Research & Development Avi Berger; Maj. Gen. (ret.) Nitzan Alon, assistant secretary for Critical Technologies; U.S. Deputy Secretary of Defense for Research and Engineering and head of the defense-innovation unit, Michael "Mike" Doud; MIT Dean Fiona Marie; and Seán McGuire, partner at the global investment firm Sakoya.

THE JERUSALEM POST

Israeli drone startup Heven AeroTech now valued over $1 billion after IonQ investment

Investor Lorne Abony of Texas Venture Partners described the Israeli-founded US based drone company Heven AeroTech as "Israel's first defense tech unicorn."

By ANNA AHRONHEIM

Israeli drone manufacturer Heven AeroTech has become the country's first defense-tech unicorn after being now valued at over 1$ billion following significant investments from the American quantum computing company IonQ.

The valuation and the round in which the startup raised 100$ million were revealed in a LinkedIn post by investor Lorne Abony of Texas Venture Partners.

Abony described Heven as "Israel's first defense tech unicorn."

"This is an amazing milestone for Heven AeroTech and Texas Venture Partners. We were early investors in Heven with our early stage investment of 4.5$ million. I am also proud to be a Board Member at Heven," he wrote.

Heven AeroTech was founded in 2019 by Bentzion Levinson. Part of the company's achievements includes the development of hydrogen-powered drones capable of long-range flight and high payload capacities. The company's flagship line are stealth hydrogen powered drones that have an endurance of 1,000 kms and soon expected to expand to 2,000 kms.

The company also has drones that can parachute blood into battlefields and save lives.

From Gaza 2018 to Gaza 2023

Speaking with Defense & Tech by The Jerusalem Post at the sidelines of International DefenseTech Summit led by the IMOD's DDR&D, in collaboration with the Blavatnik Cyber Research Center at Tel Aviv University, Levinson said the idea for the company came as saw the Start Up Nation struggling to intercept and neutralize the fire kites and balloons launched by Hamas from the Gaza Strip in 2018.

"My mind was going crazy that terrorists are sending kites and this high tech nation couldn't handle it," he said, adding that he "understood that drones with cameras are good, but the moment drones become flying robots and can do missions, everything changes."

Levinson told D&T that took that experience, some tuition money, found people to work with and founded his company in 2019. A year later, during the coronavirus pandemic his drones were delivering COVID tests in Israeli hospitals.

Then came the war in Ukraine, followed by the Hamas invasion and massacre of October 7th. Levinson was called up to be up on Israel's northern border before also spending time in Gaza.

"Do you know what it's like to be on the border and be blind? The value of having a drone fly even one or two kms, that's the future and we need to get it right, as a nation and as a company," Levinson told D&T. "When you have the urgency, it's easier to wrap everyone around an idea. I've always believed in the importance and potential of the company and after experiencing this full time, getting what we are doing right is 10x more important."

Israeli drone companies make waves in defense industry

IonQ confirmed in an announcement last week that it had signed a cooperation agreement with Heven to integrate quantum-based sensing, communication, navigation, and security capabilities into its drone systems.

"Five years ago people laughed about hydrogen drones. We now have a separate business line for hydrogen drones. Now that we can fly 1,000 km and more into contested environments, what do we need to operate and communicate there? We started realizing that we need the most advanced technology powering them. IonQ has quantum navigation, communication and sensors and that's what we are focused on. When we see millions of drones flying in the next few years, quantum technology will power a lot of that," Levinson said.

With the advanced technologies, the companies hope to improve drones> accuracy and stability in environments saturated with electronic interference.

As part of the agreement, senior officials at IonQ will join Heven's board of directors, suggesting that more than just a financial investment is involved in the new deal.

While at the beginning of his startup journey Levinson was told "ok, cool tech, that's it"- with the insight given by customers along with support by MAFAT and international investors, six years later his company is working with the IDF, US Department of Defense and has become the first defense-tech unicorn.

But for Levison, it's only the beginning.

"The more we grow, the more we have to grow. It's an important milestone, but it's only the first %1 of the journey. We believe it will scale out and change the world," he said.

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'Over 100 start-ups contributed to Israel's war effort'

The DefenseTech Week 2025 conference in Tel Aviv showcases Israeli defense advances, with a new emphasis on AI in combat.

By Yaakov Lappin

(JNS) Senior defense officials, tech investors, and military commanders from across the globe gathered in Tel Aviv for DefenseTech Week 2025 on Monday and Tuesday, a conference that showcases cutting-edge advances in Israeli defense technologies that shape the future of global security.

The summit is a deep dive into technologies that have been battle-tested in Israel's ongoing multi-front conflicts against jihadist adversaries.

The event has been organized by the Defense Ministry's Directorate of Defense Research and Development in collaboration with the Blavatnik Interdisciplinary Cyber Research Center and the Yuval Ne'eman Workshop for Science, Technology and Security at Tel Aviv University.

Col. Yishai Kohn, head of the Planning, Economics and IT Department at the DDR&D, told JNS on Sunday that the conference has grown significantly compared to last year, reflecting a clear growth of interest among international partners coming to learn from the Israeli experience.

Alongside cooperation with Israel's large defense companies, the conference will also raise awareness about the startup ecosystem "that played a significant role in the recent war—in drones,

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counter-UAVs, AI, and logistics," Kohn said. "The Iron Dome, the Arrow and Trophy are the really famous systems in the world that almost every country considers purchasing, but we want to raise awareness that it is not just the big systems. It is also the issue of incubation and start-ups."

Kohn noted that the war has accelerated the integration of "dual-use" technologies—innovations that can be sold to the civilian market and are rapidly adapted for military needs. He said that more than 100 startups have had their products integrated into Israeli combat operations over the past two years, bringing agility, speed and lower costs.

Kohn offered vivid examples of this synergy, such as a startup that developed an automated tourniquet that stops or slows bleeding.

"This is something that the wounded person themselves or someone next to them can apply without prior medical training," he said. "They can place it on their arm and adjust it, and then there is no need for a doctor or a medic to reach them specifically. This is completely in the world of dual-use; it is not just defense tech. It is a product of a startup that was integrated into the fighting and contributed to the war."

Another innovation involves logistics and the aerial supply of medical necessities. Kohn described the "logistics of parachuting blood units beyond the front lines, using a drone," as a prime example of how non-traditional defense companies are contributing directly to saving lives.

A major headline expected to emerge from the conference is the emergence of Artificial Intelligence (AI) within the Israeli defense establishment. Historically, the Defense Ministry operated three major directorates: Missile Defense, Space and UAVs.

Kohn revealed that a fourth has now been officially established: The Directorate for AI and Autonomy.

"The fact that the fourth directorate that was established is the AI and Autonomy Directorate indicates the importance that the defense establishment attributes to this field; it's way up there, together with the most central fields," he said.

Kohn said that until now, AI had been used primarily in drones and visual intelligence—fields that already had mature products—but that a major leap was now expected across all areas, including decision-making processes in future warfare.

The summit comes at a time when Israel is facing intense diplomatic pressure and delegitimization campaigns. Yet, paradoxically, the demand for Israeli defense technology has never been higher. Kohn attributes this to the "Battle Lab" effect.

"There were years when we were alone in the world as a combat lab. Today, there is competition, there are wars in all sorts of other places in the world, and there are other combat labs in the world. But still, there are things where the world looks to us and sees for the first time what is happening here," he stated.

The summit will also aim to encourage large international defense firms to set up research and development sites in Israel, much like large civilian tech firms have done.

Among those attending the conference is Emil Michael, head of the Pentagon's Defense Innovation Unit, who will deliver a speech, and other government representatives from around the world.

DefenseTech 2025 also has a domestic message aimed at IDF reservists. Thousands of Israeli tech professionals have spent months on the front lines in Gaza and Lebanon and are returning with firsthand knowledge of the operational gaps, said Kohn.

"We want to reach any reservist who returned from the battlefield with an idea for how to improve, so to make it accessible to and encourage them to engage in the field and to turn to us, as part of the contribution to national defense," said Kohn.

In an opening address to the conference on Monday, Defense Ministry Director General Maj. Gen. (Res.) Amir Baram said Israel has transformed from a global "Cyber Nation" into a full-scale "Defense-Tech Nation," as wartime innovation rapidly reshapes its security and industrial landscape.

He said the country's technological edge now spans aerial defense systems, unmanned vehicles, electronic warfare, quantum-resistant communications, cyber defense and space technologies.

"All fronts remain open and our enemies are constantly learning and preparing," Baram warned, saying Israel is already developing next-generation technologies for potential future confrontations with Iran in both defensive and offensive domains.

He added that Israel's operational reality has created a uniquely fast feedback loop between the battlefield, engineers and industry—producing combat-proven systems now protecting lives worldwide.

The conference comes days after the Defense Ministry outlined its strategic priorities for defense exports. On Nov. 26, Baram emphasized that expanding defense exports is a critical national interest.

"While the prolonged multi-front war has yielded many significant successes, it has depleted resources, capabilities, and reserves," he said. "Therefore, we must dramatically increase Israel's defense exports as a central mechanism to strengthen the IDF with new systems, as a tool for international policy influence, and to fortify both our defense industry and economy."

In June this year, the Defense Ministry announced that Israel's all-time defense export record has been broken for the fourth consecutive year, with over 14.7$ billion in 2024—a %13 increase over the previous year. "Over %50 of the deals were with European countries. Defense exports have more than doubled over the past five years," said the statement.

In 2024 alone, Israel signed 21 government-to-government defense agreements worth billions of dollars and invested 1.2 billion shekels in defense startups. More than 300 startups work with the Defense Research and Development Directorate, with more than 100 joining active wartime operations during the current conflict.

Tel Aviv now ranks as the world's third-largest defense-tech hub, while Israeli defense companies have secured major contracts across Europe, Asia and North America.

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THE TIMES OF ISRAEL

Former IAF chief: Israel's next wars will be 'orders of magnitude more challenging'

Amir Eshel tells DefenseTech Summit that October 7 was merely a 'tasting menu' of what's to come, and that modern armies don't yet have solutions for 'evolving threats'

By Stav Levaton

A former commander of the Israeli Air Force warned Monday that Israel will face threats in the coming years that are more severe than what it experienced during and since the Hamas attack on southern Israel on October 7, 2023.

Speaking at a defense summit at Tel Aviv University, Amir Eshel — who also served as the director general of the Defense Ministry from May 2020 to February 2023 and is now a senior partner at venture capital firm Aurelius Capital — called for urgent national preparation and large-scale investment in defense innovation.

"October 7 was experienced in Israel as a modern war and a successful one, which is true," Eshel said at the DefenseTech Summit, held by the Defense Ministry's R&D directorate, of Hamas's attack on southern Israel, which employed ground forces, rockets, drones and hang gliders. "I want to argue that we went through, in some aspect, a tasting menu. The next wars – ours and everyone else's – will be orders of magnitude more challenging. We must prepare now."

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"October 7 was experienced in Israel as a modern war and a successful one, which is true," Eshel said at the DefenseTech Summit, held by the Defense Ministry's R&D directorate, of Hamas's attack on southern Israel, which employed ground forces, rockets, drones and hang gliders. "I want to argue that we went through, in some aspect, a tasting menu. The next wars – ours and everyone else's – will be orders of magnitude more challenging. We must prepare now."

"It will be a different ball game," Eshel said Monday, warning that modern armies "currently lack effective defensive solutions against those evolving threats."

Despite rising global demand for security technologies, Eshel said that commercial investors remain hesitant due to fears of tech bubbles and past experiences in the offensive cyber sector.

He urged a national focus "to acquire 'good enough,' mass-produced, and affordable offensive and defensive capabilities," adding that Israel's defense exports will become increasingly vital as new US regulations on emerging technologies take effect.

"Israel remains one of the global leaders, but competition is first," he said. "Israel's qualitative military edge is based on US support and genuine Israeli technology. We should boost our efforts to preserve and extend the edge.... This is the moment."

Eshel spoke Monday, the same day that the Defense Ministry announced that the IDF would receive the high-powered laser interception system, dubbed "Iron Beam," at the end of this month.

The Iron Beam — which was created by Rafael Advanced Systems Ltd. and has been in development for over a decade — is not meant to replace the Iron Dome or Israel's other air defense systems, but to supplement and complement them, shooting down smaller projectiles and leaving larger ones for the more robust missile-based batteries such as the David's Sling and Arrow systems.

Rafael said in September that it had declared the Iron Beam operational following testing that involved the interception of rockets, mortars, and drones.

Also speaking at the DefenseTech Summit on Monday, Brig. Gen. Benny Aminov, the head of the Defense Ministry's military research and development unit, said that the threat of drones crossing Israel's borders was "moving toward a solution."

"In recent weeks, we have achieved a technological breakthrough in enemy drone detection, and we are now working on interception solutions using drone-based systems that enable response to swarm scenarios while accelerating the development of new directed-energy weapons," he said.

In the past year, there have been frequent attempts to bring weapons and drugs over the Egyptian border using drones, with the military struggling to detect and shoot down the relatively small devices.

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Israeli defense-tech start-ups attract $1b. in financing rounds, mergers and acquisitions in 2025

Crunchbase data shows that the total funding raised by defense startups worldwide since the beginning of 2025 amounted to 7.7$ billion

By DEAN SHMUEL

Israeli defense startups working with the Ministry of Defense Directorate for R&D (DDRD) (MAFAT) have attracted over 1$ billion in financing rounds, mergers, and acquisitions in 2025.

A senior defense official tells "Globes," "The funding in 2025 has been greater than all previous years combined, and the year is not over yet." In 2024, which was also a record year, only about 150$ million was raised. In total, funding raised by startups in the field in recent years (through 2025) amounted to about 422$ million.

The amount is also impressive on an international scale. Crunchbase data published a few days ago shows that the total funding raised by defense startups worldwide since the beginning of 2025 amounted to 7.7$ billion in nearly 100 deals.

The main driver was the %9 growth in global defense budgets to about 2.7$ trillion, the largest annual increase in the last 30 years, according to the Stockholm International Peace Research Institute (SIPRI).

"The two years of war have benefited startups"

Growth is occurring despite the fundamental challenge of the field, in which there is a single customer in Israel: the Ministry of Defense. The leading user is the Israel Defense Forces (IDF), along with security agencies and many armies worldwide.

Col. Yishai Kohn, Head of MAFAT>s Planning, Economics & IT Department, tells "Globes," "When a startup wants customers to buy from it, there are several possible customers, and we are a single address. At the same time, due to global field oversight, there is reluctance to invest in security technologies that are not dual-use (military and civilian). Until two years ago, there was no term for <defense tech.> The two years of war have benefited startups, due to the conflicts on the battlefield."

Since the start of the war in October 2023, more than 130 Israeli startups have been integrated into the war effort: about %50 in autonomy and AI (including drones), about %25 in sensors and detectors (some against drones and some for deep-tech detectors), and the rest for navigation, electronic warfare, and quantum solutions.

"We have no ability or desire to influence business; it>s a free market," stresses Col. Kohn.

"We try to cooperate as much as legally permissible with all the players, and not to say anything bad about anyone. If, for example, we verify that a company has received orders from us, we will verify. This is important for investors. We recently met with a German fund that asked. Our response provides credibility."

This credibility with foreign customers is reflected in the fact that out of the 1$ billion raised, some 400$ million came from the US company Ondas Holdings.

The company, which operates in the fields of autonomous drones, security robotics, and advanced communications solutions, has made a series of acquisitions in Israel, the most notable of which was the acquisition of Sentrycs, which specializes in anti-drone solutions based on protocol manipulation (Cyber Over RF), for 225$ million. This is a company whose product is also used by the IDF.

One unicorn and hundreds of millions of dollars in funding

Another standout in the field this year is Classiq, which develops software tools for quantum computing and raised 110$ million, including some from overseas investors.

Drone company Heven became Israel>s first-ever unicorn in the defense industry after raising 100$ million at a 1$ billion valuation, with US quantum computing company IonQ leading the investment.

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A similar amount was raised by Kela, which was founded in 2024 and is developing a platform to connect civilian technologies with military systems. Investors included Sequoia, Lux Capital, and IQT, the investment arm of the CIA.

Ondas> significant presence reflects a broader industry trend: most startups are not systems of systems, but the industry is moving toward them. The US company is accumulating technologies through acquisitions, but it is not the only one.

Israeli drone company UVision recently acquired Israeli company SpearUAV, which develops tactical attack drones launched from a capsule. SpearUAV raised 20$ million in a Series B round in May last year at a 80$ million valuation.

UVision did not disclose the acquisition amount, but "Globes" has learned it was not below the previous 80$ million valuation. This is a significant step, but not the only one that UVision has taken in its efforts to become a systems house.

About two months ago, together with US company Mistral, UVision closed a huge deal to supply suicide drones to the US Army for 982$ million. At the same time, the company is working closely with German giant Rheinmetall to supply hundreds of UVISION>s "Hero" series of walkie-talkies to a NATO member state. International media reports that the deal is worth hundreds of millions of euros.

The third major Israeli defense tech company is Kela, which is developing a range of SCM (command and control) capabilities on a relatively small scale and will bring together startups using an open architecture.

The company is striving to become as broad-based an integrator as possible, accumulating, for example, radar, SIGINT, and interception technologies. If the move is successful, Kela will become a real rival to Elbit Systems, which operates in the field.

Beating the defense giants in tenders

What these companies have in common is their close cooperation with the Ministry of Defense, which benefits them not only in Israel. In the first half of 2025 alone, no fewer than 12 Israeli startups signed export agreements in G2G (government-to-government) frameworks- a record that several years ago would have seemed like a distant dream, when most of the attention in the field was on cybersecurity.

Col. Kohn notes that when the Ministry of Defense works with a startup, it does not take equity. "We view ourselves as an R&D body. Sometimes, we issue large supply orders to companies, which is not insignificant for us either, but this is a calculated risk designed to provide them with security. The companies show investors the supply order."

One of MAFAT>s more complex tasks, especially under wartime pressure, is to persuade the security forces to use the systems. "Capacity is limited; it is impossible to take on 200 drone companies, but it is developing. In the counter-drone field, we conduct field trials and deploy them along the border. The limitations are not only in money, but also in the operational scope that is possible."

At the MAFAT Defense Tech conference in cooperation with the Yuval Ne>eman Science, Technology and Security Workshop at Tel Aviv University, the head of MAFAT, Brig. Gen. (res.) Dr. Danny Gold recalled a tender for attack drones, which was won by several startups that formed a consortium to compete with Israel>s biggest three defense companies (IAI, Elbit, and Rafael).

More budgets alongside state-guaranteed investment funds

2026 will be challenging from a security perspective, but it is not expected to be comparable to the operational conflicts and order volumes of the previous two years. Therefore, the Ministry of Defense has taken three key steps: First and foremost, Dr. Gold decided that at least %10 of the Ministry of Defense>s R&D budget in 2026 will go to startups and not to the three large companies, which are already flourishing due to increased demand from abroad.

In addition, the Ministry of Defense has joined forces with the Ministry of Finance to establish two state-guaranteed investment funds totaling NIS 200 million.

"This will be a different year than the previous one," says Col. Kohn. "The startups are not expected to achieve the same backlog of orders. Given the fact that the large companies have record-breaking exports, it is right to continue to promote the (startup) ecosystem."

The final measure pertains to the API, the Defense Exports Control Department. The Ministry of Defense plans to remove barriers to marketing some classified products to more than 100 countries.

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Israel a 'Defense-Tech Nation' unlike any other: ministry director

The security industry has achieved a technological breakthrough in enemy drone detection, says Brig. Gen. Benny Aminov.

Israel has "evolved into a true 'Defense-Tech Nation,'" with Tel Aviv now ranking as the world's "third leading Defense-Tech hub," Maj. Gen. (res.) Amir Baram, director general of the Defense Ministry, said at the International DefenseTech Summit at Tel Aviv University on Monday.

Baram said that Israel's transition from a so-called "Cyber Nation" to a Defense-Tech Nation has been recognized during its multi-front war over the past two years, according to an statement from the ministry.

"In 2024 alone, we signed 21 government-to-government agreements worth billions," he stressed.

Israel's major defense firms have secured "significant" international contracts across Europe, Asia and North America, as small and mid-sized companies have achieved "remarkable growth, with contracts worth hundreds of millions of dollars each," Baram continued.

The director general noted that Israel's "innovation portfolio now spans the full spectrum of advanced capabilities: aerial defense systems, unmanned vehicles, electronic warfare, quantum-resistant communications, intelligence and surveillance systems, cyber defense and space technologies."

He added that 130 Israeli startups have joined the Defense Ministry's Directorate of Defense Research and Development (DDR&D) operations during the war, raising the number of startups working with the ministry to more than 300.

As for Israel's geopolitical situation, he said that "All fronts are still open, and our enemies are learning and preparing. This transitional period brings uncertainty and risks, but also significant strategic opportunities for those who understand the moment.

"We are deeply engaged in developing next-generation breakthrough technologies for potential future confrontations with Iran, in both defensive and offensive capabilities," he was cited as saying.

Baram highlighted the unique conditions of Israel's defense industry. Israeli innovation emerges from "direct feedback loops [that] connect the frontline, engineers and industry partners—creating a robust chain from battlefield needs to deployed solutions. These are combat-proven systems. This is what Defense-Tech means in Israel."

Also at the Dec. 2-1 summit, Brig. Gen. Benny Aminov, head of the Directorate of Defense Research and Development's Military R&D Unit, said that the "drone challenge" at Israel's borders was "moving toward a solution," with a technological breakthrough in enemy drone detection achieved in recent weeks, the Defense Ministry's statement read.

"We are now working on interception solutions using drone-based systems that enable response to swarm scenarios while accelerating the development of new directed-energy weapons," Aminov said.

"The issue of low-altitude threats is an example of a challenge that requires our defense establishment to fundamentally change its operational approach—responding within compressed timeframes, spiral development, accelerating testing during the development process, and bridging small defense-tech companies with major defense contractors," he added.

The International DefenseTech Summit showcases cutting-edge advances in emerging technologies that are shaping the future of global security, amid the lessons drawn from the Jewish state's ongoing military operations and challenges in the region.

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THE JERUSALEM POST

'First robotics war': Defense Ministry shows how robotic systems used in Israel-Hamas War

The robotic systems have gotten much more diverse and standardized, being deployed in much higher volumes to assist with exploring Hamas tunnels, to save risking soldiers> lives from that process.

By YONAH JEREMY BOB

The 2025-2023 Israel-Hamas War was the first-ever robotics war, Col. (ret.) Yaron Sarig, head of the AI and Autonomy Program Executive Office of MAFAT within the Defense Ministry, said on Monday.

"This is the first robotics war," he said. "In this conflict, we have mobilized our entire defense ecosystem and deployed tens of thousands of autonomous systems across the battlefield — from drone swarms to agile ground robotics distributed across vast areas."

Although remotely controlled drones and some other systems have been used for a longer period of time, Sarig revealed at the International Defense Tech Summit sponsored by the Defense Ministry's DDR&D and the Yuval Ne'eman Science, Technology and Security Workshop at Tel Aviv University, that thousands of kilometers of the invasion in Gaza were carried out by robotic systems.

The robotic systems have gotten much more diverse and standardized, being deployed in much higher volumes to assist with exploring Hamas tunnels, to save risking soldiers' lives from that process.

In addition, remote vehicles were used to enter new areas above ground to crash into Hamas positions or to intercept and spring ambushes, so that soldiers could come in afterwards knowing where concealed Hamas fighters were located.

Improving the quality of detection and tracking of Hamas terrorists

Moreover, robots were used with artificial intelligence to improve the quality of detection and tracking of Hamas terrorists in the field on a much broader and more advanced level.

"The AI and Autonomy PEO, working in coordination with the IDF, has accelerated innovative developments from start-ups, defense contractors, and research institutions, with the goal of integrating them into the operational theater and maintaining our relative advantage on land, in the air, and at sea," he said.

Moreover, he stated, "We are only at the beginning of this revolution. In the coming years, driven by operational necessity, we will significantly expand our robotic capabilities. Robotics serves as a critical bridge to the world of AI, which, looking forward, will be integrated into every weapon system and into the operational capability of every soldier."

Meanwhile, later Monday at the conference, recently retired IDF Hostage and Missing Persons Directorate chief Nitzan Alon made his first public appearance.

He detailed how, within 24 hours, an improvised headquarters was established to address the rapidly evolving crisis. "On day one, about 200 people were involved. Most of the time after that, around 500 were active. Altogether, more than 2,000 people worked in the headquarters across several months," Alon noted.

Despite retiring only weeks earlier, he stepped in immediately: "No organization could handle this kind of catastrophic event alone. Not the IDF, not Shin Bet [Israel Security Agency], not Mossad. When you face a new type of challenge, you need to build a new kind of organization."

Reflecting on leadership principles, Alon emphasized that decision-making under uncertainty is not gambling, but structured risk management. Citing strategic interpretations of "He who dares, wins," he explained, "It's about developing your ability to manage risk based on skills and professionalism. Act, cooperate, do not freeze — and make decisions in the dark."

Alon contrasted military and business decision-making, stressing that in both arenas, leaders must move decisively without full information. "In the military, when you're wrong, people die. With the hostages, it was even more extreme. These aren't anonymous figures. You might talk to a hostage's family in the afternoon and make an operational decision about them that night."

Also at the conference, Dame Fiona Murray, chair of the NATO Innovation Fund, warned, "Innovation alone is not enough. We must industrialize at scale."

Explaining further, she stated that without production capacity, even breakthrough technologies cannot deliver impact:

"It's no good making one of something. We need many solutions. We need many missiles, many drones, many interceptors".

She cautioned that years of outsourcing have created global vulnerabilities: "Manufacturing and supply chains have been almost invisible... Investors will tell an entrepreneur: outsource your manufacturing, be capital efficient... But fast forward, and we've seen the challenge of that approach... There's really no access to some of the critical parts, including the means of production."

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ISRAEL HAYOM

Israeli laser shield expected to become operational by December 30

Handover to IDF come after game-changing air defense proven in trials; next generations of development already underway.

By Lilach Shoval

The "Iron Beam" laser system, one of the most significant technological developments in Israeli air defense, has completed the development and testing phase and will be delivered to the IDF at the end of the month. This announcement came from the Head of the Directorate for Defense, Research, and Development (DDR&D) in the Defense Ministry, Brigadier General (Res.) Dr. Daniel Gold, who spoke on Monday at the annual DefenseTech Week conference in Tel Aviv.

"The development of the <Iron Beam> laser system has been completed," Gold declared at the conference, which was held in cooperation with the Yuval Ne>eman Workshop for Science, Technology and Security and the Blavatnik Interdisciplinary Cyber Research Center at Tel Aviv University. "We are preparing to deliver the first capability to the IDF on December 2025 ,30, and simultaneously, we are already working on the next generations."

Will change the rules of the battlefield

According to the Head of the DDR&D, the "Iron Beam" laser system is expected to "change the rules of the game of the battlefield" after successfully proving its capabilities in a comprehensive series of trials. Developed by the DDR&D over several years, the system is considered a major breakthrough in the air defense capabilities of the State of Israel. It will allow the interception of threats using a laser beam at a cost significantly lower than traditional kinetic interceptors.

Gold added that as the first capability is delivered, development continues: "We are already working on the next generations" of laser systems, as part of the Defense Ministry>s long-term planning.

Lessons from thew war

The head of the DDR&D also addressed the technological achievements during the recent combat experience. "The achievements during the operations are unprecedented," Gold said. "The operation provided a glimpse into the <surprise repository> – powerful, groundbreaking Israeli technologies that are the fruit of development by DDR&D personnel throughout the generations."

Gold emphasized that the Defense Ministry is currently operating according to a clear strategy: "We are deep into the work on the next generations of surprises for the next war – in space, in attack, and in defense – and we will deploy them at the right time. The DDR&D is a production line that is creating the next surprises, the next game-changers."

In his speech, the Head of the DDR&D also addressed the revolution taking place in Israel>s defense sector. "In the defense tech field, the game has changed – startups are now competing <head-to-head> with the large companies and winning," Gold said, and offered a concrete example: "Just recently, a number of startups that connected competed against all the large industries in a tender by the DDR&D, and were chosen to supply the IDF with an array of attacking drones."

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THE TIMES OF ISRAEL

Retired IAF chief says Oct. 7 was 'tasting menu' of future threats, urges defense innovation

By Stav Levaton

Retired Israeli Air Force commander and former Defense Ministry director general Amir Eshel warns that the threats Israel faces in the coming years will be far more severe than those seen in the Hamas-led October 7, 2023 attack, and calls for urgent national preparation and large-scale investment in defense innovation.

"October 7 was experienced in Israel as a modern war and a successful one, which is true. I want to argue that we went through, in some aspect, a tasting menu," Eshel says at the DefenseTech Summit, held by the Defense Ministry's R&D directorate and Tel Aviv University. "The next wars — ours and everyone else's — will be orders of magnitude more challenging. We must prepare now."

Eshel outlines a future battlefield flooded with "magnitudes [more threats] than the Iranian attack on October 1, 2024," including stealth and AI-powered autonomous drones, along with electronic warfare, directed-energy weapons, cyber operations, and attacks on critical civilian and military infrastructure. "It will be a different ball game," he says.

Modern armies, he warns, "currently lack effective defensive solutions against those evolving threats."

Despite rising global demand for security technologies, Eshel says commercial investors remain hesitant due to fears of tech bubbles and past experiences in the offensive cyber sector.

He urges a national focus "to acquire 'good enough,' mass-produced, and affordable offensive and defensive capabilities," adding that Israel's defense exports will become increasingly vital as new US regulations on emerging technologies take effect.

"Israel remains one of the global leaders, but competition is first," he says. "Israel's qualitative military edge is based on US support and genuine Israeli technology. We should boost our efforts to preserve and extend the edge... This is the moment."

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WIN NEWS

Iron Beam laser defense system set for IDF launch

The Defense Ministry and Israel's Rafael defense technology firm announced in September the completion of a series of successful trials of the Iron Beam system at a facility in southern Israel.

Israel's Iron Beam ("Magen Or" in Hebrew) laser defense system will begin defending against aerial threats at the end of the month, the country's Defense Ministry announced on Monday.

"With development complete and a comprehensive testing program that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on Dec. 30, 2025," said Brig. Gen. (res.) Daniel Gold, head of the Directorate of Defense Research and Development at the Defense Ministry.

Speaking at the International DefenseTech Summit at Tel Aviv University, Gold said the system was a complement to the Iron Dome, David's Sling and Arrow air defense systems, and "is expected to fundamentally change the rules of engagement on the battlefield."

The system uses a 100-kilowatt laser to intercept rockets, mortars and UAVs at a range of more than 6 miles (10 kilometers), at a fraction of the cost of traditional interceptors. The estimated cost per firing is about 2$ to 5$, compared to 40,000$ to 80,000$ for a single Iron Dome interceptor.

The Iron Beam—to be renamed "Ohr Eitan" ("Eitan's Light") after Eitan Oster, who fell in battle in Lebanon and whose father was one of its developers—will be integrated into the Israel Defense Forces' air defense array.

The Defense Ministry and Israel's Rafael defense technology firm announced in September the completion of a series of successful trials of the Iron Beam system at a facility in southern Israel.

"The system proved its effectiveness in a complete operational configuration by intercepting rockets, mortars, aircraft and UAVs across a comprehensive range of operational scenarios," they said in a joint statement at the time.

The Israeli military revealed in May that a smaller version of the laser defense system was tested in combat operations during the war that began on Oct. 7, 2023, shooting down dozens of enemy drones. Most of the interceptions were of Hezbollah drones, but the system also downed UAVs on other fronts, according to the IDF.

Devdiscourse
Discourse on Development

Iron Beam: Revolutionizing Israel's Air Defense with Laser Technology

Israel prepares to deploy the Iron Beam, a revolutionary laser interception system, to enhance its air defense. Set to be operational by December 30, 2025, it is designed to neutralize aerial threats like rockets and UAVs. Developed over a decade, Iron Beam promises to reshape battlefield engagements.

Israel is gearing up to introduce the Iron Beam, a groundbreaking laser interception system, aimed at fortifying its air defense by the end of 2025. The advanced system is expected to combat a range of aerial threats including rockets, mortars, and UAVs, as announced by Brig. Gen. (Res.) Daniel Gold.

Speaking at Tel Aviv University>s International DefenseTech Summit, Gold detailed how the Iron Beam system, after a decade in development, will shift traditional rules of battlefield engagement. The summit highlighted technological advancements and lessons from recent conflicts.

As the Iron Beam undergoes final testing, Israel>s defense forces are also working on next-gen systems to prepare for future conflicts. Brig. Gold emphasized the continuous evolution of defense technologies to maintain strategic advantages.

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THE TIMES OF ISRAEL

IDF to receive 'Iron Beam' laser interceptors at the end of the month

The system, which has been in development since 2014, will <fundamentally change> rules of engagement, Defense Ministry official says; next-gen versions already in the works

By Emanuel Fabian

Israel's high-powered laser interception system, dubbed "Iron Beam," will be delivered to the military at the end of the month, the head of the Defense Ministry's Directorate of Defense Research and Development said Monday.

Speaking at the DefenseTech Summit, DDR&D head Danny Gold said that "with development complete and a comprehensive testing program that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on December 30, 2025."

The Iron Beam has been in development for over a decade, after it was first unveiled in 2014. It was declared operational in September after completing development and final tests.

"The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield. Simultaneously, we are already advancing the next-generation systems," Gold said, speaking at the International DefenseTech Summit led by the DDR&D, in collaboration with the Blavatnik Cyber Research Center at Tel Aviv University.

During the conflict with Hezbollah, which ended in a ceasefire last November, the IDF's newly revived 946th Air Defense Battalion, which operates anti-drone systems, used a lower-powered and shorter-range version of the system to shoot down some 35 drones launched at northern Israel from Lebanon.

The Iron Beam, developed by Rafael Advanced Systems Ltd., is not meant to replace the Iron Dome or Israel's other air defense systems, but to supplement and complement them, shooting down smaller projectiles and leaving larger ones for the more robust missile-based batteries such as the David's Sling and Arrow systems.

As long as there is a constant source of energy for the laser, there is no risk of it ever running out of ammunition. Officials have hailed the system as a potential "game-changer" in the battle against projectile attacks.

In June, Rafael showcased at the Paris Air Show its family of "high-energy laser weapon systems," including the Iron Beam 450, an upgraded version of the Iron Beam; the Iron Beam M, a compact and mobile version of the laser interceptor, designed to be mounted on a truck and used by ground forces or to protect strategic sites; and the Lite Beam, a lightweight, compact, and lower-powered laser interceptor designed to be mounted on armored personnel carriers or other armored vehicles during ground operations.

The main downside of a laser system is that it does not function well in low visibility, including heavy cloud cover or other inclement weather.

Earlier this year, the Defense Ministry symbolically renamed the system in Hebrew from Magen Or (Light Shield) to Or Eitan (Eitan's Light) after Cpt. Eitan Oster, 22, a commander in the Egoz Commando Unit who was killed fighting Hezbollah in southern Lebanon in October 2024.

Oster's father, who works for the DDR&D, was among the "initiators and developers" of the Iron Beam project, the ministry said at the time.

Drone smuggling threats

Separately, the head of the Defense Ministry's military research and development unit said at Monday's conference that the threat of drones crossing Israel's borders was "moving toward a solution."

"In recent weeks, we have achieved a technological breakthrough in enemy drone detection, and we are now working on interception solutions using drone-based systems that enable response to swarm scenarios while accelerating the development of new directed-energy weapons," said Brig. Gen. Benny Aminov.

"The issue of low-altitude threats is an example of a challenge that requires our defense establishment to fundamentally change its operational approach, responding within compressed timeframes, spiral development, accelerating testing during the development process, and bridging small defense-tech companies with major defense contractors," he said.

"Enemies continue to evolve in this learning competition. This drives us to develop robust solutions, and it is here that directed-energy weapons demonstrate their unique strength. Their distinctive characteristics enable us to address even the unknown unknowns — threats we don't yet know we face," Aminov added.

In the past year, there have been frequent attempts to bring weapons and drugs over the Egyptian border using drones, with the military struggling to detect and shoot down the relatively small devices.

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ISRAEL NATIONAL NEWS

Senior commander: Israel reached breakthrough in detecting enemy drones

Brig. Gen. Benny Aminov says Israel is advancing interception solutions for swarm threats, including accelerated development of directed-energy weapons.

Brig. Gen. Benny Aminov, Head of the Israel Ministry of Defense (IMOD) Directorate of Defense Research & Development (DDR&D)'s Military R&D Unit, reported at the International DefenseTech Summit led by the IMOD's DDR&D, in collaboration with the Yuval Ne>eman workshop for Science, Technology & Security at Tel Aviv University, that "drone challenges at Israel's borders are moving toward a solution - we have achieved a technological breakthrough in enemy drone detection."

Brig. Gen. Aminov further stated: "we are now working on interception solutions using drone-based systems that enable response to swarm scenarios while accelerating the development of new directed-energy weapons."

"The issue of low-altitude threats is an example of a challenge that requires our defense establishment to change its operational approach fundamentally - responding within compressed timeframes, ensuring spiral development, accelerating testing during the development process, and bridging small defense-tech companies with major defense contractors," he added.

"Our enemies continue to evolve in this learning competition. This drives us to develop robust solutions, and it is here that directed-energy weapons demonstrate their unique strength. Their distinctive characteristics enable us to address even the unknown unknowns - threats we don>t yet know we face."

Drawing lessons from Israel>s ongoing military operations and real-world scenarios, the International DefenseTech Summit showcases cutting-edge advances in emerging technologies that are shaping the future of global security.

Key participants include: Maj. Gen. (Res.) Amir Baram, IMOD Director General; Brig. Gen. (Res.) Dr. Daniel Gold, Head of the DDR&D; Maj. Gen. (Ret.) Prof. Isaac Ben-Israel, Conference Chairman and Director of the Blavatnik ICRC at Tel Aviv University; Brig. Gen. Benny Aminov, Head of the DDR&D's Military R&D unit; Avi Berger, Head of the DDR&D's Space Program Office; Maj. Gen. (Res.) Nitzan Alon, Managing Partner at Elements Venture Capital; Michael Dodd, U.S. Assistant Secretary of War for Critical Technologies and Acting Deputy Director of the Defense Innovation Unit; Dame Fiona Murray, Associate Dean of Innovation at MIT School of Management; Shaun Maguire, Partner at Sequoia Capital; Dr. Christian Steinborn, Head of Business Development Start-Up Activities at Rheinmetall AG; Francois Chopard, CEO & Founder of Starburst; and many other senior officials from Israel and worldwide.

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Israel to Deploy 'Game-Changing' Iron Beam Laser Defense System End of 2025, Officials Announce

Israel will deploy the «Iron Beam» laser defense system by Dec 2025 ,30, offering a low-cost, unlimited-ammo solution to drone and missile threats.

Israel's Ministry of Defense has officially announced that its cutting-edge high-powered laser interception system, known as "Iron Beam," will be delivered to the military for initial operational capability at the end of December. The deployment marks the culmination of over a decade of research and development, introducing a weapon that officials believe will fundamentally alter the rules of engagement on the battlefield by providing a near-infinite, low-cost solution to aerial threats ranging from drones to mortar fire.

Speaking at the International DefenseTech Summit held at Tel Aviv University on Monday, Danny Gold, the head of the Defense Ministry's Directorate of Defense Research and Development (DDR&D), confirmed the timeline for the system>s rollout.

According to reports from The Times of Israel, Gold stated that with development complete and a comprehensive testing program validating the system's capabilities, the ministry is prepared to deliver the Iron Beam to the Israel Defense Forces (IDF) on December 2025 ,30.

The system, which has been in development since 2014 and was declared operational in September following final tests, represents a significant leap in directed-energy warfare.

The Iron Beam is designed to serve as a complementary layer to Israel>s existing multi-tiered air defense architecture, rather than a replacement for it.

As detailed by Agence France-Presse (AFP), the laser system will work in tandem with the renowned Iron Dome, which intercepts short-range rockets, as well as the David's Sling and Arrow systems, which are engineered to counter medium- and long-range ballistic missiles.

The primary strategic advantage of the Iron Beam lies in its economics and logistics; officials note that as long as there is a constant source of energy for the laser, there is no risk of running out of ammunition.

State-owned arms manufacturer Rafael Advanced Defense Systems, which developed the project alongside private defense group Elbit, highlighted that the system possesses the unique advantage of rapidly neutralizing threats using laser technology at a "negligible cost," a sharp contrast to the expensive interceptor missiles used by kinetic systems.

The urgency of this deployment is underscored by the intense security challenges Israel has faced over the past year.

AFP reported that the announcement comes as the Israeli military steps up strikes against Hezbollah infrastructure, despite a ceasefire that began just over a year ago.

Furthermore, the defense establishment is still analyzing the fallout from a "-12day war" launched against Iran in June 2025. During that conflict, Israel's existing missile defense shield failed to intercept all projectiles fired by Tehran, with the country acknowledging hits by more than 50 missiles that resulted in 28 deaths.

The introduction of the Iron Beam is seen as a critical step in plugging these defensive gaps.

While the full system is set for deployment in late December, The Times of Israel reported that elements of the technology have already seen combat.

During the recent conflict with Hezbollah, the IDF's newly revived 946th Air Defense Battalion utilized a lower-powered, shorter-range version of the laser system to successfully shoot down approximately 35 drones launched at northern Israel from Lebanon.

This operational success has bolstered confidence in the technology, with Gold noting at the summit that the defense establishment is already advancing next-generation versions of the system.

The versatility of the laser technology was showcased earlier this year when Rafael displayed a family of high-energy laser weapon systems at the Paris Air Show.

These included the Iron Beam 450, an upgraded variant; the Iron Beam M, a compact mobile version designed for mounting on trucks to protect strategic sites or ground forces; and the Lite Beam, a lightweight interceptor intended for armored personnel carriers.

However, officials acknowledge that the technology is not without limitations. The Times of Israel noted that the main downside of the laser system is its reduced functionality in low visibility conditions, such as heavy cloud cover or inclement weather, necessitating the continued reliance on

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kinetic interceptors during storms.

The DefenseTech Summit also addressed the evolving threat of unmanned aerial systems (UAVs) along Israel>s borders.

Brigadier General Benny Aminov, head of the Defense Ministry's military research and development unit, told attendees that the country was moving toward a solution for the threat of drones crossing from neighboring territories.

He cited frequent attempts over the past year to smuggle weapons and drugs across the Egyptian border using small drones, which the military has struggled to detect.

Aminov announced that recent weeks have seen a technological breakthrough in enemy drone detection, and development is accelerating on interception solutions for "swarm scenarios." He emphasized that directed-energy weapons like the Iron Beam demonstrate a unique strength in addressing "unknown unknowns"—threats that have yet to fully materialize on the battlefield.

As the December 30 delivery date approaches, the Israeli defense establishment views the Iron Beam not just as a new weapon, but as a paradigm shift.

By integrating directed energy into its defensive umbrella, Israel aims to counter the economic asymmetry of modern aerial warfare, where cheap drones and rockets can force defenders to expend costly interceptors.

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Israel plans to deploy Iron Beam laser defence system by year-end

The first operational high-power laser beam will be deployed this year, providing a cost-effective and rapid solution for drones and unmanned aerial vehicles.

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TheDefensePost

Israel to Deploy 'Iron Beam' Laser Defense by End 2025

Israel's defense ministry announced on Monday the completion of a laser air defense system known as "Iron Beam," which will be deployed by the end of December.

"The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield," Daniel Gold, head of defense ministry research and development, told a defense summit in Tel Aviv.

"With development complete and a comprehensive testing program that has validated the system's capabilities," he added, promising to deliver "initial operational capability" by the end of the year.

The announcement comes as Israeli military steps up its strikes against the militant group Hezbollah and its infrastructure, despite a ceasefire that began just over a year ago.

Contacted by AFP, the defense ministry refused to provide more details on what exactly would happen on that date.

The announcement marks a major milestone in a project more than a decade old, developed jointly with the state-owned arms company Rafael and Israeli private defense group Elbit.

The laser system seeks to enhance Israel's interception of drones and other projectiles, and will supplement other aerial defense capacities such as the more well-known Iron Dome.

Iron Dome offers short-range protection against missiles and rockets. The David's Sling system and successive generations of Arrow missiles are Israeli-American technology built to bring down ballistic missiles.

During the 12-day war launched by Israel against Iran in June, the country's missile defense system failed to intercept all the projectiles fired by Tehran toward Israeli territory.

Israel has since acknowledged being hit by more than 50 missiles during the war with Iran, resulting in 28 deaths.

The new system is "a ground-based high-power laser air defense system designed to counter aerial threats," Rafael said.

The company added that the system has the "unique advantage of rapidly neutralizing threats using laser technology at negligible cost."

תקווה TIKVAH IDEAS

Israel's New Laser Weapons Are Poised to Revolutionize Warfare

In July of last year, an explosive-laden Hizballah drone—the same Iranian-made Shahed model Russia is using in Ukraine—killed an Israeli reservist in Kibbutz Kabri. The drone was one of several Hizballah launched simultaneously in an attack on the Western Galilee; some, though not all, were shot down. But the IDF was working hard to come up with better defenses against unmanned aerial vehicles, and in May 2025 it announced that it had been using prototypes of smaller versions of the new weapon known as the Iron Beam, which had already downed some 40 Hizballah drones. Over the summer, this device, which uses lasers against airborne projectiles, underwent five weeks of extensive testing, and the Defense Ministry announced on Monday that it expects delivery of the fully operational system by the end of December.

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THE JERUSALEM POST

Israel set to fully deploy 'game-changing, cutting-edge' Iron Beam laser system this month

Israel will fully deploy the Iron Beam on December 30, introducing a laser system designed to intercept drones, rockets, missiles, and mortars at high speed.

By YONAH JEREMY BOB

Israel's Iron Beam paradigm-shattering laser defense will be rolled out in the field on December 30, Defense Ministry research and analysis chief Dani Gold announced on Monday.

In mid-September, the Defense Ministry announced that Iron Beam was operational and that a full series of batteries would be fanning out across the country to provide cutting-edge new air defense capabilities within the coming months.

Already in June, the ministry and Rafael, the lead company of multiple defense tech companies involved, including also Elbit and others, had announced that Lite Beam, a smaller relative of Laser Dome (formerly known as "Iron Beam"), was operational.

At the time, the ministry also disclosed that Israeli laser defense systems had shot down around 40 Hezbollah drones in October 2024.

However, Monday's news signaled the final jumps forward.

First, Iron Beam has more power, a longer range, and can be used to defend against a wide array of threats as compared to Lite Beam.

Second, Iron Beam can specifically shoot down not only drones, but also missiles, rockets, and mortars, making it far more formidable than if it were only capable of shooting down drones, a relatively slow-moving threat.

Third, the announcement means that Iron Beam batteries will be produced and dispersed around the country at scale, as opposed to serving in just one or two locations where their impact would take time to be judged.

The ministry and the IDF expect Iron Beam to immediately start reducing the cost of shooting down aerial threats, an issue that has been out of control for Israel during this war, in which tens of thousands of threats have been launched through the air at Israel on six fronts.

Firing the Iron Beam is as cheap as turning a light on

Firing Arrow interceptors can cost millions of shekels, Iron Dome interceptors can cost tens of thousands of shekels, but firing the Iron Beam is as cheap as turning a light on.

Defense Ministry director-general Amir Baram has previously said that Iron Beam will lay the foundation to start the process that will change battle zones worldwide until they are invariably filled with cheaper laser platforms.

Security officials said that Iron Beam also has the capacity to take on barrages of simultaneous aerial threats and is not merely limited to shooting down one or two at a time.

Head of the directorate's R&D Division Brig.-Gen. Yehuda Elmakayes previously said that the Knesset already approved an extensive budget two years ago to cover as many Laser Dome batteries as will be needed at this stage of deployment.

In June, M. Sgt. "A." told The Jerusalem Post in an exclusive interview that his time on the laser team protecting the country with this game-changing, cutting-edge system has been "incredible."

A. is a reservist who was stationed in the North to work on how to operate the laser in real combat situations, and who had spent time in the IDF's air defense units, mostly over a decade ago, but returned to assist when the war broke out.

He said that he and everyone else had to learn how to best operate the laser in real time in the field since it is essentially something that no one has ever done before.

"We received the system, we made adjustments while operating in the field, and we improved with the industry developers [Rafael] after we got a better understanding of what we needed to increase our shoot-down success," said A.

Although Raytheon in the US, as well as the UK, Russia, China, Germany, and Japan, are all at various stages of developing laser defense systems, the ministry has said that the Iron Beam is the only one that has moved beyond test firings to actual use in the field.

Defense sources also previously revealed that the new family of lasers could eliminate the need for Israelis to run to bomb shelters versus most aerial threats.

They explained that a major advantage of the lasers Iron Beam, Iron Beam M, and Lite Beam is that they can shoot down enemy rockets and drones much earlier in the threat process. This means that

most of the time, no siren warnings or bomb shelters would be necessary.

How does this work?

The reason would be that the light energy of the laser travels much faster than any interceptor in Israel's arsenal and would already potentially destroy the enemy aerial threat shortly after it launches, and invariably while still in enemy territory.

In fact, because the laser fires so much faster, the IDF will also likely have more chances to hit a target that it initially misses, since it will know it has missed earlier on in the process.

That means that Israelis would likely only hear a siren and need to run to bomb shelters in those rare cases where the laser system missed its target, and then likely missed it multiple times.

The Lite Beam is the smallest and most local short-range system of Israel's three laser systems, which can be placed on individual ground forces vehicles and fires a ~10kW beam.

Iron Beam M fires a 250 mm. 50 kW beam and can be mounted on large trucks for mobility, but cannot be placed as a minor additional system on individual vehicles.

Sources have also indicated that the Iron Beam M is not only generally mobile but can even be fired while moving.

The full-size Iron Beam fires a 450 mm. 100 kW beam, is designed to remain stationary for periods of time, and cannot be fired while moving. However, it can, with planning, be moved around just as Iron Dome batteries, over time, can be moved around.

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The EurAsian Times

IRON BEAM: Israel On The Cusp Of Making History: Set To Become 1st Country To Deploy High-Power Laser Weapons

The ~12day Iran-Israel War was a rude awakening not only for Tehran but for Tel Aviv as well, as many Iranian missiles were able to penetrate Israel's much vaunted multilayered air defense systems and hit densely populated cities as well as high-value military targets.

By Sumit Ahlawat

When Israel launched 'Operation Rising Lion' against Iran in June 2025, Iran retaliated with multiple volleys of missiles and drones over the next few days.

During the ~12day conflict, Iran launched nearly 600 missiles and over 1,000 drones at Israel. Of them, almost 60~50 missiles were able to penetrate Israeli air defense systems, killing 29 people.

Iranian missiles were also able to hit five military bases, among them the Mossad headquarters, the Kiryah Military Headquarters, and multiple Israeli air bases.

This massive attack by Iran put Israel's highly praised multilayered air defense network, composed of Arrow, David's Sling, Iron Dome, and THAAD, to the test.

Earlier, during the October 2023 ,7, attack, Hamas was able to overwhelm the Israeli air defense systems by launching thousands of rudimentary drones and rockets in a span of 40 minutes.

Together, these two incidents showed that Israel's multilayered air defense systems were not as invincible as Tel Aviv made them out to be.

Another shortcoming highlighted by the ~12day war with Iran was that even a short war with a middle-ranking power like Iran could strain the missile stockpiles of Israel's air defense systems, even when complemented by US missile stockpiles.

Iran has a large stockpile of thousands of ballistic missiles, supplemented by hypersonic missiles and drones.

According to multiple military analysts, one critical reason Israeli Prime Minister Benjamin Netanyahu agreed to a ceasefire with Iran was Tel Aviv's fast-depleting stocks of missile interceptors.

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In July, US defense officials said that the THAAD operators fired as many as 150 missiles during the ~12 day war to shoot down waves of Iranian ballistic missiles.

The lesson for Tel Aviv was crystal clear: it cannot rely exclusively on its existing air defense systems, certainly not in a protracted, intense war.

Another headache for Israel is Iran's Shahed drones. Their terrain-hugging flight paths and carbon-fibre bodies are hard to detect.

It's challenging to shoot them down from the ground. By the time a helicopter or fighter jet detects them, closes in, and fires, several critical — sometimes fatal — minutes have already passed.

Ukraine is still struggling to find a reliable, long-term solution for the Russian Geran2- drones, which are a replica of Iranian Shahed drones.

The lesson was simple: Israel needed a new missile defense doctrine and a new air defense system to supplement its existing multilayered AD systems, and it needed them fast, before the next round of hostilities with Iran begins.

And here comes in the picture, Israel's Laser defense system, the Iron Beam.

The Iron Beam was in development for several years, and the system became operational in September this year.

Now, Israel's Defense Ministry research and analysis chief, Dani Gold, has announced that the Iron Beam will be rolled out in the field on December 30.

Israel To Fully Deploy Iron Beam In December

Israel's Iron Beam has already seen action.

In June, Israel's defense ministry revealed that in October 2024, the Iron Beam had brought down at least 40 drones fired by Hezbollah.

"The Air Defense Array deployed laser systems in the field and achieved especially high interception results that saved civilians' lives and protected national assets," the statement said.

"Israel is the first country in the world to present a massive operational laser capability for intercepting threats," said Brig. Gen. (res.) Danny Gold, head of the Defense Ministry's Directorate of Defense Research and Development, or MAFAT.

Explaining the urgency behind the integration of Iron Beam, Dr. Y., the system engineer of Iron Beam, said, "I think it needs to be put in context. October 7, everyone wakes up and thinks what they can do. So after we went to donate blood, we met and started thinking, OK, what can we do now? Since we are all identified with laser, we said, OK, what can we do with laser?"

Lt. Col. Y., head of the high-power laser branch at MAFAT, said, "Iron Beam is a ground-based high-power laser weapon system, 100 kilowatts, the first of its kind in the world to enter regular operational service. The system proved effective in intercepting rockets, mortar bombs, and UAVs at ranges of up to 10 kilometers."

Iron Beam will be integrated with Iron Dome's warning and command-and-control systems. Whenever incoming aerial threats are identified, the system will decide within seconds whether to fire a US50,000$ Iron Dome missile or a laser shot costing about half a dollar.

Defense Ministry Director-General Amir Baram has previously said that Iron Beam will lay the foundation stone for the process, which will change battle zones worldwide until they are inevitably filled with cheaper laser platforms.

In fact, using Iron Beam is as cheap as turning on lights.

Therefore, Iron Beam, or laser weapons, are a perfect solution for the threat posed by low-flying, cheap drones.

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MIDDLE EAST EYE

Israel to roll out 'Iron Beam' laser defence by end of 2025

Israel>s defence ministry announced the completion of a laser air defence system known as "Iron Beam", which will be deployed by the end of December.

"The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield," Daniel Gold, head of defence ministry research and development, told a defence summit in Tel Aviv.

The laser system is intended to improve Israel's ability to intercept drones and other incoming threats, serving as an added layer alongside existing air-defence systems like the Iron Dome.

5 TOWNS CENTRAL

Israel Deploys Iron Beam Laser as Multi-Front Tensions Rise

Israel will hand over its high-powered Iron Beam laser defense system to the IDF on December ,30 2025, marking the end of more than a decade of development. The system, which has already proven effective in a lower-powered version against Hezbollah drones, is designed to intercept rockets, mortars, and drones at a fraction of the cost of traditional missiles. Defense officials say it will dramatically reshape air-defense economics and battlefield dynamics.

The deployment comes as Israel braces for renewed conflict with Iran and its proxies. Intelligence assessments warn of repeated rounds of war, fueled by hard-line voices in Tehran calling for a massive, coordinated "multi-front massacre" by the entire Resistance Axis. Some Israeli analysts argue that only a decisive preemptive strike across several fronts can restore lasting deterrence.

In Syria, President Ahmad al-Sharaa has accused Israel of deliberately obstructing the country's recovery and past peace efforts, while Damascus's UN envoy openly admits to a diplomatic campaign aimed at isolating Israel internationally to force concessions and attract reconstruction investment.

Lebanese Prime Minister Nawaf Salam, meanwhile, warned that Israeli military pressure along the northern border is likely to continue, dimming hopes for rapid calm.

Against this backdrop, IDF Chief of Staff Lt. Gen. Eyal Zamir will travel to Washington next week for intensive talks with his U.S. counterpart on Gaza, Lebanon, Syria, and Iran, underscoring the deepening military coordination between the two allies as Israel prepares for prolonged regional instability.

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BREAKING DEFENSE

Israeli official says Gaza conflict was 'first robotics war'

The Israeli Defense Forces deployed thousands of unmanned systems, in what senior officials said was an illustration of the future of combat.

By Seth J. Frantzman

JERUSALEM — After two years of combat operations in Gaza, a senior Israeli official recounted the technological leaps in ground combat and called the conflict nothing less than the "first robotics war."

"In this conflict, we have mobilized our entire defense ecosystem and deployed tens of thousands of autonomous systems across the battlefield — from drone swarms to agile ground robotics distributed across vast areas," said Yaron Sarig, Head of the Israel Ministry of Defense (IMOD) Directorate of Defense Research & Development (DDR&D)'s AI and Autonomy program.

Sarig was speaking at the second annual Defense Tech Week in Israel which took place at Tel Aviv University earlier this month.

Though Israel has seen technological success in a number of domains during the recent conflict, from air defense to blending types of robotics, AI, and autonomous systems, Sarig spoke specifically about the development of ground robotics in a talk titled "Robotics and AI: From Theory to the Battlefield."

RELATED: Israeli robotic defense firm sees 'big change' in unmanned combat

He said that two decades of Israel's development of these technologies enabled them to be put to use in the last two years. During his presentation, he showed a video of six-wheeled unmanned ground vehicle driving along a path, as well as what appeared to be a column of D9- armored bulldozers and M113 armored personnel carriers, two platforms that Israel have used as unmanned systems in the recent war.

Sarig spoke about a number of technologies that have been combined, such as enabling robots and autonomous systems to work in concert as a group of machines. Several unmanned M113s, for instance, were shown opening a route. Smaller UGVs delivered logistics. Sarig said the systems could work in GPS-denied environments and used a number of new sensors.

"We see these assets operating by almost every unit," he said.

Such ubiquitous use of robotics is aided by the reams of data Israel's been able to collect about their operations, from "tens of thousands of hours" of flying drone operations to "thousands of hours" of ground maneuver robotics data.

At the same conference, Israel's Brig. Gen. Oren Giber, the commander general of MANTAK, the Merkava and Armored Vehicle Directorate in the Ministry of Defense, also discussed new technologies for maneuvering forces.

In his mind, the future of ground combat will include tailored robotic systems working alongside armored vehicles. For instance, instead of several main battle tanks, using two types of vehicles that work as a team, with a leader vehicle and a second vehicle. "We can then introduce drones as part of their weapon systems and UGVs as part of the overall concept."

During his presentation, he showed a video of tanks approaching a position in 2025 and another video set in a hypothetical 2032 showing two vehicles with a two robotic UGV wingmen, where the UGVs are sent into combat first networked with their parent vehicles. The UGVs can then launch small drones and conduct combat.

The IDF appears to be pushing robotics further, as a new program of AI and Autonomy was declared last year by the ministry, Sarig said. It will be focused on "force build up efforts to improve the IDF Multi-Domain operational gain."

Earlier this week, the IDF's C4I and Cyber Defense Directorate announced a new division devoted to AI named "Bina," Hebrew for "intelligence"). According to Israeli outlet Ynet, the division, which will consolidate several disparate AI-focused initiatives already in existence, will be lead by a brigadier general.

Sarig argued that "we are only at the beginning of this revolution." He noted that "in the coming years, driven by operational necessity, we will significantly expand our robotic capabilities. Robotics serves as a critical bridge to the world of AI, which, looking forward, will be integrated into every weapon system and into the operational capability of every soldier."

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THE DEFENSE CIRCUIT

At Defense Tech Week, the Real Story Was the People Who Showed Up to Serve

The Sandbox is known as Israel's first hardware-first nonprofit defense tech incubator. On paper, that means founders, mentors, and engineers working to turn raw battlefield needs into usable products. Being there made it clear that it is much more than a program.

By Chaya Gonikman

Defense Tech Week hosted by Israel's MOD DDR&D and Tel Aviv University is always a showcase of innovation, ambition, and the sheer complexity of building technology that keeps soldiers alive. But at this year's event, one moment stood out above the rest. It was not the polished presentations or the big-name investors. It was the feeling in the room when The Sandbox, powered by Let's Do Something, hosted its debut gathering.

The Sandbox is known as Israel's first hardware-first nonprofit defense tech incubator. On paper, that means founders, mentors, and engineers working to turn raw battlefield needs into usable products. Being there made it clear that it is much more than a program. It is a community of people who have seen what happens when the country lacks equipment, who remember the urgency of the days after October 7, and who decided that instead of waiting for the system to catch up, they would build the tools themselves.

Breaking into defense tech is notoriously difficult. The barriers are technical, bureaucratic, logistical, and financial. These hurdles keep even the most promising ideas from ever reaching a soldier's hands. Yet this room was full of people willing to push through all of it. Young entrepreneurs stood next to decorated veterans, Ministry of Defense officials, engineers, and philanthropists. Many of them are working long hours with no expectation of massive payout. What drives them is something far simpler and far more powerful: serving the country.

That spirit was echoed throughout the event. For founders, meeting IDF partners and people who truly understood their technology was not just helpful. It was validating. As one participant put it, the clarity of mission is what pulls people in and keeps them pushing forward. You could feel that clarity in every conversation happening on the sidelines and in every moment someone stood up to explain the problem they were trying to solve.

The Sandbox's origin story, tied to the memory of David Newman, gives the initiative an authenticity that is rare in the tech world. What started as a grassroots effort to help units obtain critical equipment has grown into a structured space where hardware innovators can move quickly, test with real users, and respond to urgent operational needs. The presence of senior IDF officials and Ministry of Defense representatives underscored how seriously that work is being taken.

The real story of the night was not about institutions. It was about individuals. It was watching people step up, often quietly, because they believe they can make a difference. It was seeing founders who have no guarantee of success get on stage anyway. It was being reminded that courage is not always dramatic. Sometimes it looks like a small group of people deciding to solve a problem that no one else has the bandwidth to fix.

Events like this reveal something important about Israel's defense tech ecosystem. Despite the challenges and despite the weight of the moment, there are people who refuse to let gaps go unaddressed. Not because there is a market opportunity, but because there is a national responsibility. Seeing that up close, watching people try, fail, try again, and build anyway, was perhaps the most inspiring part of all.

In a sector filled with complexity, The Sandbox is proving that determination, mission, and service can still break through. Judging by the energy in the room, this is only the beginning.

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VIN NEWS .com

Israel to Deploy Groundbreaking Iron Beam Laser Defense System by Year-End

By Reuven Rosenfeld

JERUSALEM (VINnews) — Israel will hand over its revolutionary high-powered laser interception system, known as Iron Beam, to the Israeli military on December 30, 2025, the head of the Defense Ministry's Directorate of Defense Research and Development announced Monday.

Speaking at the DefenseTech Summit in Tel Aviv, Brig. Gen. (res.) Danny Gold said development of the system is complete and an extensive testing program has confirmed its operational readiness.

"With development complete and a comprehensive testing program that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on December 30, 2025," Gold told summit attendees.

The Iron Beam is designed to intercept rockets, mortars, drones, and other aerial threats using a high-energy laser at a fraction of the cost of traditional missile-based interceptors.

"The Iron Beam laser system is expected to fundamentally change the rules of engagement on the battlefield," Gold said. "Simultaneously, we are already advancing the next-generation systems."

The laser program has been in development for more than a decade by Rafael Advanced Defense Systems in partnership with the Defense Ministry. A lower-powered prototype of Iron Beam has already seen combat use during the ongoing war, successfully downing Hezbollah drones launched from Lebanon.

The full-power operational version set for delivery later this month represents a major leap forward in Israel's multi-layered air defense architecture, which already includes the Iron Dome, David's Sling, and Arrow systems.

Defense officials say the laser system will dramatically reduce the cost of intercepting short-range threats and provide an essentially unlimited magazine as long as power is available—advantages that have become critical amid the high volume of rocket and drone attacks Israel has faced since October 2023.

The announcement comes as Israel continues to battle Hezbollah in Lebanon and Hamas in Gaza while bracing for potential escalation with Iran and its regional proxies.

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Iron Beam laser defense system set for IDF launch

Israel will begin deploying the technology at the end of the month, offering cost-effective interception of rockets and UAVs.

By Joshua Marks

Israel's Iron Beam ("Magen Or" in Hebrew) laser defense system will begin defending against aerial threats at the end of the month, the country's Defense Ministry announced on Monday.

"With development complete and a comprehensive testing program that has validated the system's capabilities, we are prepared to deliver initial operational capability to the IDF on Dec. 30, 2025," said Brig. Gen. (res.) Daniel Gold, head of the Directorate of Defense Research and Development at the Defense Ministry.

Speaking at the International DefenseTech Summit at Tel Aviv University, Gold said the system was a complement to the Iron Dome, David's Sling and Arrow air defense systems, and "is expected to fundamentally change the rules of engagement on the battlefield."

The system uses a 100-kilowatt laser to intercept rockets, mortars and UAVs at a range of more than 6 miles (10 kilometers), at a fraction of the cost of traditional interceptors. The estimated cost per firing is about 2$ to 5$, compared to 40,000$ to 80,000$ for a single Iron Dome interceptor.

The Iron Beam—to be renamed "Ohr Eitan" ("Eitan's Light") after Eitan Oster, who fell in battle in Lebanon and whose father was one of its developers—will be integrated into the Israel Defense Forces' air defense array.

The Defense Ministry and Israel's Rafael defense technology firm announced in September the completion of a series of successful trials of the Iron Beam system at a facility in southern Israel.

"The system proved its effectiveness in a complete operational configuration by intercepting rockets, mortars, aircraft and UAVs across a comprehensive range of operational scenarios," they said in a joint statement at the time.

The Israeli military revealed in May that a smaller version of the laser defense system was tested in combat operations during the war that began on Oct. 7, 2023, shooting down dozens of enemy drones. Most of the interceptions were of Hezbollah drones, but the system also downed UAVs on other fronts, according to the IDF.

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JBN
JEWISHBREAKINGNEWS.COM

Israeli Defense Startups Smash $1 Billion as War-Forged Tech Draws Global Cash

By Shmuli Volkin

Israeli defense-tech startups have blown past the symbolic 1$ billion mark in 2025, raking in money through investment rounds, mergers and acquisitions — more than in all previous years combined, according to figures first reported by Globes. Crunchbase data shows that puts Israel's ecosystem as a heavyweight slice of the roughly 7.7$ billion funneled into defense startups worldwide this year.

The catalyst is brutally simple: war. Since Hamas terrorists invaded Israel and massacred civilians, the IDF and Ministry of Defense have pulled more than 130 Israeli startups directly into wartime operations, many under the Directorate for R&D (MAFAT/DDRD). Their tools range from autonomous drones and counter-drone systems to battlefield sensors, navigation aids, electronic-warfare gear and robotics — all battle-tested against Hamas, Hezbollah and Iran-backed militias rather than in clean lab conditions. As one senior defense official put it, "The funding in 2025 has been greater than all previous years combined, and the year is not over yet."

The headline deals show how fast this niche became mainstream. Drone maker Heven Aerotech, which is building hydrogen-fuel-cell platforms for long-endurance missions, raised about 100$ million and became Israel's first pure defense-tech unicorn, valued above 1$ billion. Quantum-software company Classiq pulled in 110$ million to expand tools that can support military encryption and next-generation command-and-control. Kela, a younger firm building open-architecture C2 environments that plug together radars, SIGINT, interceptors and other "micro-startups," has reportedly raised around 100$ million of its own.

Foreign money is not just nibbling at the edges; it is driving the consolidation. Roughly %40 of defense-startup acquisitions this year were made by one U.S. company, Ondas Holdings, which has injected some 400$ million into Israeli firms. That includes buying anti-drone specialist Sentrycs for 225$ million — a company whose systems are already deployed by the IDF to detect and neutralize hostile UAVs. For investors, this is not charity; they are buying into technologies that have been refined in live combat and can be exported to allied militaries facing the same Iranian drones, Russian tactics and copycat terror movements.

Zoom out, and the macro picture explains why the fire hose opened now. Global defense budgets have climbed about %9 to a -30year high of roughly 2.7$ trillion as governments scramble to rearm in the wake of Russia's invasion of Ukraine and Iran's proxy wars across the region. Tech-focused analysts say at least 7.7$ billion in venture money has gone into defense-tech startups worldwide in 2025, with more than 48$ billion into the broader defense-related startup universe and ten new defense-tech unicorns minted. Israel, with its small domestic market and permanently under-fire security environment, is the natural place where those trends collide.

On the Israeli side, the Ministry of Defense is quietly restructuring how it works with startups. The DDRD is now a formal gateway: it helps young companies refine products, runs field trials — for example lining multiple counter-drone systems along a real border segment — and, crucially, can tell foreign buyers that "the IDF uses this," a stamp of credibility that opens doors in Washington, Europe and Asia. Officials are clear that capacity is limited; they cannot test "200 drone companies" at once, so the bar to enter that pipeline is rising.

Policy is shifting to match the money. Defense officials plan to steer about %10 of the ministry's R&D budget next year directly toward startups, and to create state-backed investment funds worth around NIS 200 million to stabilize growth and prevent promising firms from collapsing in between contracts. Regulators are looking at easing some export controls on less-sensitive technologies so Israeli companies can scale globally without compromising core security secrets. If that happens, today's 1$ billion year could turn into a durable pipeline rather than a one-off wartime spike.

For Israel, this is much bigger than a funding milestone. It marks the moment when a cluster of small, war-born companies — building tools to defend Israeli civilians from Hamas rocket fire, Hezbollah precision missiles and Iranian drones — becomes central to the global defense-tech map. If the money keeps flowing and the IDF continues using startups as a live testbed, Israeli innovators won't just be reacting to the next round of attacks; they'll be helping shape how the free world's militaries fight back.

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ISRAEL365 NEWS

Laser Defense Arrives: Iron Beam to Become Operational on December 30

By Adam Eliyahu Berkowitz

The Iron Beam, Israel's first high-energy laser interceptor, has completed development and testing and will be handed to the IDF on December 30. The announcement came from Brig. Gen. (res.) Dr. Daniel Gold, head of the Defense Ministry's Directorate for Defense Research and Development, who told the DefenseTech Week conference in Tel Aviv that the system is ready for its first operational capability. His message was delivered without qualifiers: the system works, the tests proved it, and the IDF will receive it within weeks.

This marks the most significant upgrade to Israel's air-defense array since the introduction of Iron Dome. It arrives after a year in which Israeli communities from the Golan to Eilat absorbed wave after wave of drone attacks, including Iranian Shahed101- UAVs that slipped through the existing layers. Even when helicopters or fighter jets managed to intercept them, they did so too late, and too often at the cost of lives. The IDF revived its 946th Air Defense Battalion to confront this threat, deploying an earlier, lower-powered laser to shoot down dozens of drones during the fighting in the north. The Iron Beam is in another league.

The Iron Beam is a -100kilowatt-class high-energy laser developed over more than a decade by Rafael Advanced Defense Systems together with the DDR&D. It hits targets from hundreds of meters to several kilometers away, engages at the speed of light, and—most importantly in a long war—has no practical limit on ammunition as long as it remains powered. Dr. Gold said the system will "change the rules of the battlefield," replacing expensive interceptor missiles with shots that cost only a few shekels. Rafael is already developing upgraded versions, including the Iron Beam 450 and the Iron Beam M, a mobile truck-mounted variant for front-line forces.

The system has been renamed from Magen Or (Light Shield) to Or Eitan (Eitan's Light) in honor of Cpt. Eitan Oster of the Egoz Commando Unit, who was killed fighting the Hezbollah terrorists in Lebanon in October 2024. His father, a senior engineer in the DDR&D, was involved in the early stages of the project.

Dr. Gold said Israel's defense sector is undergoing a revolution. Startups are now winning DDR&D tenders against the most prominent companies and supplying attack drone systems to the IDF. Brig. Gen. Benny Aminov announced a breakthrough in detecting and intercepting enemy drones, including swarm scenarios that only directed-energy systems can counter quickly enough. The Defense Ministry's long-term plan involves new offensive and defensive technologies in space, electronic warfare, and artificial intelligence.

These changes align with the IDF's sweeping reorganization announced this week. Under a new structure called Bina ("intelligence"), the military is consolidating its computing, AI, and communications units, forming the Artificial Intelligence Division and the Spectrum Division while reorganizing satellite warfare under the ICT Division. Two of the five senior positions in these new divisions are held by women, including Brig. Gen. Yael Grossman and Brig. Gen. Racheli Dembinsky.

The backdrop to these reforms is a year of relentless drone attacks that exposed gaps even in Israel's highly regarded air-defense network. While Iron Dome and Arrow systems intercepted 95—90 percent of rockets and ballistic threats, only about half of hostile UAVs were downed in time. From the Shahed strike in Kabri that killed a reservist, to the UAV that reached Caesarea, to the drone launched from Yemen that struck near the U.S. Embassy, the threat was unmistakable and immediate. Iron Beam was designed for moments like these.

Israel has always been forced to innovate in the face of enemies who learn, adapt, and escalate. The Iron Beam does more than cut costs or improve intercept rates. It represents Israel's refusal to accept vulnerability as a permanent condition. It is a deliberate answer to a year of drones buzzing over farms in the Galilee and streets in Eilat, a year when civilians listened for the whine of a Shahed and prayed it would miss them.

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SEMANARIO HEBREO JAI

Las FDI recibirán antes de fin de mes el sistema israelí de laser anti misiles

por Ana Jerozolimski

Paralelamente a la ofensiva contra diversos enemigos en los distintos frentes en los que combaten las Fuerzas de Defensa de Israel, la cúpula de desarrollo tecnológico y las industrias de defensa están constantemente abocadas a idear nuevos sistemas que protejan el territorio nacional y a la ciudadanía israelí de amenazas provenientes de cerca y de lejos. Y ahora se confirma oficialmente que el más reciente logro en este campo, el revolucionario "Rayo de Hierro"-Iron Beam en inglés-, será entregado a las Fuerzas de Defensa de Israel antes de fin de año. Se trata de un sistema que se espera destruya cualquier tipo de misil disparado hacia Israel con la activación precisamente de un rayo laser, un modus operandi revolucionario en su campo.

El nombre fue concebido a raíz del exitoso sistema "Iron Dome", o sea "Cúpula de Hierro" que funciona desde hace casi tres lustros con alto porcentaje de efectividad para interceptar cohetes en camino a Israel hacia los que se lanza un proyectil que los destruye en vuelo.

La primera entrega del nuevo sistema a las FDI está programada para el 30 de diciembre próximo, o sea antes de fin de año.

Así lo anunció el Brig. General (Res.) Dr. Daniel Gold, Jefe de la Dirección de Investigación y Desarrollo de Defensa del Ministerio de Defensa de Israel, en la Cumbre Internacional de Tecnología de Defensa que se lleva a cabo en Tel Aviv.

"Se espera que el sistema láser Iron Beam cambie radicalmente las reglas de combate en el campo de batalla. Con el desarrollo completo y un programa de pruebas exhaustivo que ha validado las capacidades del sistema, estamos preparados para entregar la capacidad operativa inicial a las FDI el 30 de diciembre de 2025. Simultáneamente, ya estamos desarrollando los sistemas de próxima generación".

En este corto anuncio, está el espíritu que mueve al sistema todo: no descansar sobre los laureles y buscar constantemente la forma de mejor los logros ya obtenidos.

"El panorama de la tecnología de defensa ha cambiado radicalmente: las startups ahora compiten directamente con los principales contratistas de defensa y obtienen resultados. Recientemente, varias startups compitieron contra las principales industrias de defensa en un concurso de adquisiciones de la División de Investigación y desarrollo del Ministerio de Defensa y fueron seleccionadas para suministrar a las Fuerzas de Defensa de Israel sistemas avanzados de vehículos aéreos no tripulados (UAV) de ataque".

Gold agregó que "en consonancia con la estrategia del Ministerio, estamos desarrollando activamente la próxima generación de sorpresas tecnológicas para futuros conflictos —en los ámbitos espacial, ofensivo y defensivo— y las pondremos en funcionamiento en el momento oportuno". Aseguró que la división que encabeza, las industrias de defensa y la excelencia de distintas startups "son base de nuestra fortaleza de cara al futuro."

Mucha agua ha corrido bajo el puente desde que en 1986 Israel comenzó a desarrollar el sistema anti misiles "Jetz" (Arrow en hebreo, Flecha en español), para interceptar misiles lanzados desde larga distancia. La guerra del Golfo de 1991 durante la cual el entonces dictador irakí Saddam Hussein lanzó 39 misiles Scud hacia Israel, aceleró el trabajo.

En el año 2000 el "Jetz" entró en funcionamiento operativo. La versión mejorada "Jetz 3" se incorporó en el 2017 y ya está en trabajo una nueva versión.

En otro plano, pero con el mismo espíritu, comenzó en el 2005 el desarrollo de la Cúpula de Hierro, cuyo gran promotor fue también el aquí citado Dr. Danny Gold, Brigadier General (Res) en la Fuerza Aérea de Israel. La segunda guerra en Líbano en el 2006, durante la cual miles de cohetes fueron disparados hacia Israel, dejó nuevamente en claro cuán necesario era el sistema. En marzo del 2011 una primera batería fue declarada operativa e instalada cerca de Beer Sheba. Pocas semanas después, en abril 2011, la Cúpula hizo su primera interceptación de un cohete disparado desde la Franja de Gaza.

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כלכליסט

משרד הביטחון: מערכת ההגנה בלייזר תימסר לצה"ל בסוף החודש

ראש מפא"ת דני גולד התייחס למערכת מתוצרת רפאל בכנס הדיפנסטק של משרד הביטחון - "תשנה את חוקי המשחק, כבר עובדים על הדורות הבאים שלה"; מנכ"ל המשרד אמיר ברעם אמר כי "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום"

יובל אזולאי

בפתחו של כנס הדיפנסטק של משרד הביטחון המתקיים היום (ב') באוניברסיטת תל אביב התייחס מנכ"ל משרד הביטחון האלוף (במיל') אמיר ברעם למצב הגיאו-פוליטי והביטחוני של ישראל, יותר משנתיים מפרוץ מלחמת 7 באוקטובר. לדברי ברעם, "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום". במקביל ציין ראש מפא"ת דני גולד בין היתר כי מערכת ההגנה בלייזר מתוצרת רפאל תימסר לצה"ל בסוף החודש.

לדברי ברעם, חרף הסיכונים ואי הוודאות המאפיינים את המזרח התיכון "יש גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע שכן המציאות לעולם לא עומדת מלכת וכל מי שלא מתאים את עצמו לכך נשאר מאחור. מערכת הביטחון מפתחת את הדורות הבאים של טכנולוגיה פורצת דרך לקראת עימות עתידי עם איראן בהגנה ובהתקפה ומפתחת יכולות נוספות".

ברעם הוסיף כי במהלך 2024 משרד הביטחון חתם על 21 הסכמים בין ממשלות (G2G) בהיקף כולל של מיליארדי שקלים. מדובר בעסקאות ביטחוניות הנעשות בהליכים מקוצרים בין ממשלות תוך תמיכה בתעשיות הנשק ובפיתוח וביסוס יחסים דיפלומטיים בין מדינות. באותה השנה הסתכם כלל היצוא הביטחוני מישראל בשיא של 14.8 מיליארד דולר.

ברקע המלחמה הממושכת, משרד הביטחון השקיע אשתקד כ-1.2 מיליארד שקל בסטארט-אפים ישראליים. לדברי ברעם, למעלה מ-300 חברות כאלה עובדות כיום עם המינהל לפיתוח אמצעי לחימה ותשתיות טכנולוגיות (מפא"ת) כש-130 מהן לקחו חלק פעיל בפעילות המבצעית של יחידות צה"ל במלחמה. "במשך שנים ישראל היתה <סייבר ניישן> והיום אנחנו <דיפנסטק ניישן>, כשיכולות החדשנות שלנו משתרעות על כל הספקטרום – ממערכות להגנה אוויריות, כלים אוטונומיים, לוחמה אלקטרונית, טכנולוגיות קוונטים, מודיעין, סייבר וחלל. תל אביב מדורגת במרכז הדיפנסטק השלישי בעולם כשתעשיות הביטחון הגדולות שלנו חתמו על חוזים בינלאומיים משמעותיים באירופה, אסיה וצפון אמריקה וגם החברות הקטנות והבינוניות רושמות צמיחה בקצב מסחרר עם חוזים בשווי של מאות מיליוני דולרים".

גולד אמר במהלך הכנס כי מערכת ההגנה האוירית המבוססת על לייזר רב עוצמה של רפאל, "אור איתן" תימסר כאמור לצה"ל בסוף החודש. "המערכת צפויה לשנות את חוקי המשחק בשדה הקרב ואנו נערכים למסור יכולות ראשונות לצה"ל ב-30 לדצמבר. אנחנו כבר עובדים במקביל על הדורות הבאים שלה המערכת".

מדובר במערכת הגנה המיועדת לנטרל מגוון רחב של איומים אוויריים כמו רקטות, פצמ"רים וכטב"מים בטווחים של עד כ-10 ק"מ. לפחות בשלב ראשון יכולות היירוט בלייזר יוטמעו בפעילות השוטפת של סוללות כיפת ברזל.

בהתייחס למוכנות מערכת הביטחון למלחמה עתידית אמר גולד כי "אנחנו נמצאים עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה בחלל, בתקיפה ובהגנה. אנחנו פס ייצור של ההפתעות הבאות ושל שוברי השוויון הבאים".

גלובס

מפתח כיפת ברזל חשף: זה מועד מסירת מערכת הלייזר לצה"ל

תא"ל (מיל') דני גולד הודיע בכנס דיפנסטק כי מערכת "אור איתן" תימסר לצה"ל ב־30 בדצמבר • בכנס אף התייחס מנכ"ל משרד הביטחון אלוף (מיל') אמיר ברעם למערכה נוספת שצפויה עם איראן: "כל החזיתות עדיין פתוחות"

דין שמואל אלמס

ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, הודיע היום (ב') כי מערכת ההגנה האווירית באמצעות לייזר, "אור איתן", השלימה את הליך הפיתוח והניסויים, ותימסר לצה"ל ב־30 בדצמבר. הדברים נאמרו בכנס דיפנסטק של מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון באוניברסיטת תל אביב.

מערכת הלייזר אור איתן "צפויה לשנות את חוקי המשחק של שדה הקרב", ציין ד"ר גולד. "בתחום הדיפנסטק המשחק השתנה - סטארט־אפים מתחרים היום 'ראש בראש' עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארט־אפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

בה בעת, מנכ"ל משרד הביטחון, אלוף (מיל') אמיר ברעם, התייחס בכנס להיערכות למערכה נוספת שצפויה עם איראן. "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום. תקופה זו מביאה עימה אי־ודאות וסיכונים, אבל גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע. משרד הביטחון עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות.

"התובנות של חיילים מהשטח מעצבות באופן ישיר את הפתרונות הטכנולוגיים לצרכים המבצעיים שלהם. יש לנו מעגל משוב ישיר מקו החזית למהנדסי התעשייה הביטחונית - וזה יוצר שרשרת אספקה חזקה. זו המשמעות של דיפנסטק בישראל".

ירידה משמעותית ביעילות בעת אובך

ככלל, מערך הלייזר שפיתחה החברה שמהווה את הקבלן הראשי של תוכנית הלייזר, רפאל, כולל שלוש מערכות מרכזיות.

מעריב

צה"ל נכנס לעידן טכנולוגי חדש: "אנחנו רק בתחילתה של המהפכה"

מלחמת הרובוטיקה הראשונה: עשרות אלפי רחפנים וכלים אוטונומיים שולבו בלחימה, ובמערכת הביטחון נערכים להרחבת סדר הכוח הרובוטי ולשדרוג אמל"ח ומערכות חכמות

אבי אשכנזי

"המלחמה הזו היא מלחמת הרובוטיקה הראשונה - שילבנו בשדה הקרב עשרות אלפי כלים, מלהקות רחפנים ועד צוותי רובוטיקה קרקעית מתמרנת", כך גילה היום תא"ל ירון שריג, ראש מנהלת AI ואוטונומיה במפא"ת שבמשרד הביטחון.

שריג אמר את הדברים בכנס דיפנסטק: "המלחמה הזו היא מלחמת הרובוטים הראשונה. במלחמה רתמנו את כלל האקוסיסטם הביטחוני ושילבנו בשדה הקרב עשרות אלפי כלים. מלהקות רחפנים ועד רובוטיקה קרקעית מתמרנת בתפוצה רחבה. מנהלת AI ואוטונומיה, בשילוב עם צה"ל, האיצה פיתוחים חדשניים של סטארטאפים, חברות ביטחוניות וגופי מחקר, במטרה לשלבם בשדה הקרב ולשמר את היתרון היחסי ביבשה, באוויר ובים".

לדבריו ישראל בראשית הדרך הטכנולוגית הזאת: "אנחנו רק בתחילתה של המהפכה. בשנים הקרובות, לאור הצורך ההולך וגובר, נגדיל משמעותית את סדר הכוחות הרובוטי. הרובוטיקה מהווה חוליה מקשרת משמעותית לעולמות AI, שבהסתכלות קדימה ישולבו בכל אמצעי לחימה ובעשייתו של כל חייל".

ראש מנת"ק במשרד הביטחון, תא"ל אורן גיבר, גילה בכנס כי בישראל פועלים כעת להכניס מערכות רובוטיות לטנקי המרכבה של צה"ל: "אנחנו פועלים להכניס מערכות רובוטיות לטנקים שמאפשרות שיתוף מידע בין טנקים, מה שיאפשר מעגל מבצעי בשלמותו. אנחנו נמשיך לפתח ולפעול כדי להגיע למקומות האלה".

תא"ל אורן גיבר סיפר כי "אנחנו ממציאים מחדש את התפקיד המרכזי של פלטפורמות הלחימה היבשתיות כהיערכות לעימותים עתידיים, שצפויים להיות מורכבים וקטלניים. אנחנו פועלים להכניס מערכות רובוטיות לטנקים שמאפשרות שיתוף מידע בין טנקים, מה שיאפשר מעגל מבצעי בשלמותו".

הוא הוסיף כי "אנחנו נמשיך לפתח ולפעול כדי להגיע למקומות האלה. אחת הדרכים לעשות את זה היא לעבור לשימוש במוצרי מדף, לשלב צבאי לצד אזרחי-צבאי, כלים לא מאוישים לצד כלים מאוישים, במבנה לחימה מתקדם שמאפשר להביא לקצה המבצעי תפוקות מבצעיות עצומות. כך, אני שואף לעשות אצלנו במנת"ק".

לדבריו של תא"ל גיבור, "אנחנו מדברים על מערכות במשקל עשרות טונות, שתפעולן בשטח בנוי ומורכב מהווה אתגר משמעותי. הצוותים שלנו מצאו עצמם פועלים בתנאים קשים ביותר, כשמתחתיהם מנהרות טרור. להפעיל מערכת הגנה אקטיבית ביעילות מלאה בסביבה אורבנית זה משהו מורכב במיוחד".

"בזמן הלחימה האקטיבית, מערכת 'מעיל רוח' – שהייתה בפיתוח במשך שנים - הוכיחה את עצמה והצליחה להגן על הכוחות והלוחמים שלנו. הבנו שאנחנו חייבים לפתח מערכות גמישות שמסוגלות להסתגל מהר. זה בדיוק מה שאנחנו מתכוונים אליו כשאנחנו מדברים על המצאה מחדש של הרכבים המשוריינים שלנו. האתגר שלנו הוא להבטיח כי גם בעתיד ניתן יהיה להצטייד בכלים מתקדמים, בכמויות גדולות ובאיכויות טובות יותר אך במחיר נמוך".

מעריב

תגידו שלום ל"סייבר ניישן": ישראל ממציאה מחדש את טכנולוגיות ההגנה

מנכ"ל משרד הביטחון אמיר: ישראל מתחדשת כ"דיפנס-טק ניישן" כשהתעשייה המקומית מפתחת יכולות פורצות דרך במערכות הגנה, לוחמה אלקטרונית, חלל וסייבר

אבי אשכנזי

"במשך שנים ישראל הייתה ידועה בתור 'סייבר ניישן'. היום, אנחנו 'דיפנס-טק ניישן'. יכולות החדשנות שלנו משתרעות על כל הספקטרום - ממערכות הגנה אוויריות ועד טכנולוגיות חלל. משרד הביטחון והתעשיות הביטחוניות עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות" כך אומר הבוקר מנכ"ל משרד הביטחון האלוף במיל אמיר ברעם במהלך הכנס DefenseTech Week2025 שנפתח הבוקר באוניברסיטת תל אביב.

מדובר בכנס הבינלאומי השני של מפא"ת במשרד הביטחון, בשיתוף המרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב, המתמקד בחדשנות טכנולוגית לאור לקחי המלחמה.

אלוף במיל' אמיר ברעם

בדבריו, התייחס אמיר ברעם לייחודיות הישראלית בעולמות הטכנולוגיות הביטחוניות, וציין: "יכולות החדשנות שלנו משתרעות על כל הספקטרום - ממערכות הגנה אוויריות, כלים אוטונומיים, לוחמה אלקטרונית, טכנולוגיות קוונטום, מערכות מודיעין מפותחות, סייבר ועד טכנולוגיות חלל.

"רק בשנת 2024 חתם משרד הביטחון על 21 הסכמי G2G בין-ממשלתיים בשווי מיליארדים. השקענו 1.2 מיליארד שקלים בסטארטאפים בלבד, כאשר מעל 300 מהם עובדים כיום עם מפא"ת, ויותר מ-130 מהם לקחו חלק בפעילות מבצעית במהלך המלחמה.

"תל אביב מדורגת כעת כמרכז הדיפנסטק השלישי בעולם. תעשיות הביטחון הגדולות שלנו חתמו על חוזים בינלאומיים משמעותיים בכל אירופה, אסיה וצפון אמריקה, ואפילו החברות הקטנות והבינוניות צומחות בקצב מסחרר עם חוזים בשווי מאות מיליוני דולרים".

בהתייחס למצב הביטחוני הגיאו-פוליטי של ישראל, אמר: "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום. תקופה זו מביאה עימה אי-ודאות וסיכונים, אבל גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע. המציאות לעולם לא עומדת מלכת - לא באסטרטגיה ולא בטכנולוגיה - וכל מי שלא מתאים את עצמו לכך, בסופו של דבר נשאר מאחור.

"משרד הביטחון עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות. כעת, בזמן שאנו מתכנסים כאן, טכנולוגיות דיפנסטק ישראליות מגנות על חיים בעולם. זה לא רק דיבור - זו מציאות. הצורך הקיומי והאתגרים הביטחוניים שלנו יצרו אקוסיסטם ייחודי שרק מעטים בעולם יכולים לשכפל, בו באות לידי ביטוי מערכות חדשניות בתחום הדיפנסטק, עם עשרות שנות ניסיון מבצעי אמיתי.

"אלו מערכות שהוכחו בשדה הקרב. התובנות של חיילים מהשטח מעצבות באופן ישיר את הפתרונות הטכנולוגיים לצרכים המבצעיים שלהם. יש לנו מעגל משוב ישיר מקו החזית למהנדסי התעשייה הביטחונית - וזה יוצר שרשרת אספקה חזקה. זו המשמעות של דיפנסטק בישראל".

בין המשתתפים הבולטים בכנס: ראש מפא"ת במשרד הביטחון, תא"ל במיל דני גולד, על ראשי התעשייה הביטחונית הישראלית אנשי אקדמיה, משלחות בטחוניות ואקדמיות מחו"ל.

מעריב

איראן בהלם, טורקיה מביטה בקנאה: שובר השוויון נכנס לפעולה בצה"ל

"פיתוח מערכת הלייזר 'אור איתן' הושלם. אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025 ובמקביל עובדים כבר על הדורות הבאים", כך חשף ראש מפא"ת במשרד הביטחון, תא"ל במיל' דני גולד

אבי אשכנזי

ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, השתתף בכנס דיפנסטק Defense Tech Summit של מפא"ת במשרד הביטחון, בשיתוף סדנת יובל נאמן למדע, המרכז למחקר סייבר באוניברסיטת תל אביב. הכנס מתקיים זו השנה השנייה ברציפות בהשתתפות מאות נציגים מהעולם ומתמקד בחדשנות טכנולוגית לאור לקחי מלחמה.

במהלך הכנס אמר גולד כי "ההישגים במהלך מבצע 'עם כלביא' הם חסרי תקדים. המבצע סיפק הצצה ל'מאגר ההפתעות' - טכנולוגיות ישראליות עוצמתיות ופורצות דרך, שהן פרי פיתוח של אנשי מפא"ת לדורותיהם".

עוד אמר גולד: "מערכת הלייזר 'אור איתן' שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת. אנו נערכים למסור יכולות ראשונות לצה"ל ב-30.12.2025. במקביל אנו עובדים כבר על הדורות הבאים".

"בתחום הדיפנסטק המשחק השתנה - סטארטאפים מתחרים היום <ראש בראש> עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים", הוסיף גולד.

לסיום, אמר גולד כי "בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה - ונפעיל אותן בזמן הנכון. מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו קדימה".

גם מנכ"ל משרד הביטחון, האלוף במיל' אמיר ברעם, השתתף בכנס ונשא דברים. "במשך שנים ישראל הייתה ידועה בתור 'סייבר ניישן'. היום, אנחנו 'דיפנס-טק ניישן'. יכולות החדשנות שלנו משתרעות על כל הספקטרום - ממערכות הגנה אוויריות ועד טכנולוגיות חלל. משרד הביטחון והתעשיות הביטחוניות עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות", אמר בין היתר.

כזכור, סדרת הניסויים שהתקיימה בשדה ניסוי בדרום הארץ, סיכמה את תהליך הפיתוח והיוותה את השלב האחרון לפני מסירת המערכת לשימוש מבצעי מלא בצה"ל. במהלך הניסויים, הוכיחה המערכת את ביצועיה ביירוט מגוון איומים בתרחישים מבצעיים, בהם: רקטות, כלי טיס ומל"טים. הצלחת הניסויים מהווה שלב קריטי לקראת מבצועה ומסירתה לצה"ל עד סוף השנה.

כחלק מתהליך הפיכת המערכת למבצעית ובאופן סמלי, החליט בימים האחרונים משרד הביטחון להעניק למערכת את השם "אור איתן", לזכרו של קצין סיירת אגוז, סרן איתן אוסטר ז"ל, שנפל בקרב בדיוק לפני כשנה ביום הראשון של מבצע "חיצי הצפון" בדרום לבנון ואביו, איש מפא"ת היה מיוזמי ומפתחי הפרויקט.

DefenseTech Week
Dec. 1st–2nd, 2025
Tel Aviv University

מעריב

שדרוג משמעותי להגנה האווירית: מערכת הלייזר "אור איתן" תימסר לצה"ל בחודש הבא

אבי אשכנזי

שדרוג משמעותי בהגנה האווירית: משרד הביטחון הודיע כי פיתוח מערכת הלייזר "אור איתן" הושלם, וכי היא תימסר לצה"ל כבר בחודש הבא. ראש מפא"ת, תא"ל (מיל') ד"ר דני גולד, אמר בכנס Defense Tech Summit כי המערכת, שעברה סדרת ניסויים מוצלחת, צפויה "לשנות את חוקי המשחק בשדה הקרב". במקביל, מפא"ת כבר פועלת על דורות מתקדמים של מערכות הגנה ותקיפה, כולל טכנולוגיות חלל ורחפנים תוקפים שיפותחו גם על ידי סטארטאפים ישראליים.

מעריב

בכיר ביטחוני במסר אופטימי: "אתגר הרחפנים בגבולות בדרך לפתרון"

ישראל משיגה פריצת דרך טכנולוגית נגד איום הרחפנים - גילוי ויירוט בגבולות, פתרונות לנחילים ומערכות בתהליך פיתוח מתקדם: "בעיה שדורשת ממערכת הביטחון שינוי בשיטות העבודה"

אבי אשכנזי

אתגר הרחפנים מעסיק כיום את מרבית גורמי הביטחון בעולם. באירופה נאלצים יחידות צבא, משטרה וגורמי אבטחה להתמודד עם איומי רחפנים המשוגרים ככל הנראה מרוסיה לנמלי תעופה ואתרים אסטרטגיים רגישים במדינות היבשת - מה שגורם לפגיעה בשגרת החיים, בלוחות הטיסות ולבהלה בקרב ציבור רחב.

גם בישראל העניין מטריד את מערכת הביטחון בין היתר בשימוש שעושים מבריחים בגבולות מצרים וירדן וכן השימוש שעושים ארגוני הטרור במטרה לתקוף כוחות מתמרנים וכוחות בעורף.

ראש מו"פ במפא"ת במשרד הביטחון, תא"ל בני אמינוב, גילה היום בכנס דיפסנטק כי ישראל הגיע בימים האחרונים לפריצת דרך מול האיום: 'אתגר הרחפנים בגבולות בדרך לפתרון. בשבועות האחרונים השגנו פריצת דרך טכנולוגית בסוגיית גילוי רחפני האויב ואנו עמלים כעת על פתרונות היירוט באמצעות רחפנים, המאפשרים מענה לתרחישי נחילים תוך האצה של נשקי אנרגיה חדשים".

תא"ל בני אמינוב, התיחס לאתגר הרחפנים בגבולות: "בעיית הרוק"ק (רום קרוב לקרקע א"א) היא דוגמה לבעיה שדורשת ממערכת הביטחון שינוי בשיטות העבודה שלה - מענה בקבועי זמן מהירים, התפתחות ספירלית, האצת ניסויים תוך כדי תהליך הפיתוח וחיבור בין חברות דיפנסטק קטנות לחברות ביטחוניות גדולות".

מערכת הלייזר "אור איתן" נכנסת לפעילות: "כל החזיתות עדיין פתוחות"

אחרי ששמה עלה לא מעט במהלך המלחמה עם איראן ובכלל, הבוקר נודע כי מערכת הלייזר המתקדמת תיכנס לפעילות מבצעית כבר בסוף החודש הקרוב. "האויבים שלנו למדים ומתכוננים מיום ליום. תקופה זו מביאה איתה אי ודאות וסיכונים, אבל גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע", אומרים במשרד הביטחון ומשדרים אופטימיות רבה. כל הפרטים

שי לוי

ראש מפא"ת (המנהל למחקר ולפיתוח אמצעי לחימה ותשתית טכנולוגית), ד"ר דני גולד, הודיע רשמית: "פיתוח מערכת הלייזר 'אור איתן' הושלם. אנו נערכים למסור יכולת ראשונה לצה"ל ב-30 בדצמבר ובמקביל עובדים כבר על הדורות הבאים".

גולד אמר את הדברים בכנס הדיפנסטק (Defense Tsech Summit) הבינלאומי השני של מפא"ת במשרד הביטחון, בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון באוניברסיטת ת"א, שמתמקד בחדשנות טכנולוגית לאור לקחי המלחמה.

מנכ"ל משרד הביטחון אלוף במיל אמיר ברעם אמר בכנס: "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום. תקופה זו מביאה עימה אי-ודאות וסיכונים, אבל גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע. המציאות לעולם לא עומדת מלכת, לא באסטרטגיה ולא בטכנולוגיה , וכל מי שלא מתאים את עצמו לכך, בסופו של דבר נשאר מאחור".

מערכת "אור איתן" (Laser Dome) היא מערכת הגנה אקטיבית ישראלית מבוססת לייזר רב עוצמה שמיועדת ליירט איומים כמו רקטות, פצמ"רים, כלי טיס בלתי מאוישים (כטב"מים) ורחפנים בעיקר בטווחים קצרים. המערכת פותחה על ידי "רפאל" בשיתוף "אלביט מערכות" ונחשבת למערכת היירוט הלייזר המבצעית הראשונה מסוגה בעולם. יתרונה הגדול הוא עלות יירוט נמוכה במיוחד (בסביבות כמה שקלים ליירוט) לעומת עלותם של האמצעים האוויריים המיועדים.

המערכת נקראת על שמו של סרן איתן אוסטר ז"ל שנפל בלבנון, ואבא שלו היה מהמפתחים שלה. באוקטובר 2024 גרסה מוקטנת של המערכת ששמה "להב ברזל" נפרסה בצפון שם ביצעה יירוט בכורה ולאחר מכן יירוטים של עשרות כטב"מים של חיזבאללה. אלה היו היירוט המבצעיים הראשונים של כטב"ם באמצעות נשק לייזר ומה שסייע לפיתוח ובדיקת המערכת בתנאים מבצעיים שאפשרו את כניסתה של המערכת לשירות מבצעי עליו הבוקר (יום ב) הכריז ד"ר גולד.

בכנס דיבר גם מנכ"ל משרד הביטחון, אלוף המיל' אמיר ברעם, שאמר "במשך שנים ישראל הייתה ידועה בתור 'סייבר ניישן'. היום, אנחנו 'דיפנסטק ניישן'. יכולות החדשנות שלנו משתרעות על כל הספקטרום - ממערכות הגנה אוויריות ועד טכנולוגיות חלל. משרד הביטחון והתעשיות הביטחוניות עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות".

ברעם הוסיף: "רק בשנת 2024 חתם משרד הביטחון על 21 הסכמי G2G בין-ממשלתיים בשווי מיליארדים. השקענו 1.2 מיליארד שקלים בסטארטאפים בלבד, כאשר מעל 300 מהם עובדים כיום עם מפא"ת, ויותר מ-130 מהם לקחו חלק בפעילות מבצעית במהלך המלחמה. תל אביב מדורגת כעת כמרכז הדיפנסטק השלישי בעולם. תעשיות הביטחון הגדולות שלנו חתמו על חוזים בינלאומיים משמעותיים בכל אירופה, אסיה וצפון אמריקה, ואפילו החברות הקטנות והבינוניות צומחות בקצב מסחרר עם חוזים בשווי מאות מיליוני דולרים".

ברעם התייחס למצב המלחמה בזירות השונות ואמר: "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום. תקופה זו מביאה איתה אי ודאות וסיכונים, אבל גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע. המציאות לעולם לא עומדת מלכת, לא באסטרטגיה ולא בטכנולוגיה, וכל מי שלא מתאים את עצמו לכך, בסופו של דבר נשאר מאחור".

עוד אמר שמשרד הביטחון עובד על פיתוח הדורות הבאים של טכנולוגיה "פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות. כעת, בזמן שאנו מתכנסים כאן, טכנולוגיות דיפנסטק ישראליות מגינות ומצילות חיים בעולם. זה לא רק דיבור זו מציאות. הצורך הקיומי והאתגרים הביטחוניים שלנו יצרו אקוסיסטם ייחודי שרק מעטים בעולם יכולים לשכפל, בו באות לידי ביטוי מערכות חדשניות בתחום הדיפנסטק, עם עשרות שנות ניסיון מבצעי אמיתי. אלו מערכות שהוכחו בשדה הקרב. התובנות של חיילים מהשטח מעצבות באופן ישיר את הפתרונות הטכנולוגיים לצרכים המבצעיים שלהם".

Geektime

"מערכת הלייזר מוכנה, ה'הפתעות' הבאות כבר בפיתוח"

ראש מפא"ת, תא"ל (מיל') ד"ר דני גולד, מצהיר כי הגוף שהוא עומד בראשו הוא "פס ייצור שמייצר את שוברי השוויון הבאים" כחלק מהפקת לקחי המלחמה

דודי סגל

ראש המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית (מפא"ת) במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, נאם הבוקר (ב') בכנס דיפנסטק שנערך בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון באוניברסיטת תל אביב. הכנס, המתקיים זו השנה השנייה ברציפות, מתמקד בחדשנות טכנולוגית לאור לקחי המלחמה, ומשך אליו מאות נציגים בכירים מישראל ומהעולם.

בנאומו, חשף ד"ר גולד פרטים על פיתוחים טכנולוגיים פורצי דרך, ובראשם מערכת הלייזר "אור איתן". ראש מפא"ת הודיע כי פיתוח המערכת הושלם בהצלחה לאחר סדרת ניסויים.

"מערכת הלייזר 'אור איתן' שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת", אמר גולד. עוד חשף ראש מפא"ת את לוח הזמנים להכנסת היכולת החדשה לשימוש מבצעי: "אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025 ובמקביל עובדים כבר על הדורות הבאים".

ד"ר גולד התייחס להישגי צה"ל במבצעים האחרונים והבהיר כי הם מבוססים על יתרון טכנולוגי ישראלי מובהק. "ההישגים במהלך מבצע 'עם כלביא' הם חסרי תקדים. המבצע סיפק הצצה ל'מאגר ההפתעות'- טכנולוגיות ישראליות מעצמתיות פורצות דרך שהן פרי פיתוח של אנשי מפא"ת לדורותיהם'.

ראש מפא"ת התייחס לשינויים הדרמטיים בשוק הדיפנסטק, המשלבים בין עוצמת התעשיות הגדולות לחדשנות של חברות קטנות. 'בתחום הדיפנסטק המשחק השתנה – סטארטאפים מתחרים היום 'ראש בראש' עם החברות הגדולות וזוכים", הדגיש גולד, וסיפק דוגמה עדכנית: "רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

לדבריו, מפא"ת פועל כעת על מנת לשלב בין העוצמות הללו לקראת המערכה הבאה. 'בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה – ונפעיל אותן בזמן הנכון".

הוא סיכם את חזון המנהל: "מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו קדימה".

סרוגים

בכיר משרד הביטחון חושף: "אתגר הרחפנים בגבולות בדרך לפתרון"

ראש מ"פ במפא"ת במשרד הביטחון, תא"ל בני אמינוב, חשף כי "אתגר הרחפנים בגבולות בדרך לפתרון. בשבועות האחרונים השגנו פריצת דרך טכנולוגית בסוגיית גילוי רחפני האויב ואנו עמלים כעת על פתרונות היירוט"

קובי פינקלר

ראש מו"פ במפא"ת שבמשרד הביטחון, תא"ל בני אמינוב, נאם הבוקר (שני) בכנס דיפנסטק והתייחס לאתגר הרחפנים בגבולות. בדבריו חשף כי בשבועות האחרונים נרשמה פריצת דרך בסוגיית גילוי הרחפנים, והבעיה נמצאת בדרך לפתרון.

לדבריו, "אתגר הרחפנים בגבולות בדרך לפתרון. בשבועות האחרונים השגנו פריצת דרך טכנולוגית בסוגיית גילוי רחפני האויב ואנו עמלים על פתרונות היירוט באמצעות רחפנים, המאפשרים מענה לתרחישי נחילים תוך האצה של נשקי אנרגיה חדשים".

"האויב ממשיך בתחרות הלמידה. זה מפנה אותנו לפתח פתרונות רובוסטים וזוהי החוזקה של נשקי אנרגיה" סיכם. "הייחודיות שלהם מאפשרת לנו להתמודד גם עם ה- unknown unknown (מה שאנחנו לא יודעים שאנחנו לא יודעים)".

ISRAELDEFENSE

האוצר ומפא"ת משיקים קרנות ענק: 200 מיליון ש"ח לטכנולוגיות הגנה מתקדמות

כללי ההשקעה שנקבעו במכרז מציבים דגש משמעותי על טכנולוגיות צבאיות מסורתיות יותר, כאשר נקבע כי לפחות חמישים אחוז מסך הכספים שיושקעו בקרן יופנו לחברות שהמוצר העיקרי שלהן הוא ציוד צבאי

עמי רוחקס דומבה

משרד האוצר יחד עם המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית במשרד הביטחון (מפא"ת) הכריזו על מהלך משמעותי במטרה להזניק את תעשיית הטכנולוגיה הביטחונית בישראל, באמצעות פרסום מכרז לבחירת שני מנהלי קרנות השקעה בתחום ה-Defense Tech.

המהלך יכלול ערבות מדינה כוללת בגובה של 200 מיליון ש"ח, שנועדה לתמוך בפיתוחים פורצי דרך בתחומים קריטיים לביטחון המדינה, כפי שעולה ממסמכי המכרז הרשמיים שפורסמו ב-30 בנובמבר 2025 תחת מספר 2025/14.

על פי תנאי המכרז, מדובר בהשקעות שמטרתן המרכזית היא קידום טכנולוגיות צבאיות מתקדמות, והוא משרטט מפה ברורה לסיווג הטכנולוגיות הזכאיות להשקעה. המסמך המקיף מגדיר את ה"דפנס טק" כמכסה ציוד צבאי ושאינו סייבר, כהגדרתו בהסדר ואסנאר הבינלאומי, וכן ציוד דו-שימושי ומוצרי סייבר הגנתי המיועדים למניעה ולטיפול באיומי סייבר. בפסקה זו קיים ייחוס למקור בצורה נרטיבית.

כללי ההשקעה שנקבעו במכרז מציבים דגש משמעותי על טכנולוגיות צבאיות מסורתיות יותר, כאשר נקבע כי לפחות חמישים אחוז מסך הכספים שיושקעו בקרן יופנו לחברות שהמוצר העיקרי שלהן הוא ציוד צבאי שאינו סייבר. מנגד, רק עד עשרה אחוז מסך ההשקעות מותר שיופנה לחברות המפתחות ציוד צבאי סייבר או ציוד סייבר הגנתי, ואילו היתרה תוקדש לציוד דו-שימושי.

מודל הערבות הממשלתית נבנה כרשת ביטחון למשקיעים, כך שכל אחד משני הזוכים במכרז יהיה זכאי לתקרת ערבות של עד מאה מיליון ש"ח. הערבות תמומש אם התשואה הפנימית של הקרן תהיה שלילית בתום תקופת ההתקשרות, המוגדרת לשמונה שנים עם אופציה לשלוש שנים נוספות. מנגד, אם הקרן תציג תשואה שנתית העולה על שנים עשר אחוז, היא תידרש לשלם למדינה פרמיית הצלחה כנגד התמיכה שהוענקה.

תנאי הסף להשתתפות במכרז מעידים על הרצון של משרדי הממשלה למשוך גורמים מנוסים ובעלי יכולות מוכחות בתחום ניהול קרנות ההשקעה. בין הדרישות המרכזיות נדרש ניסיון מוכח של חמישים ושניים חודשים לפחות כמנהל או שותף בכיר בקרנות השקעה פרטיות, עם היקף נכסים מינימלי של חמש מאות עשרים וחמישה מיליון ש"ח בשנה אחת. כמו כן, המציע צריך להציג גיוס כספי השקעה מצטבר בהיקף של לפחות מאה שבעים וחמישה מיליון ש"ח או חמישים מיליון דולר.

בנוסף לניסיון, המציעים נדרשים להציג התחייבויות השקעה בסך של שלוש מאות וחמישים מיליון ש"ח ממשקיעים שיתמכו בקרן, וכן נדרשת הגשת ערבות הצעה אוטונומית בסך חמישה מיליון ש"ח. הצעות המשתתפים יעברו ניקוד שבו יוענק משקל שישים אחוז לאיכות המציע והתאמת הצעתו למטרות התוכנית, ואילו ארבעים אחוז מהציון יינתן להצעה הכמותית, קרי דרישה נמוכה יותר לערבות ממשלתית.

המכרז מתנהל בשיטה דו-שלבית, והמועד האחרון להגשת ההצעות לשלב הראשון נקבע ליום עשרים ושישה בפברואר 2026 בשעה שמונה בערב.

ישראל היום

אמיר ברעם: "ישראל עוברת מ'סייבר ניישן' ל-DefenseTech Nation"

לילך שובל

מפא"ת ומשרד הביטחון, יחד עם מרכז בלווטניק באוניברסיטת ת"א, פתחו הבוקר את כנס הדיפנסטק הבינלאומי. מנכ"ל המשרד, אלוף (מיל') אמיר ברעם, אמר כי ישראל עוברת מ"סייבר ניישן" ל-"DefenseTech Nation", עם חדשנות הנפרשת ממערכות הגנה אווירית ועד טכנולוגיות חלל. תל אביב מדורגת כיום כמרכז הדיפנסטק השלישי בעולם.

ישראל היום

בקרוב מאוד: המערכת שוברת השוויון נכנסת לצה"ל

ראש מפא"ת, תא"ל דני גולד: "מערכת 'אור איתן' תימסר ותשנה את חוקי המשחק בשדה הקרב" • "עובדים כבר על הדורות הבאים"

לילך שובל

מערכת הלייזר "אור איתן", אחת מההתפתחות הטכנולוגיות המשמעותיות ביותר בתחום ההגנה האווירית הישראלית, השלימה את שלב הפיתוח והניסויים ותימסר לצה"ל בסוף החודש. זאת על פי הודעת ראש מפא"ת (המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית) במשרד הביטחון, תא"ל (מיל>) ד"ר דני גולד, שנאם הבוקר (שני) בכנס דיפנסטק השנתי. "פיתוח מערכת הלייזר <אור איתן> הושלם", הכריז גולד בכנס שהתקיים בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון והמרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב. "אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025, ובמקביל עובדים כבר על הדורות הבאים".

"תשנה את חוקי המשחק בשדה הקרב"

לדברי ראש מפא"ת, מערכת "אור איתן" צפויה "לשנות את חוקי המשחק של שדה הקרב" לאחר שהוכיחה את יכולותיה בסדרת ניסויים מקיפה. המערכת, שפותחה על ידי מפא"ת לאורך שנים, נחשבת לפריצת דרך משמעותית ביכולות ההגנה האווירית של מדינת ישראל ותאפשר יירוט איומים באמצעות קרן לייזר בעלות נמוכה משמעותית לעומת מיירטים קינטיים מסורתיים.

גולד הוסיף כי במקביל למסירת היכולת הראשונה, הפיתוח ממשיך קדימה: "אנו עובדים כבר על הדורות הבאים" של מערכות הלייזר, במסגרת התכנון ארוך הטווח של משרד הביטחון.

לקחי מלחמת "חרבות ברזל"

ראש מפא"ת התייחס גם להישגים הטכנולוגיים במהלך מבצע "חרבות ברזל" (שכונה בהודעה "עם כלביא"). "ההישגים במהלך המבצע הם חסרי תקדים", אמר גולד. "המבצע סיפק הצצה ל>מאגר ההפתעות< - טכנולוגיות ישראליות מעצמתיות פורצות דרך שהן פרי פיתוח של אנשי מפא"ת לדורותיהם".

גולד הדגיש כי משרד הביטחון פועל כבר היום על פי אסטרטגיה ברורה: "אנחנו נמצאים עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה - בחלל, בתקיפה ובהגנה - ונפעיל אותן בזמן הנכון. מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים".

בנאומו התייחס ראש מפא"ת גם למהפכה שעוברת על תעשיית הביטחון בישראל. "בתחום הדיפנסטק המשחק השתנה - סטארטאפים מתחרים היום <ראש בראש> עם החברות הגדולות וזוכים", אמר גולד, והוסיף דוגמה קונקרטית: "רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

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ידיעות אחרונות

"תשנה את חוקי המשחק": מערכת הלייזר אור איתן תימסר ב-30 בדצמבר לצה"ל

ראש מפא"ת, תא"ל (מיל') ד"ר דני גולד, אמר בכנס דיפנס-טק בת"א כי "אנו נמצאים כבר עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה". אלוף (מיל') אמיר ברעם: "במשך שנים ישראל הייתה ידועה בתור 'סייבר ניישן. היום, אנחנו 'דיפנס-טק ניישן'. ת"א המרכז השישי בגודלו בעולם בתחום"

טל שחף, גל גנות

ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, הכריז היום (שני) בכנס דיפנס-טק בתל אביב כי מפא"ת, רפאל ואלביט יעמדו בהתחייבות שלהן למסור את נשק הלייזר "אור איתן" (לשעבר מגן אור) לידי מערך ההגנה האווירית של חיל האוויר עד סוף השנה. לדבריו "היכולת הראשונה" תימסר לצה"ל ב-30 בדצמבר 2025. עוד אמר גולד כי "במקביל אנחנו עובדים כבר על הדורות הבאים". יש לציין כי מדובר כרגע ביכולות ראשוניות בשלב זה, והצבא עוד צריך לבצע תהליך קליטה שלה והכשרה.

על המערכת עצמה, הוסיף ראש מפא"ת: "מערכת הלייזר <אור איתן> צפויה לשנות את חוקי המשחק של שדה הקרב, והיא מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת. בתחום הדיפנסטק המשחק השתנה - סטארטאפים מתחרים היום <ראש בראש> עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים.

"בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה - ונפעיל אותן בזמן הנכון. מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו קדימה".

מנכ"ל משרד הביטחון: "כל החזיתות עדיין פתוחות - האויבים שלנו מתכוננים"

ב-2024 חתם משרד הביטחון על 21 הסכמים בין ממשלתיים (G2G) בהיקף מיליארדים בתחום הדיפנס-טק. כמו כן, הוא השקיע 1.2 מיליארד שקל בסטארטאפים, כאשר מעל 300 מהם עובדים כיום עם מפא"ת, ויותר מ-130 מהם לקחו חלק בפעילות מבצעית במהלך המלחמה, כך סיפר מנכ"ל משרד הביטחון, אלוף (מיל') אמיר ברעם, בדבריו בכנס דיפנס-טק בתל אביב הבוקר (שני).

ברעם אמר: "במשך שנים ישראל הייתה ידועה בתור <סייבר ניישן. היום, אנחנו <דיפנס-טק ניישן>. יכולות החדשנות שלנו משתרעות על כל הספקטרום - ממערכות הגנה אוויריות, כלים אוטונומיים, לוחמה אלקטרונית, טכנולוגיות קוונטום, מערכות מודיעין מפותחות, סייבר ועד טכנולוגיות חלל". לדבריו, תל אביב מדורגת כעת כמרכז הדיפנס-טק השלישי בעולם. "תעשיות הביטחון הגדולות שלנו חתמו על חוזים בינלאומיים משמעותיים בכל אירופה, אסיה וצפון אמריקה, ואפילו החברות הקטנות והבינוניות צומחות בקצב מסחרר עם חוזים בשווי מאות מיליוני דולרים", הוסיף.

בהתייחס למצב הביטחוני הגיאו-פוליטי של ישראל, אמר: "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום. תקופה זו מביאה עימה אי-ודאות וסיכונים, אבל גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע. המציאות לעולם לא עומדת מלכת - לא באסטרטגיה ולא בטכנולוגיה – וכל מי שלא מתאים את עצמו לכך בסופו של דבר נשאר מאחור.

"משרד הביטחון עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות. כעת, בזמן שאנו מתכנסים כאן, טכנולוגיות דיפנס-טק ישראליות מגנות על חיים בעולם. זה לא רק דיבור - זו מציאות. הצורך הקיומי והאתגרים הביטחוניים שלנו יצרו אקוסיסטם ייחודי שרק מעטים בעולם יכולים לשכפל, בו באות לידי ביטוי מערכות חדשניות בתחום הדיפנס-טק, עם עשרות שנות ניסיון מבצעי אמיתי. אלו מערכות שהוכחו בשדה הקרב. התובנות של חיילים מהשטח מעצבות באופן ישיר את הפתרונות הטכנולוגיים לצרכים המבצעיים שלהם. יש לנו מעגל משוב ישיר מקו החזית למהנדסי התעשייה הביטחונית - וזה יוצר שרשרת אספקה חזקה. זו המשמעות של דיפנס-טק בישראל".

כנס הדיפנס-טק (Defense Tech Summit) הבינלאומי השני הוא יוזמה של מפא"ת במשרד הביטחון, בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון באוניברסיטת ת"א, והשנה הוא מתמקד בחדשנות טכנולוגית לאור לקחי המלחמה. בין משתתפי הכנס: ראש מפא"ת במשרד הביטחון; תא"ל (מיל') ד"ר דניאל גולד, יו"ר המרכז למחקר סייבר באוניברסיטת ת"א; אלוף (במיל') פרופ' יצחק בן ישראל, ראש מינהלת החלל במפא"ת אבי ברגר; אלוף (מיל') ניצן אלון, עוזר מזכיר המלחמה לטכנולוגיות קריטיות במשרד הביטחון; תת מזכיר המלחמה האמריקני למחקר והנדסה ומנהל יחידת החדשנות הביטחונית, מייקל "מייק" דוד; פיונה מארי, דיקנית באוניברסיטת MIT; ושון מגווייר, שותף בקרן סאקויה העולמית.

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ידיעות אחרונות

מפא"ת: מערכת ראשונה של מיירט הלייזר "אור איתן" תימסר לצה"ל בסוף השנה

אלישע בן קימון

ראש המנהל למחקר ולפיתוח אמצעי לחימה ותשתית טכנולוגית (מפא"ת) במשרד הביטחון, תא"ל במיל> דני גולד, אמר כי מערכת ראשונה של מיירט הלייזר העוצמתי "אור איתן" תימסר לצה"ל ב-30 בדצמבר. הוא הוסיף בכנס דיפנסטק (Defense Tech Summit), בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון באוניברסיטת תל אביב: "אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה - בחלל, בתקיפה ובהגנה".

מנכ"ל משרד הביטחון, אלוף במיל> אמיר ברעם, הוסיף: "התעשיות הביטחוניות עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן".

וואלה!

הסוף לטילים על ישראל? פיתוח מערכת הלייזר הושלמה, מתי תכנס לשימוש?

ראש מפא"ת חשף הבוקר בכנס דיפסנטק כי "פיתוח מערכת <אור איתן> הושלם, נמסור יכולת ראשונה ב-30 בדצמבר", ואמר כי מפא"ת היא "פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים"; מנכ"ל משרד הביטחון: "כל החזיתות עדיין פתוחות, האויבים שלנו לומדים ומתכוננים"

אודי עציון

רגע לפני סוף השנה יקבל חיל האוויר את מערכת היירוט בלייזר <אור איתן> הראשונה שיצאה מפס הייצור ברפאל. כך חשף הבוקר ראש מפא"ת (מנהל למחקר ופיתוח אמצעי לחימה) במשרד הביטחון, תא"ל (מיל>) ד"ר דני גולד.

"אור איתן שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת. אנו נערכים למסור יכולות ראשונות לצה"ל ב-30 לדצמבר, ובמקביל אנו עובדים כבר על הדורות הבאים".

גולד דיבר בכנס דיפנסטק (Defense Tech Summit) של מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע, המרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב. הכנס מתקיים זו השנה השנייה ברציפות בהשתתפות מאות נציגים מהעולם ומתמקד בחדשנות טכנולוגית לאור לקחי המלחמה.

בעוד שמאחורי אור איתן נמצאות חברות ותיקות וגדולות כמו רפאל המשמשת כקבלנית הראשית ואלביט שמספקת את תותח הלייזר עצמו, גולד אמר כי מפא"ת ומשרד הביטחון מגבירים את העבודה עם חברות סטארט אפ. "בתחום הדיפנסטק המשחק השתנה - סטארטאפים מתחרים היום <ראש בראש> עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

אחרי שבמבצע עם כלביא באיראן השתמש צה"ל בכמה פיתוחים מהשנים האחרונות שנשמרו כהפתעה למלחמה הבאה, אומר גולד כי "בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה - ונפעיל אותן בזמן הנכון.

"מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו".

מנכ"ל משרד הביטחון, אלוף (מיל>) אמיר ברעם אמר בכנס כי ישראל נערכת לעימותים הבאים עם איראן. "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום. תקופה זו מביאה עימה אי-ודאות וסיכונים, אבל גם הזדמנויות אסטרטגיות גדולות למי שמבין את הרגע. המציאות לעולם לא עומדת מלכת - לא באסטרטגיה ולא בטכנולוגיה - וכל מי שלא מתאים את עצמו לכך, בסופו של דבר נשאר מאחור. משרד הביטחון עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות".

ראש מפא"ת:'מערכת הלייזר צפויה לשנות את כללי המשחק'

אלישע בן קימון

בכנס דיפנסטק של מפא"ת במשרד הביטחון בשיתוף אוניברסיטת תל אביב, הודיע הבוקר ראש מפא"ת, תא"ל (מיל>) ד"ר דני גולד, כי פיתוח מערכת הלייזר "אור איתן" הושלם וכי צה"ל צפוי לקבל יכולת ראשונית כבר ב-30 בדצמבר 2025.

לדברי גולד, המערכת החדשה צפויה "לשנות את חוקי המשחק" בשדה הקרב, לאחר סדרת ניסויים מוצלחת שהוכיחה את יכולותיה המבצעיות. גולד הוסיף כי מפא"ת כבר פועלת על "הדורות הבאים" של המערכת, כחלק מתהליך פיתוח רציף.

גולד התייחס גם להישגי מבצע "עם כלביא", ואמר כי המבצע חשף "מאגר הפתעות". טכנולוגיות ישראליות פורצות דרך שפותחו במפא"ת לאורך השנים. הוא ציין מגמה מובהקת בשוק הדיפנס־טק: "סטארטאפים היום מתחרים ראש בראש מול החברות הגדולות וזוכים. רק לאחרונה סטארטאפים שהתאגדו יחד גברו על כל התעשיות הגדולות וזכו במכרז לאספקת מערך רחפנים תוקפים לצה"ל."

לדבריו, בהתאם לאסטרטגיית משרד הביטחון, מפא"ת ממשיכה לפתח יכולות מתקדמות למלחמה הבאה בחלל, בתקיפה ובהגנה תוך שילוב עוצמת התעשיות הביטחוניות עם חדשנות מהירה של חברות צעירות.

מנכ"ל משרד הביטחון אמיר ברעם שהוסיף ואמר: "במשך שנים ישראל הייתה ידועה בתור 'סייבר ניישן'. היום, אנחנו 'דיפנסטק ניישן'. יכולות החדשנות שלנו משתרעות על כל הספקטרום - ממערכות הגנה אוויריות ועד טכנולוגיות חלל. משרד הביטחון והתעשיות הביטחוניות עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות".

בכנס השתתפו גם יו"ר המרכז למחקר סייבר פרופ> יצחק בן ישראל, אלוף (מיל>) ניצן אלון, בכירי MIT, DIU, תעשיות בינלאומיות ועוד.

מערכת הלייזר תימסר החודש לצה"ל: "עובדים על טכנולוגיה פורצת דרך לעימות עתידי עם איראן"

ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, בכנס דיפסנטק של מפא"ת: 'פיתוח מערכת הלייזר 'אור איתן' הושלם. אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025 ובמקביל עובדים כבר על הדורות הבאים"

ראש מפא"ת (המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית) במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, נאם הבוקר, (שני) בכנס דיפנסטק של מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע, המרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב. הכנס מתקיים זו השנה השניה ברציפות בהשתתפות מאות נציגים מהעולם ומתמקד בחדשנות טכנולוגית לאור לקחי מלחמה.

ראש מפא"ת אמר בנאומו: 'מערכת הלייזר 'אור איתן' שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת. אנו נערכים למסור יכולות ראשונות לצה"ל ב-30.12.2025. במקביל אנו עובדים כבר על הדורות הבאים".

'בתחום הדיפנסטק המשחק השתנה - סטארטאפים מתחרים היום <ראש בראש> עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

'בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה - ונפעיל אותן בזמן הנכון. מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו קדימה".

בין המשתתפים הבולטים בכנס דיפנסטק: מנכ"ל משרד הביטחון, אלוף (מיל') אמיר ברעם, ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דניאל גולד, יו"ר המרכז למחקר סייבר באוניברסיטת ת"א, אלוף (במיל') פרופ' יצחק בן ישראל, ראש מו"פ במפא"ת, תא"ל בני אמינוב, ראש מנהלת החלל במפא"ת, אבי ברגר, אלוף (מיל') ניצן אלון, דיקנית באוניברסיטת MIT, פיונה מארי, סגן ראש ה-DIU האמריקאי והממונה על טכנולוגיות מפציעות, מייק דוד, שותף בקרן סאקויה העולמית, שון מגוייר , נציג חברת Rheinmetall, כריסטיאן סטיינבורן ובכירים רבים נוספים מרחבי הארץ והעולם.

JDN חדשות

מערכת הלייזר "אור איתן" מוכנה; בעוד חודש בעז"ה תועבר לצה"ל

ראש מפא"ת, תא"ל (מיל') ד"ר דני גולד, הכריז בכנס הדיפנסטק הבינלאומי כי פיתוח מערכת הלייזר "אור איתן" הושלם והיא צפויה להימסר לצה"ל בסוף החודש. "אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025", אמר גולד, והוסיף כי במקביל עובדים כבר על הדורות הבאים

זאב גור אריה

מפא"ת במשרד הביטחון, בשיתוף המרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב, פתחו הבוקר (יום ב') את כנס הדיפנסטק (Defense Tech Summit) הבינלאומי השני בישראל, המתמקד בחדשנות טכנולוגית לאור לקחי המלחמה.

ראש מפא"ת (המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית) במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, אמר בנאומו: "מערכת הלייזר 'אור איתן' שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת. אנו נערכים למסור יכולות ראשונות לצה"ל ב-30.12.2025. במקביל אנו עובדים כבר על הדורות הבאים".

גולד התייחס לשינוי בתחום הדיפנסטק: "בתחום הדיפנסטק המשחק השתנה – סטארטאפים מתחרים היום 'ראש בראש' עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים."

ראש מפא"ת הוסיף: "בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה – ונפעיל אותן בזמן הנכון. מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים."

מנכ"ל משרד הביטחון, אלוף (מיל') אמיר ברעם, פתח את הכנס ואמר: "במשך שנים ישראל הייתה ידועה בתור 'סייבר ניישן'. היום, אנחנו 'דיפנסטק ניישן'. יכולות החדשנות שלנו משתרעות על כל הספקטרום – ממערכות הגנה אוויריות, כלים אוטונומיים, לוחמה אלקטרונית, טכנולוגיות קוונטום, מערכות מודיעין מפותחות, סייבר ועד טכנולוגיות חלל."

ברעם הוסיף: "רק בשנת 2024 חתם משרד הביטחון על 21 הסכמי G2G בין-ממשלתיים בשווי מיליארדים. השקענו 1.2 מיליארד שקלים בסטארטאפים בלבד, כאשר מעל 300 מהם עובדים כיום עם מפא"ת, ויותר מ-130 מהם לקחו חלק בפעילות מבצעית במהלך המלחמה. תל אביב מדורגת כעת כמרכז הדיפנסטק השלישי בעולם."

היערכות לעימות עתידי עם איראן

בהתייחס למצב הביטחוני, אמר המנכ"ל: "כל החזיתות עדיין פתוחות והאויבים שלנו למדים ומתכוננים מיום ליום. משרד הביטחון עמוק בעבודה על פיתוח הדורות הבאים של טכנולוגיה פורצת דרך לעימות עתידי עם איראן, בהגנה ובהתקפה ומפתחים יכולות נוספות."

ברעם הדגיש: "כעת, בזמן שאנו מתכנסים כאן, טכנולוגיות דיפנסטק ישראליות מגנות על חיים בעולם. זה לא רק דיבור – זו מציאות. הצורך הקיומי והאתגרים הביטחוניים שלנו יצרו אקוסיסטם ייחודי שרק מעטים בעולם יכולים לשכפל, בו באות לידי ביטוי מערכות חדשניות בתחום הדיפנסטק, עם עשרות שנות ניסיון מבצעי אמיתי. אלו מערכות שהוכחו בשדה הקרב. התובנות של חיילים מהשטח מעצבות באופן ישיר את הפתרונות הטכנולוגיים לצרכים המבצעיים שלהם. יש לנו מעגל משוב ישיר מקו החזית למהנדסי התעשייה הביטחונית – וזה יוצר שרשרת אספקה חזקה. זו המשמעות של דיפנסטק בישראל".

בין המשתתפים הבולטים בכנס: מנכ"ל משרד הביטחון אלוף (מיל') אמיר ברעם, ראש מפא"ת תא"ל (מיל') ד"ר דני גולד, יו"ר המרכז למחקר סייבר באוניברסיטת תל אביב אלוף (במיל') פרופ' יצחק בן ישראל, דיקנית באוניברסיטת MIT פיונה מארי, סגן ראש ה-DIU האמריקאי מייק דוד, ובכירים רבים נוספים מרחבי הארץ והעולם.

המחדש

"מערכת הלייזר מוכנה, ה'הפתעות' הבאות כבר בפיתוח"

ראש מפא"ת, תא"ל (מיל') ד"ר דני גולד, מצהיר כי הגוף שהוא עומד בראשו הוא "פס ייצור שמייצר את שוברי השוויון הבאים" כחלק מהפקת לקחי המלחמה

דודי סגל

ראש המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית (מפא"ת) במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, נאם הבוקר (ב') בכנס דיפנסטק שנערך בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון באוניברסיטת תל אביב. הכנס, המתקיים זו השנה השנייה ברציפות, מתמקד בחדשנות טכנולוגית לאור לקחי המלחמה, ומשך אליו מאות נציגים בכירים מישראל ומהעולם.

בנאומו, חשף ד"ר גולד פרטים על פיתוחים טכנולוגיים פורצי דרך, ובראשם מערכת הלייזר "אור איתן". ראש מפא"ת הודיע כי פיתוח המערכת הושלם בהצלחה לאחר סדרת ניסויים.

"מערכת הלייזר 'אור איתן' שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת", אמר גולד. עוד חשף ראש מפא"ת את לוח הזמנים להכנסת היכולת החדשה לשימוש מבצעי: "אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025 ובמקביל עובדים כבר על הדורות הבאים".

ד"ר גולד התייחס להישגי צה"ל במבצעים האחרונים והבהיר כי הם מבוססים על יתרון טכנולוגי ישראלי מובהק. "ההישגים במהלך מבצע 'עם כלביא' הם חסרי תקדים. המבצע סיפק הצצה ל'מאגר ההפתעות'- טכנולוגיות ישראליות מעצמתיות פורצות דרך שהן פרי פיתוח של אנשי מפא"ת לדורותיהם'.

ראש מפא"ת התייחס לשינויים הדרמטיים בשוק הדיפנסטק, המשלבים בין עוצמת התעשיות הגדולות לחדשנות של חברות קטנות. 'בתחום הדיפנסטק המשחק השתנה – סטארטאפים מתחרים היום 'ראש בראש' עם החברות הגדולות וזוכים", הדגיש גולד, וסיפק דוגמה עדכנית: "רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

לדבריו, מפא"ת פועל כעת על מנת לשלב בין העוצמות הללו לקראת המערכה הבאה. 'בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה – ונפעיל אותן בזמן הנכון".

הוא סיכם את חזון המנהל: "מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו קדימה".

סרוגים

ממציא "כיפת ברזל" בעדכון דרמטי

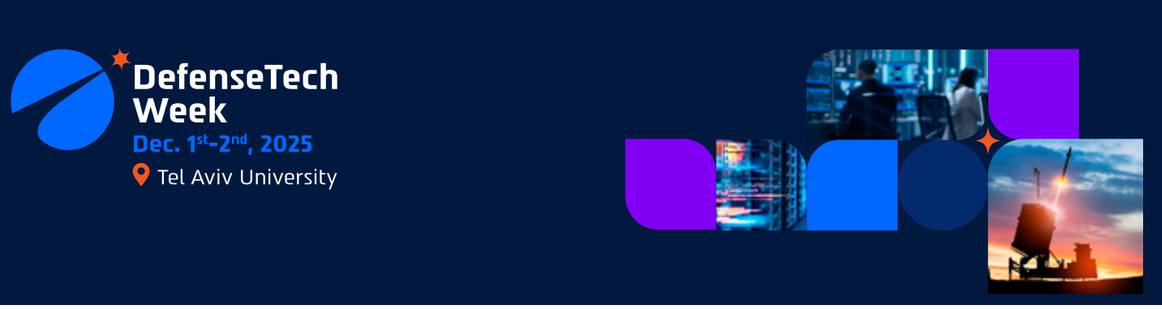
ראש מפא"ת, תא"ל (מיל') ד"ר דני גולד, חשף הבוקר כי פיתוח מערכת הלייזר "אור איתן" הושלם: "אנו נערכים למסור יכולת ראשונה לצה"ל בחודש הקרוב"

ראש מפא"ת – המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית – במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, נאם הבוקר בכנס דיפנסטק (Defense Tech Summit) של מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע, המרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב.

ראש מפא"ת אמר בנאומו: "מערכת הלייזר "אור איתן" שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת. אנו נערכים למסור יכולות ראשונות לצה"ל ב-30.12.2025. במקביל אנו עובדים כבר על הדורות הבאים".

"בתחום הדיפנסטק המשחק השתנה – סטארטאפים מתחרים היום <ראש בראש> עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

"בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה – ונפעיל אותן בזמן הנכון. מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו קדימה".



ערוץ 7

מפא"ת: "פיתוח מערכת הלייזר 'אור איתן' הושלם, אנו נערכים למסור יכולת ראשונה לצה"ל בסוף השנה"

ראש המנהל למחקר ולפיתוח אמצעי לחימה ותשתית טכנולוגית (מפא"ת) במשרד הביטחון, תא"ל במיל> דני גולד, אמר כי פיתוח מערכת הלייזר "אור איתן" הושלם. אנו נערכים למסור יכולת ראשונה לצה"ל ב-30 בדצמבר ובמקביל עובדים כבר על הדורות הבאים".

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"המערכת תשנה את כללי המשחק": זה תאריך המסירה

ראש מפא"ת במשרד הביטחון נאם הבוקר בכנס דיפנסטק, והתייחס בין היתר למערכת הלייזר 'אור איתן'

קובי פינקלר

ראש מפא"ת (המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית) במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, נאם הבוקר (שני), בכנס דיפנסטק (Defense Tech Summit) של מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע, המרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב.

הכנס מתקיים זו השנה השניה ברציפות בהשתתפות מאות נציגים מהעולם ומתמקד בחדשנות טכנולוגית לאור לקחי מלחמה.

הפתרון לאיום הרחפנים בגבולות מתקרב: "השגנו קפיצה טכנולוגית"

ראש מ"פ במפא"ת במשרד הביטחון, תא"ל בני אמינוב, הכריז כי בשבועות האחרונים הושגה פריצת דרך טכנולוגית בסוגיית גילוי רחפני האויב, וכי המערכת הביטחונית נמצאת בעיצומו של פיתוח פתרונות יירוט מתקדמים

מירב ארד

בכנס דיפנסטק (Defense Tech Summit) שנערך הבוקר (ב') על-ידי מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע והמרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב, נחשפה בשורה משמעותית בתחום ההתמודדות עם איום הרחפנים בגבולות. ראש מו"פ במפא"ת, תא"ל בני אמינוב, הכריז כי בשבועות האחרונים הושגה פריצת דרך טכנולוגית בסוגיית גילוי רחפני האויב, וכי המערכת הביטחונית נמצאת בעיצומו של פיתוח פתרונות יירוט מתקדמים.

לדברי אמינוב, "בעיית הרוק"ק (רום קרוב לקרקע) היא דוגמה לבעיה שדורשת ממערכת הביטחון שינוי בשיטות העבודה שלה - מענה בקבועי זמן מהירים, התפתחות ספירלית, האצת ניסויים תוך כדי תהליך הפיתוח וחיבור בין חברות דיפנסטק קטנות לחברות ביטחוניות גדולות".

אמניוב הוסיף כי "אתגר הרחפנים בגבולות בדרך לפתרון. בשבועות האחרונים השגנו פריצת דרך טכנולוגית בסוגיית גילוי רחפני האויב ואנו עמלים על פתרונות היירוט באמצעות רחפנים, המאפשרים מענה לתרחישי נחילים תוך האצה של נשקי אנרגיה חדשים".

"האויב ממשיך בתחרות הלמידה. זה מפנה אותנו לפתח פתרונות רובוסטים וזוהי החוזקה של נשקי אנרגיה. הייחודיות שלהם מאפשרת לנו להתמודד גם עם ה- unknown unknown (מה שאנחנו לא יודעים שאנחנו לא יודעים)".

בין המשתתפים הבולטים בכנס דיפנסטק: מנכ"ל משרד הביטחון, אלוף (מיל') אמיר ברעם, ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דניאל גולד, יו"ר המרכז למחקר סייבר באוניברסיטת ת"א, אלוף (מיל') פרופ' יצחק בן-ישראל, ראש מו"פ במפא"ת, תא"ל בני אמינוב, ראש מנהלת החלל במפא"ת, אבי ברגר, אלוף (מיל') ניצן אלון, דיקנית באוניברסיטת MIT, פיונה מארי, סגן ראש ה-DIU האמריקני והממונה על טכנולוגיות מפציעות, מייק דוד, שותף בקרן סאקויה העולמית, שון מגוייר, נציג חברת Rheinmetall, כריסטיאן סטיינבורן ובכירים רבים נוספים מרחבי הארץ והעולם.

מוכנה להימסר לצה"ל: פיתוח מערכת הלייזר נגד מל"טים הושלם

ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, בכנס דיפסנטק של מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע, טכנולוגיה וביטחון באוניברסיטת ת"א: 'פיתוח מערכת הלייזר 'אור איתן' הושלם. אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025 ובמקביל עובדים כבר על הדורות הבאים"

יענקי פרבר

ראש מפא"ת (המנהל למחקר ופיתוח אמצעי לחימה ותשתית טכנולוגית) במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, נאם הבוקר, (ב') בכנס דיפנסטק (Defense Tech Summit) של מפא"ת במשרד הביטחון בשיתוף סדנת יובל נאמן למדע, המרכז למחקר סייבר ע"ש בלווטניק באוניברסיטת תל אביב. הכנס מתקיים זו השנה השניה ברציפות בהשתתפות מאות נציגים מהעולם ומתמקד בחדשנות טכנולוגית לאור לקחי מלחמה.

ראש מפא"ת אמר בנאומו: 'מערכת הלייזר 'אור איתן' שצפויה לשנות את חוקי המשחק של שדה הקרב, מוכנה להימסר לצה"ל עם השלמת הפיתוח וסדרת הניסויים שהוכיחו את יכולות המערכת. אנו נערכים למסור יכולות ראשונות לצה"ל ב-30.12.2025. במקביל אנו עובדים כבר על הדורות הבאים".

'בתחום הדיפנסטק המשחק השתנה - סטארטאפים מתחרים היום <ראש בראש> עם החברות הגדולות וזוכים. רק לאחרונה מספר סטארטאפים שהתחברו, התחרו מול כל התעשיות הגדולות במכרז של מפא"ת, ונבחרו לספק לצה"ל מערך רחפנים תוקפים".

'בהתאם לאסטרטגיית משרד הביטחון, אנחנו נמצאים היום עמוק בעבודה על הדורות הבאים של ההפתעות למלחמה הבאה, בחלל, בתקיפה ובהגנה - ונפעיל אותן בזמן הנכון. מפא"ת הוא פס ייצור שמייצר את ההפתעות הבאות, את שוברי השוויון הבאים, שמשלב את העוצמה של התעשיות הגדולות עם המבצעיות המדהימה שהציגו הסטארטאפים במהלך המלחמה, זו תשתית העוצמה שלנו קדימה".

גם ראש מו"פ במפא"ת שבמשרד הביטחון, תא"ל בני אמינוב, נאם הבוקר, (ב') בכנס דיפנסטק (Defense Tech Summit) והתייחס לאתגר הרחפנים בגבולות: "בעיית הרוק"ק (רום קרוב לקרקע) היא דוגמה לבעיה שדורשת ממערכת הביטחון שינוי בשיטות העבודה שלה - מענה בקבועי זמן מהירים, התפתחות ספירלית, האצת ניסויים תוך כדי תהליך הפיתוח וחיבור בין חברות דיפנסטק קטנות לחברות ביטחוניות גדולות".

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מקור ראשון

"מי אמר שלא משתמשים בה?": מערכת הלייזר כבר מיירטת רחפנים

משרד הביטחון, חיל האוויר, וחברת רפאל הודיעו כי השלימו בהצלחה סדרת ניסויים מבצעיים מתקדמת, שארכה מספר שבועות, להוכחת יכולות מערכת הלייזר רב העוצמה

ישראל שמאי

אחד הנושאים החמים ביותר בכנס "דיפנס-טק" (DefenseTech) של מפא"ת במשרד הביטחון שנפתח אתמול באוניברסיטת תל-אביב, היה מערכת "אור איתן", מערכת הגנה אקטיבית ישראלית מבוססת נשק לייזר להגנה מפני רקטות, טילים ופצצות מרגמה.

ארי סכר, מנהל פיתוח עסקי ברפאל שגם שימש בעבר כמהנדס מערכות בכיפת ברזל, אומר ל"מקור ראשון" על התפקוד של המערכת במערכה עד כה כי "ראיתי אותה עושה דברים מדהימים עם המון יירוטים מדויקים ומוצלחים".

ראש מפא"ת במשרד הביטחון, תא"ל (מיל') ד"ר דני גולד, אמר אתמול (שני) בפתיחת הכנס כי 'פיתוח מערכת הלייזר 'אור איתן' הושלם. אנו נערכים למסור יכולת ראשונה לצה"ל ב-30.12.2025 ובמקביל עובדים כבר על הדורות הבאים".

למה התכוון ראש מפא"ת שדיבר על "הדורות הבאים" של המערכת?

"יש שלושה דגמים של המערכת: קטן, בינוני וגדול. הדגם הקטן והבינוני הם אלה שכבר נעשה בהם שימוש מבצעי".

על פי אתר רפאל, הדגמים השונים בעלי עוצמות שונות, יעילים לטווחים שונים - ובהתאם גם לסוגי חימושים שונים. לדגם הגדול, "Iron Beam", עוצמה של 100 קילוואט והוא יעיל למרחק של עד 10 קילומטרים, בעוד הדגם הבינוני "Iron Beam - M, בעל עוצמה של 50 קילוואט ויעיל למאות מטרים עד מספר קילומטרים בודדים. הדגם הקטן, "LITE BEAM" בעל עוצמה של 10 קילוואט, משמש ליירוט איומים אווריים בגובה נמוך למרחק של עד 3 קילומטרים. הייעוד העיקרי שלו הוא יירוט כטב"מים קטנים ונחילי רחפנים.

למה לא משתמשים במערכת ה-Lite Beam ליירוט הרחפנים בגבולות?

"זה כמו שאשאל אותך למה אתה לא לובש גרביים", אומר סכר ומסביר בחיוך, "מי אמר שלא משתמשים בה?"

משרד הביטחון, חיל האוויר, וחברת רפאל מודיעים הערב (ד') כי השלימו בהצלחה סדרת ניסויים מבצעיים מתקדמת, שארכה מספר שבועות, להוכחת יכולות מערכת הלייזר רב העוצמה. לפרויקט שותפה גם חברת אלביט שמייצרת את מקור הלייזר למערכת, ובסופה אפשר לומר באופן רשמי כי הפיתוח הושלם והמערכת תימסר בקרוב לשימוש מבצעי בצה"ל.

סדרת הניסויים שהתקיימה בשדה ניסוי בדרום הארץ והסתיימה בשבוע שעבר, מסכמת את תהליך הפיתוח ומהווה את השלב האחרון לפני מסירת המערכת לשימוש מבצעי בצה"ל. במהלך הניסויים, הוכיחה המערכת את ביצועיה ביירוט מגוון איומים בתרחישים מבצעיים, בהם: כטב"מים ורחפנים אך גם טילים, רקטות ופצצות מרגמה. הצלחת הניסויים מהווה שלב קריטי לקראת המבצוע והמסירה לצה"ל עד סוף השנה. "זה דבר ייחודי בעולם", אמר יו"ר רפאל, יובל שטיניץ. למעשה כל גוף שנמצא באוויר - המערכת יודעת לטפל בו. המערכת מצוידת במכוון המאפשר טווח פעולה משודרג, דיוק גבוה ויעילות רבה - תוך שמירה על היתרון הייחודי שלה: נטרול איומים במהירות באמצעות לייזר ובעלות שולית זניחה.

משרד הביטחון כחלק מתהליך הפיכת המערכת למבצעית, ובאופן סמלי, החליט משרד הביטחון להעניק למערכת את השם "אור איתן", לזכרו של קצין אגוז, סרן איתן אוסטר ז"ל, שנפל בקרב בדרום לבנון ואביו, איש מפא"ת היה מיוזמי וממפתחי הפרויקט.

בספטמבר השנה אמר גורם בכיר במערכת הביטחון כי "עוד שלושים שנה שום דבר לא יעוף באוויר בלי אישור של מדינת ישראל באזור שלנו. הלייזר ינקה את כל הגורמים העוינים, טילים, רקטות, טילים בליסטיים, מל"טים וכל דבר. זה לא יקרה אולי באופן מיידי אבל זה יקרה בעתיד הנראה לעין".

מערכת הביטחון כבר הקדישה תקציב ייעודי להצטיידות במספר מערכות כאלה. כרגע מדובר בגרסה יבשתית אך ניתן להפוך אותה בהתאמות מסוימות גם לשימוש בזרועות נוספות כמו בים. "אור איתן" תוכל להתמודד עם מטחים בהיקף מסוים כשמעבר להם גם כיפת ברזל תיירט, והיא יודעת לפעול גם במגז אוויר של עננות חלקית.

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מקור ראשון

לייזר משודרג, הדפסת רכיבים לטילים ומצבת טילי החץ: בתע"א מתכוננים למלחמה

גורם בתעשייה האווירית למקור ראשון: מפתחים מערכת לייזר מתקדמת מזו של רפאל – "לייזר פולס". על האמצעים החדשניים שישנו דרמטית את היכולת לייצר חימושים והאם לישראל יש די טילי חץ למלחמה עם איראן וחיזבאללה

ישראל שמאי

בשיחה שערכתי עם גורם בתעשייה האווירית במסגרת כנס DefenseTech של מפא"ת במשרד הביטחון, שנערך בימים אלו באוניברסיטת תל-אביב, הוא סקר בפניי את "שכבות ההגנה" שהתעשייה האווירית מספקת לישראל. לצד האמצעים המוכרים, כמו טיל החץ וטילים נוספים, תותח מיירט ועוד, גם השכבה הנוספת כבר בפיתוח – מערכת לייזר, שלפי אותו גורם תהיה מתקדמת יותר ביחס למערכת "אור איתן" של רפאל.

לדבריו, בעוד מערכת הלייזר של רפאל דורשת מיקוד מספר רב של קרני לייזר, מה שמחייב התבייתות על מטרה למשך מספר שניות, המערכת של התעשייה האווירית מתעתדת לתת "פולס לייזר", כלומר, מכת לייזר בודדת שתיירט את האיום. באופן הזה אין הכרח שהקרניים יצליחו להתביית על המטרה מלבד בחלקיק השנייה שדורש ליירט אותה באחת. עם זאת, הוא הדגיש בפניי כי המערכת נמצאת בפיתוח ועדיין רחוקה מאוד מכניסה לשימוש מבצעי.

גורם נוסף בחברה אמר לי כי מבחינת מצבת טילי החץ, ישראל מוכנה היום לעימות צבאי מול איראן, חיזבאללה או בכל חזית אחרת.

רכיבים לטילים במדפסת תלת מימד

בפאנל בנושא פיתוחים טכנולוגיים בשדה הקרב העתידי, דיברה ד"ר אביטל שריפט, סמנכ"לית טכנולוגיות ליבה בתעשייה האווירית, על האתגרים שעומדים בפני החברה בנושא, בדגש על הצורך בייצור המוני של חימושים.

לדבריה, כדי לאפשר ייצור טילים בהתאם לצרכים של צה"ל, נדרש להטמיע שתי יכולות טכנולוגיות קריטיות שיכסו על פערים קיימים ביכולות הללו:

1. שימוש נרחב בהדפסת תלת-ממד לייצור רכיבים חיוניים במהירות, במטרה לקצר את זמני האספקה ולצמצם תלות בשרשרת אספקה מסורתית.

2. תכנון מודולרי של מערכות החימוש, כך שאלמנטים שונים בה יהיו ברי החלפה (interchangeable) בהתאם לשינוי בצורך. שריפט דיברה על פיתוח מוצרים שיאפשרו החלפת רכיבים והתאמת החימוש למשימות שונות באמצעות שינויי תוכנה - בלחיצת כפתור. הפיתוח יצטרך להתבסס על אוטומציה ותוכנה חכמה ותוך התאמה מיידית לתרחישים מבצעיים.

"היתרון בהתקדמות כזו לא נעוצה רק בהפחתת עלויות", הדגישה, "אלא גם בכך שתהיה לנו גמישות תעשייתית ומבצעית. לדבריה, היכולות והידע הדרושים כדי להתגבר על הפערים הללו כבר קיימים: "זה בעיקר היה עניין של החלטה. ההחלטה התקבלה - ואני מקווה שנראה את זה מתגשם בתוך שנים בודדות".

אם הייצור ההמוני והלייזר החדש אכן יצליחו, ישראל עשויה לזכות ביתרון משמעותי בשדה הקרב המשתנה — שבו חדשנות טכנולוגית חשובה לא פחות מעוצמת האש, ולעתים אפילו יותר. כעת האתגר הוא להפוך את הציפיות הגבוהות למערכות מתפקדות בתוך פרק הזמן המינימלי האפשרי.

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N1 מחלקה ראשונה

רמ"ח תוכ"ן במפא"ת: החברות שהתקשרו עם מפא"ת עשו אקזיט בהיקף של יותר מ-1 מיליארד דול

מירב ארד

רמ"ח תוכ"ן (תכנון, כלכלה וניתוח מערכות) במפא"ת שבמשרד הביטחון, אל"מ ישי כהן בכנס דיפסנטק: 'החברות שהתקשרו עם מפא"ת גייסו או עשו אקזיט בהיקף של יותר מ-1 מיליארד דולר בשנה האחרונה'. אל"צ כהן הוסיף: "לכן בשנה הבאה נקצה אחוז דו-ספרתי מתקציב המו"פ שלנו לפעילות עם סטרטאפים וחברות קטנות".

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תא"ל במיל ד"ר דני גולד ראש מפא"ת משרד הביטחון: פיתוח מערכת הלייזר "אור איתן". השלמה עם כיפת ברזל.

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כך נערכים בצה״ל לשדה הקרב העתידי: צבא רובוטים, רחפנים שמספקים חוזי ומודיעין ואחריהם יגיעו הלוחמים. ירון שריג, ראש מנהלת בינה מלאכותית ואוטונומיה במפא״ת, משרד הביטחון. ICRC. שילוב מרכיבים רובוטיים בראש צוות מתמרן.

אל״מ ישי כהן רמ״ח תכנון, כלכלה וניתוח מערכות במפא״ת: הסתיים פיתוח מערכת הלייזר 'אור איתן' והיא תיכנס לשימוש בסוף החודש

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גלץ

ד"ר גל הררי מפא"ת במשרד הביטחון: כנס דיפנס טק של משרד הביטחון בתל אביב בכותרת "לעצב את העתיד". פעילות מפא"ת. מערכות יירוט בלייזר.

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Press Kit

תיק עיתונות

Asaf Zohar

Gal Shabtai

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