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THE TRANSFORMATION OF THE ISRAEL DEFENSE FORCES

Avi Jager

Over the past decade, Israel's military—the Israel Defense Forces (IDF)—has enacted major changes to its structure and war-fighting priorities. Infantry, armor, and artillery forces have been reduced and ordered to implement structural and doctrinal changes to make them more relevant to anticipated future conflicts against Hamas and Hezbollah. Naval and air forces expanded their unconventional capacities at the expense of their conventional-warfare capabilities. Equally important, while Israel has allocated vast resources toward strengthening its defensive formations, the IDF has prioritized expanding cyber and intelligence units above all others.

The driving forces behind these changes were the rise of nonstate adversaries, the declining threat from neighboring nation-states, and groundbreaking innovations in military technology. The implications of this transformation for Israel's security and military preparedness are potentially severe. Hamas and Hezbollah have kept developing new ways to challenge Israel actively, which has responded principally by developing defensive measures to protect against these new threats rather than engaging with the sources of those threats offensively. Nonetheless, contending with the existential threats Israeli security experts foresee on the horizon—a multifront war with hundreds of thousands of missiles and rockets targeting Israeli population centers—could require deploying ground forces to capture areas in the Gaza Strip, southern Lebanon, Syria, and perhaps even Iraq and Iran. Since the IDF ground forces have been reduced, deprioritized, and neglected, they will encounter much greater difficulty achieving those objectives.

This article uses interviews with IDF intelligence analysts, security researchers, and past and present defense ministry personnel to present a comprehensive survey of these changes and reforms across the IDF, their sources, and their

operational implications. Among the interviewees were the alternate prime minister of Israel, Lieutenant General (Ret.) Benjamin (Benny) Gantz, former defense minister and chief of general staff Lieutenant General (Ret.) Moshe Ya'alon, and former IDF comptroller Major General (Ret.) Yitzhak Brick. In addition, ten IDF intelligence analysts and commanders of varying ranks and specializations were interviewed. The remaining data were collected from official publications of government agencies, military publications, archival materials and protocols, and over one thousand testimonies of IDF soldiers and reservists.

THE SOURCES OF IDF TRANSFORMATION

The primary reason for the IDF's transformation was a deliberate decision by Israel's political and military leadership to strengthen the country's defensive formations, prioritize cyber and intelligence capabilities, and implement structural and methodological changes to make the IDF more relevant to future wars with nonstate actors such as Hamas and Hezbollah. Benny Gantz, who currently serves as Israel's alternate prime minister and who led the IDF during this transformation period as chief of general staff, explained its rationale as follows:

[T]he purpose of [these changes] was to create a smaller yet deadlier army, capable of confronting non-state adversaries in complex environments and on multiple fronts. . . . The ability to be a smaller yet deadlier military depends primarily on the ability to obtain accurate intelligence, process and analyze it effectively, and transfer it to the combat forces in real time. . . .

I am saying, unambiguously, that I prioritized cyber and intelligence over infantry and armor . . . [;] unlike the threat of ground invasion, the threat of cyber is realistic.¹

Indeed, Israel's political consensus is that the last conventional military threat to Israel, the Syrian state, evaporated almost entirely during the civil war that began there in 2011. Until then, Israel had considered a conventional war with Syria to be a likely conflict scenario. Unlike Jordan and Egypt, Syria never signed a peace agreement with Israel, nor did it establish any diplomatic or economic relations. Syria confronted Israel directly in 1948, 1967, 1973, and 1982, and continued to require mass conscription for its army. In 2011, the Arab Spring spread to Syria and put the al-Assad regime on the cusp of extinction. The Syrian armed forces suffered tremendous losses following the outbreak of the civil war, from both casualties and defections. As a result, the regime lost territory and sovereignty to such an extent that it had to rely on foreign support to preserve its rule. Syria's declining demographic and economic stability, combined with its deteriorating military power, led Israel to judge that the al-Assad regime no longer was a central threat to its national security, at least over the short term.²

The structural and doctrinal changes to the IDF were, by and large, the operational and organizational response to the gradual transformation of Hamas

and Hezbollah from local resistance movements into powerful militant organizations. Within twenty-five years, Hamas has transformed from a grassroots socioreligious movement into a political regime with a military wing consisting of over thirty thousand combatants and an arsenal of approximately twenty thousand rockets capable of reaching targets two hundred kilometers away.³ Hezbollah has undergone an even greater organizational transformation, from a grassroots political movement into what many experts consider to be the most powerful nonstate military force in the world, with an estimated fifty to sixty thousand fighters and more than a hundred thousand rockets.⁴ Hezbollah's tactical skill set evolved drastically as a result of its experience in the Syrian civil war and it now is capable of carrying out offensive attacks beyond Lebanon's borders and on Israel's home front.⁵ Hamas's and Hezbollah's combat experience, firepower, and confidence have elevated their status in the eyes of the Israeli military leadership, which regards them as being among the primary military threats to Israel's security now.⁶

THE IDF'S NEW BATTLEGROUP FORMATION

In the summer of 2015, the IDF launched the Gideon multi-year plan (GMYP) under General Gantz to shrink, modernize, and reform the Israeli military to meet the asymmetric, nonstate adversary threats that now were prioritized over its traditional state-on-state warfare mission. The IDF cut combat and noncombat forces alike and across both active and reserve military formations. The IDF standing army was instructed to cut 10 percent of the commissioned and warrant officer posts and reduce their total number from 45,000 to 40,000 troops.⁷ The size of conscripted forces was reduced as well; the length of male conscripted service was shortened by four months, and it is expected to be reduced by an additional two months in the coming years.⁸ The reserve forces were affected most by the GMYP, which suggested cutting 30 percent of the reserve army, which meant releasing one hundred thousand out of three hundred thousand active reservists.⁹

Perhaps the most profound change suggested by the GMYP was the reorganization of the IDF's combat formations. Since the founding of the IDF, the divisional formation had been the IDF's core operational battle group.¹⁰ Following the Yom Kippur War in 1973, the decline of conventional warfare and the rise of nonstate adversaries led to an erosion of the divisional framework as the IDF's primary battle formation. As time went on, the IDF operated in smaller areas of the West Bank, Gaza Strip, and southern Lebanon that did not require, nor could they accommodate, large task forces. The IDF's missions no longer were to occupy vast adversary-state territory but, instead, to gain operational control over geographically limited hostile areas and eliminate localized threats such as missile capabilities and arms-smuggling tunnels. The capabilities of the nonstate

adversaries against which the IDF increasingly was being tasked—disorganized militias in southern Lebanon and local Palestinian terrorist cells in the West Bank and the Gaza Strip—as advanced as they were, did not justify deploying entire divisions. Furthermore, deploying large task forces could have resulted in more casualties, more collateral damage, and ineffective use of the combat forces.

In 2011, the IDF began implementing a new operational doctrine that established brigades as independent battle groups instead of division-sized formations, each capable of planning and executing ground maneuvers without divisional support.¹¹ The new brigade battlegroup formation consisted of six battalions, including infantry, armor, artillery, and combat-engineering forces. In addition, each battalion now could communicate directly with the air force

The driving forces behind these changes were the rise of nonstate adversaries, the declining threat from neighboring nation-states, and groundbreaking innovations in military technology.

and navy for exfiltration or fire support. To allow better control and coordination between the different battalions, each brigade battle group was given its own command-and-control headquarters. These

headquarters were in continuous communication with other field forces, as well as with parallel forces and the senior commander. Brigades were now responsible for managing their own logistics, rearmament, and tactical extractions.¹²

The primary purpose of the new battlegroup formation was to create a fighting force that would be more relevant in future conflicts against Hezbollah and Hamas. Israel expects its future conflicts will be characterized by dynamic adversaries that constantly change their structure and methods, in addition to acquiring new techniques and weaponry. The shift to smaller battle groups with the combined capabilities of different corps and the ability independently to plan and execute battle plans increases the IDF's effectiveness and flexibility.¹³

In turn, this reform of the IDF's primary fighting formations had profound impacts on the organization of the army branches and corps that contributed forces to the new brigades.

Infantry

In recent years, the IDF reduced the size of its combat infantry forces and expanded the constabulary forces that guard Israel's borders and the occupied territories. In 2005, the IDF established a new infantry brigade to specialize in those security missions, the Kfir Brigade. The Kfir Brigade was larger than most combat infantry brigades; IDF infantry brigades usually consist of four battalions, whereas the Kfir Brigade consisted of five battalions. The brigade's purpose

was to maintain a permanent presence in the West Bank to perform routine security missions, protect the Israeli settlements, and prevent infiltration attempts into Israel.¹⁴ Between 2004 and 2017, to perform border-protection and routine security missions across Israel's borders, the IDF established four more similar battalions: the Caracal, Lions of the Jordan Valley, Cheetah (Bardelas), and Lion of the Valley battalions.¹⁵

The IDF's combat infantry units, after experiencing a significant reduction in manpower following the decision to reduce the length of compulsory military service, began focusing their training on combating guerrilla warfare and preparing for future conflicts against Hezbollah and Hamas. The basic training of IDF infantry units is divided into two parts, general training and specialized training. The IDF has not changed the general training style and requirements significantly over the last several decades. The first part of the basic training is focused on fundamentals. These include preparing, using, and maintaining a personal rifle; walking long distances with heavy weight; team protocols such as battle formations and movement; and military sign language and chain-of-command structures. The second part of the basic training is conducted after the soldiers are assigned to their individual specializations: squad leaders, advanced marksmen, machine gunners, grenade gunners, shoulder-fired-missile operators, medics, or riflemen. In this phase, they learn about the theory and practice of their respective roles and undergo extensive training and tests to qualify as fully operationally proficient.¹⁶

In contrast, the specialized training of IDF infantry soldiers has seen substantial changes in response to Israel's changing adversary priorities. In the past, the specialized training focused on open-field warfare techniques. This included individual, squad, platoon, and company open-field-warfare drills, focused on capturing and holding strategic geographic positions to support seizing and controlling large swaths of territory. Urban warfare was practiced only rarely and underground warfare and fighting techniques in tunnels and underground fortifications were excluded entirely from the training curriculum of standard infantry units. The most basic principle regarding underground installations and urban areas was simply to avoid them. However, from 2014 onward, the specialized training focused on urban warfare and introduced underground warfare as a new concept with its own combat doctrine. Open-battlefield warfare practices, such as occupying Syrian and Egyptian fortifications, were removed from specialized training programs.

Armored Corps

Historically, the two fundamental principles of the IDF armored corps were mobility and speed; the underlying logic behind these principles was to leverage the armored corps's unique movement capabilities to minimize its exposure and vulnerability.¹⁷ The IDF exploited these capabilities to achieve decisive

victories against conventional enemy forces. During the Suez crisis of 1956, the 38th Armored Division, led by Ariel Sharon, penetrated the armistice line with Egypt along the Sinai Peninsula and captured the strategically crucial Abu-Ageila military compound.¹⁸ During the Six-Day War of 1967, the IDF armored corps bypassed Egyptian defensive lines on the southern front and captured the eastern bank of the Suez Canal within two days.¹⁹ In the Yom Kippur War of 1973, the armored corps pushed Syrian forces to retreat from the Golan Heights and then breached their lines to establish a forward offensive position only forty kilometers from Damascus.²⁰ These conflicts all were characterized by open-battlefield warfare, and the guiding principle on urban warfare at the time was to avoid it unless it was essential to the mission.

Over the years, the battle space and adversaries shifted away from that traditional paradigm toward more-urban conflict environments, and the armored corps's role in subsequent operations diminished. The armored corps, like the rest of the IDF, went from fighting open-field warfare against conventional armies to conducting urban warfare against nonstate adversaries. In urban warfare, armored units are unwieldy, less effective, and more vulnerable than in rural environments. Urban defenders have inherent advantages; they can prepare strong defensive formations and fortifications, lure their adversary into vulnerable positions, and move unexposed across infrastructure and populations. An armored attacker, on the other hand, has limited ability to navigate, mobilize, and communicate with other forces, especially as part of a diverse battle group.

The Lebanon war of 2006 illustrated armored units' diminishing effectiveness in urban and asymmetric warfare environments. During the first three weeks of fighting, the armored corps and the rest of the IDF ground forces waited in staging areas while air forces engaged Hezbollah. When the ground invasion commenced, only two of four active armored brigades participated, using just 370 of the estimated four thousand tanks in the Israeli inventory. The missions assigned to armored units in Lebanon were also much different than in Israel's previous conflicts. Instead of penetrating deep into southern Lebanon, the armored corps carried out raids against suspected Hezbollah compounds near the border. It also engaged in routine security missions, such as patrolling an operational route leading from Israel to southern Lebanon, performed rescue missions, and provided logistical support (e.g., transporting food, water, ammunition, and equipment to the other fighting forces).²¹

To remain relevant, the IDF armored corps significantly reduced its size and changed its structure to adapt to Israel's evolving security challenges. According to former deputy chief of general staff Major General (Ret.) Yair Nave, more than ten reserve brigades were eliminated over the last decade.²² Still more brigades are expected to be phased out as the IDF continues to downsize its armored corps.

In addition, instead of having four to six armored companies in each battalion of the remaining tank brigades, they are being reorganized to have three tank companies, two infantry companies, and one combat-engineering company.²³ With this mix of forces, armored units now can operate independently as small task forces, complete a wider variety of missions, and operate more effectively in urban-warfare environments. These changes to the armored corps's structure and its integration into the new battlegroup formations made armored units much more relevant and effective in Operation PROTECTIVE EDGE of 2014 than they had been in other recent conflicts. The operation employed all four active armored brigades for the first time in thirty-two years, and five hundred tanks took part in the fighting. The armored corps suffered fourteen fatalities in the operation, but all these were caused by mortar fire outside the Gaza Strip or by sniper fire against personnel while outside their vehicle; no IDF tanks were destroyed or permanently incapacitated by enemy fire.²⁴

Artillery

During the first decades of Israel's existence, the official mission of the IDF artillery corps was to provide covering fire for the maneuvering forces. The artillery corps played a key role in Israel's armed conflicts in the 1960s and 1970s. In the Six-Day War of 1967, the IDF artillery corps destroyed twenty-six of forty Syrian missile batteries and provided covering fire for the maneuvering IDF ground forces, enabling them to capture the Syrian Golan Heights within two days of fighting. In the Yom Kippur War of 1973, the artillery corps divided its attention between two fronts. The Drakon battalion was instrumental in blocking the Syrian armed forces from advancing in the north while the rest of the corps enabled the IDF's counterattack against the Egyptian armed forces in the Sinai Peninsula.²⁵

However, as with the fate of the IDF's armored corps, the waning of conventional warfare reduced the artillery corps's relevance in Israel's modern conflicts. Since the Yom Kippur War of 1973, no foreign military has attempted to invade Israel and the IDF conducted multidivision ground maneuvers only once, during the Lebanon war of 1982. More importantly, when IDF combat forces penetrated hostile areas, battlefield conditions limited the ability of the artillery corps to provide fire support. The large kill radius of artillery shells combined with their inability to hit targets with sufficient precision increased the risk of friendly fire or of excessive collateral damage, limiting artillery's useful role in the conflict.

The artillery corps began reforming and reorganizing itself to address the changing operational environment that the IDF faced by the time the second intifada began in 2000. In the middle of the first decade of the twenty-first century, Israeli military leadership established two new secretive units within the artillery corps to address the mismatch between the corps's traditional capabilities and the needs of a more urban battlefield. Instead of artillery weapons, the new units

were equipped with unmanned aerial vehicles (UAVs) to conduct assault and reconnaissance missions.

The assault UAV unit, called Zik or Unit 5252, operates the Israeli-made Hermes 450 UAV. The Hermes 450 is a multirole, high-performance, tactical UAV capable of collecting intelligence, conducting electronic warfare, and launching missiles.²⁶ The main virtue of the Zik unit is its ability to use precision-guided munitions to launch surgical strikes, thus minimizing collateral damage and threatening distant and hidden targets.

The reconnaissance UAV unit, called Sky Rider or Unit 5353, operates the Israeli-made Skylark I, II, and III UAVs.²⁷ The Skylark is a miniature, modular, and autonomous UAV; it is small enough to be packed up and carried by ground forces and deployed within minutes. The UAV is equipped with advanced communication features that allow it to pass real-time, high-resolution videos, day or night, within a forty-kilometer radius.²⁸ The role of the Sky Rider unit is different from other UAV units, as its primary mission is to deliver real-time, tactical intelligence directly to junior combat officers on the battlefield.²⁹

The innovative Zik and Sky Rider units presaged other paradigm shifts within the IDF artillery corps. In 2014, the artillery corps created a new Detection Unit,

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whose original mission was to identify, monitor, and report on the trajectory of missiles and rockets fired into and out of Israel.³⁰ The Detection Unit also collected meteorological data to pass on to weapons system operators. The unit deployed

sensors at various altitudes using several unique platforms. These sensors collected meteorological data such as air pressure, humidity, wind, and temperature, which are critical for making accurate ballistic calculations and increasing weapon accuracy. The data were used to improve the accuracy and effectiveness of artillery guns, UAVs, and precision-guided missiles.³¹ As the artillery corps's tools changed, its personnel structure was reduced or reallocated significantly. In the past decade, half the IDF reserve artillery brigades were disestablished, their equipment was sold or scrapped, and the reservists who had served in these brigades were released or assigned to regular infantry brigades.³² This left the IDF with four active artillery brigades and four reserve artillery battalions.³³

AIR FORCE

In the first decades of Israel's existence and in its early military conflicts, the Israeli Air Force (IAF) was tasked with supporting the ground forces as they

progressed toward and captured enemy territory, and with maintaining aerial superiority. To achieve this, the IAF operated under two guiding principles that persist to this day, in some respects. The first principle was the element of surprise; because the IAF had limited air resources compared with the combined air assets of the Arab alliance that Israel faced in its early years, it was vital to operational success for the IAF to strike adversaries first.³⁴ The IAF's second principle, also driven by its relative size, was to concentrate its effort against a single front or objective before moving on to the next one, rather than dividing into small task forces to attack multiple targets simultaneously.³⁵

The Six-Day War of 1967 illustrated the decisiveness of these principles in practice. The war commenced with a surprise aerial attack against Egypt, focusing on its airfields and aircraft while they were still on the ground. Within five hours, the IAF performed 347 sorties and destroyed more than three hundred Egyptian fighter jets and eleven Egyptian military airfields.³⁶ The IAF then carried out 125 sorties against targets in Syria and Jordan, destroying most of the Syrian air force and severely damaging the Jordanian air force. The IAF suffered twenty-four fatalities and lost forty-six fighter jets.³⁷

Six years later, the IAF faced the reverse scenario. On 6 October 1973, Egypt and Syria launched a surprise attack on Israel. The IAF first had to defend Israel's airspace; only then could it go on the offensive. The IAF also was challenged by Egypt's and Syria's newly acquired, Soviet-made anti-aircraft systems, which they purchased pursuant to the lessons of the previous conflict.³⁸ Unlike the Six-Day War, the Yom Kippur War lasted almost three weeks, and the IAF suffered ninety-two fatalities and lost 103 fighter jets.³⁹

In the wake of these wars, the IAF worked to improve its aerial dogfighting capabilities, procure new technologies to defeat Soviet anti-aircraft systems, and increase the accuracy and efficacy of its strikes against enemy targets. In 1978, Israel purchased seventy-five Lockheed Martin F-16 Fighting Falcon fighter jets, designed for stealth and air-to-ground attacks, and the McDonnell Douglas F-15A Eagle, designed for aerial dogfighting against adversary jets.⁴⁰ These modernizations led to improved IAF performance during the 1982 Lebanon war. Over ninety days of operations, the IAF destroyed Syria's Soviet-made anti-aircraft systems and shot down a hundred Syrian fighter jets, with zero losses to IAF air forces.⁴¹

However, as Israel increasingly became engaged in low-intensity conflict against the Palestine Liberation Organization (PLO), Hamas, and Hezbollah, the IAF's operational role in Israel's military campaigns decreased. Israel's nonstate adversaries diminished the relevance of Israel's air superiority by adopting guerrilla tactics. They operated in small groups; carried out low-profile operations in unexpected locations; and used light weapons, suicide bombers, and rockets. To

protect themselves, they moved constantly, kept strict secrecy about the locations of their military installations, and assimilated themselves into civilian populations and infrastructure. During the first and second intifadas, the IAF made a significant contribution to Israel's attempt to achieve military victory but was much less influential to the outcome than the ground forces. During the Lebanon war of 2006, IAF operations were lethal and efficient but failed to influence the results of the war. Over thirty-three days, the IAF executed eighteen thousand sorties and destroyed thousands of rocket launchers and military installations.⁴² But throughout that period, Hezbollah continued to launch rockets into Israel, showing Israeli military leadership that the IAF's dominance was no longer a guarantor of victory in battle.

Toward the end of that decade, the IAF began prioritizing precision-strike accuracy and stealth over air-to-air and air-to-ground attack capabilities. These capabilities were vital to Israel's attempt to prevent advanced weapons systems from reaching Hamas and Hezbollah. This allowed the IAF to conduct long-distance air operations to carry out precision strikes far beyond Israel's border areas, such as in Sudan, Syria, Lebanon, and Iraq, while leaving no footprint or signature that could be attributed to Israel. Perhaps the highest national priority for the IAF was to maintain and demonstrate the ability to attack and destroy hardened nuclear facilities by air in remote and hostile territories, as it did in 1981 against Iraq's Osirak reactor, and later in Syria. Following its successful strike against the Syrian nuclear reactor in 2007, the IAF prepared for a potential attack against what were suspected widely to be Iranian nuclear facilities.⁴³

These sensitive strike missions had significant implications for the IAF's force composition and engagement. In 2015, the Israeli defense ministry procured fourteen Lockheed Martin F-35 Lightning II fighter jets, which were added to nineteen units Israel had purchased already.⁴⁴ The F-35, while not suited for dogfights, has improved stealth capabilities and can reach distant and remote targets easily, conduct air-to-surface attacks, and even deploy some nuclear-armed missiles.⁴⁵ Simultaneously, Israel also expanded its UAV arsenal and doubled its fleet of Lockheed Martin C-130J Super Hercules aerial-refueling aircraft, expanding Israel's ability to attack remote targets at long distances.⁴⁶ These advanced acquisitions strained IAF budget constraints, forcing the IAF to deprioritize other capabilities. To save money, the IAF decided to disestablish several combat squadrons, including squadrons of F-15 and F-16A/B fighters and Bell AH-1 Cobra helicopters.⁴⁷

NAVY

Israel shares many of the characteristics of an island, in that it is surrounded alternately by adversarial states or territories and the Mediterranean Sea. Israel has maritime borders with Egypt, Jordan, Hezbollah-controlled southern

Lebanon, and the Hamas-controlled Gaza Strip. Having a small population and limited natural resources, Israel always has been challenged to provide for its own subsistence and, therefore, has been reliant on imports via the sea. In fact, over the years, 98 percent of Israel's imported goods have entered through the Mediterranean and Red Seas.⁴⁸ With over 80 percent of Israel's population spread across its 197 kilometers of coastline, this area is especially vulnerable to attacks.⁴⁹ Moreover, much of Israel's critical infrastructure facilities, such as power stations, ports, military installations, communication channels, and water desalination facilities, are located near or along Israel's coast.

That being the case, protecting trade routes, securing Israel's territorial waters, and guarding the coastline are the Israeli navy's most vital missions. Israel's dependence on seaborne imports makes the need to maintain open sea routes especially important during wartime. Israel's navy was designed to engage Egypt's and Syria's Soviet-backed navies, which Israeli leadership viewed as the primary maritime threat.⁵⁰ To that end, the Israeli navy procured destroyers, missile boats, versatile patrol boats, and two submarines.⁵¹ To minimize dependence on military imports, Israeli Military Industries developed maritime weaponry such as the Gabriel missile system, designed specifically for surface naval warfare.⁵²

During the Yom Kippur War of 1973, the Israeli navy defeated the Egyptian and Syrian navies while suffering no ship or personnel losses of its own.⁵³ As with the ground forces, the quantitative power balance at sea seemingly tilted heavily toward Egypt and Syria, which enjoyed significant superiority in terms of warships and firepower. The Israeli navy had fourteen missile boats against Egypt and Syria's combined twenty-four missile boats. Just prior to the war, the Israeli navy had decommissioned its two old submarines, leaving a significant capability gap against the Egyptian navy's twelve active submarines. Nonetheless, the Israeli navy destroyed or captured twenty-four enemy vessels while suffering only minimal damage and personnel casualties. Throughout the entire war, the Israeli navy managed to keep Israel's ports safe and most of the Mediterranean trade routes open, which permitted a continuous flow of energy and other supplies to Israel.⁵⁴ Most importantly, the Israeli navy pushed those rival navies out of Israel's territorial waters and ensured that no Israeli coastal city was attacked from the sea during the conflict.⁵⁵

After the 1973 war, the diminishing likelihood of a maritime battle with rival navies and increasing tension with nonstate adversaries led the Israeli military leadership to direct the navy to invest more resources in maritime-security missions to prevent attacks against Israeli citizens.⁵⁶ The navy decommissioned all of its destroyers and large missile boats and began purchasing patrol boats and small- and medium-size missile boats.⁵⁷ These changes came at a price. The navy was criticized for not making a sufficient contribution to the 2006 Lebanon

war. Two days into the war, Hezbollah launched two C-802 antiship cruise missiles against an Israeli Sa'ar 5-class corvette, killing four members of the ship's crew. The Winograd commission of inquiry into the war concluded that the navy operated in a mind-set of conducting policing operations rather than an offensive military conflict, leading crewmembers to disregard Hezbollah's lethality and threat.⁵⁸

In 2007, the navy took on responsibility for enforcing the blockade of the Gaza Strip.⁵⁹ The Gaza conflicts and the continuous attempts by militant groups to infiltrate Israel via the sea or to break the blockade demanded that the navy play this growing role in routine security operations. In 2011, the navy added another routine security mission: the protection of Israel's newly discovered offshore

[B]y 2011 the IDF prioritized cyber defense as the most pressing need within the military, and new recruits who were eligible for combat service but also passed cyber units' requirements were sent directly to the cyber units.

natural gas fields.⁶⁰ Between 2009 and 2012, Israel discovered several gas fields with an estimated 680 billion cubic meters of natural gas.⁶¹ The discovery of the gas reserves led Israel to begin switching its power-generation infrastructure to use natural gas,

meaning that a successful attack against those gas fields could jeopardize Israel's energy security.⁶² The navy was instructed to provide a tiered defense of Israel's offshore energy infrastructure, including the gas wells, platforms, and underwater pipelines.⁶³

In 2011, Israel purchased three additional submarines from Germany, doubling its fleet to six hulls.⁶⁴ While the German manufacturer was responsible for building the submarine hulls, Israeli teams were responsible for the combat systems and weapons that were installed on board. These included advanced radar and communication systems, electronic warfare systems, equipment for deploying special forces divers to infiltrate hostile areas, and the ability to launch torpedoes and cruise missiles with conventional and unconventional warheads and ranges up to 1,500 kilometers.⁶⁵ The main catalyst for the latest submarine purchase was Iran's pursuit of nuclear-weapons capabilities. The IDF was instructed to prepare for two possible scenarios to address Iran's nuclear ambitions. The first was that Israel would launch an attack against Iran's nuclear facilities. In this case, Israel should be able to threaten Iran with a nuclear response in case the latter decided to retaliate with other strategic weapons. In the second scenario Iran would develop a nuclear weapon and threaten to use it against Israel. In this case, Israel would expand its deterrence to make sure Iran comprehended that an attack on Israel most likely would lead to mutual destruction.⁶⁶

SPECIAL FORCES

The IDF special forces can be classified into four groups.

1. The elite units: General Staff Reconnaissance Unit (Sayeret Matkal), naval commandos (Shayetet 13), air force commandos (Shaldag), and the Special Operations Engineering Unit (Yahalom)
2. The commando units: Egoz, Maglan, and Duvdevan
3. The reconnaissance units: Paratroopers Reconnaissance Battalion, Golani Reconnaissance Battalion, Givati Reconnaissance Battalion, Nahal Reconnaissance Battalion, and 401st and 7th Reconnaissance Battalions
4. The specialized units: 669 Unit for airborne combat search and rescue, canine unit (Oketz), 504 Unit of the Human Intelligence Division, and Moran Unit for precision-guided missiles

Despite the profusion of special-operations units in the IDF, on only two occasions did the special forces make a significant contribution to the outcome of a war. The first was during the Suez crisis of 1956, in which the paratroopers were deployed behind enemy lines to the Mitla Pass in the Sinai Peninsula. The second was during the 1967 Six-Day War, when the paratroopers again deployed behind enemy lines to Abu-Ageila, also in the Sinai Peninsula.⁶⁷ The IDF's elite, commando, reconnaissance, and specialized units have not affected the outcome of any other wars decisively. In most cases, they either received small and insignificant, yet complex, missions or were annexed to an operational brigade and fought under its command.

Following twenty-four years of low-intensity conflict in southern Lebanon, the West Bank, and the Gaza Strip, the IDF special forces' ability to contribute decisively to a large-scale military campaign had reached its nadir. The Winograd Commission for the inquiry into the Lebanon war of 2006 concluded that the IDF did not make effective use of its special forces. According to the report, special forces were scattered across the IDF and were subordinated to various commands: "the decentralized command of the special forces damaged their ability to constitute a significant force . . . [which explains their] limited contribution to the greater strategic cause." The committee went so far as to conclude that some IDF special-forces units had been established to deal with specific operational challenges and that many of these challenges no longer existed. Pride and comradery prevented these units from pivoting their focus or creating collaborations that could have been relevant to large-scale conflicts.⁶⁸

In 2011, as part of the lessons of the Lebanon war of 2006, the IDF established the Depth Corps.⁶⁹ The core of the new command was a new Commando Brigade, which was a seminal unification of the IDF commando units.

Historically, the IDF's commando units all operated independently, not under a unified command. When the new brigade was established, the three commando units—the Egoz, Maglan, and Duvdevan commandos—were extracted from their existing organizational and command affiliations and began training and operating as a unified fighting force.⁷⁰ The Commando Brigade unified these units under one centralized command, making it the most lethal synchronized brigade in the IDF, and the most relevant force to combat Hamas and Hezbollah.

The reconnaissance units underwent structural and doctrinal changes as well. Each of the IDF's reconnaissance battalions was composed of three companies: an antitank company, a sabotage and engineering company, and a reconnaissance company. Following the implementation of the GMYP, the missions and training routines of these companies changed. The most significant modifications were the focus on underground warfare and the replacement of the antitank and sabotage and engineering companies with three identical reconnaissance companies in each of the reconnaissance battalions.⁷¹ The operational rationale for this was that combating Israel's new unconventional adversaries, which lacked armored forces and infrastructure requiring specialized units to handle, demanded different capabilities from the reconnaissance units.

Elite units remained separate from the new battle groups even after the other special-forces units were reorganized. While the GMYP reduced the size of the IDF's conventional combat forces, the elite units were expanded and allocated even more training resources, and their service track was modified. Prior to the new service track, male soldiers in the elite units were obligated to serve the same three years as other conscripts and then were required to complete an additional sixteen to twenty months of training before another three-year service period in an elite unit. Soldiers identified as potential commanders during that training period continued to Officer's Cadet School, while the rest of the elite-unit soldiers continued their service as noncommissioned officers.⁷² Following the implementation of the GMYP, the elite units introduced a new service track. Now, all soldiers selected for the elite units would be admitted to Officer's Cadet School and serve for seven consecutive years.⁷³ This change is expected to increase dramatically the size of the elite units and help the members of those units be seen as professionals rather than conscripted troops.

IDF INTELLIGENCE DIRECTORATE

Israeli military intelligence is divided into four core units. The signals-intelligence (SIGINT) unit is responsible for intercepting communications and electronic signals. The visual-intelligence (VISINT) unit is responsible for mapping hostile areas and interpreting images from satellites and other visual resources, such

as reconnaissance photographs.⁷⁴ The human-intelligence (HUMINT) unit is responsible for recruiting and handling human assets, and related operations.⁷⁵ The research unit is responsible for providing threat warnings of possible hostile operations and indications of adversary intentions.

In the past, traditional military targets included military bases, concentrations of forces, defense formations, dams, power stations, bridges, and other elements of permanent infrastructure. These targets did not require precision targeting, as they mostly were large, static, and distant from civilian populations. The intelligence process—researching, collecting, processing, analyzing, and distributing finished products—could take months or years to complete. Over time, with the declining likelihood of a conventional war and the rising threat of nonstate adversaries, military intelligence's focus shifted. Rather than identifying the capabilities and intentions of nations, military intelligence's focus now is on monitoring the military proliferation of nonstate adversaries, detecting and alerting on imminent threats, and developing methods to obtain and deliver intelligence quickly.⁷⁶ This shift in focus forced the IDF Intelligence Directorate to implement new doctrinal and structural changes, as well as to introduce new capabilities to remain relevant.

The SIGINT unit, known as 8200 Unit, responsible for intercepting communications and electronic signals, experienced tremendous growth in recent years. It added a cyber unit that specializes in hacking and sabotaging electronic systems, and the Hatsav Unit, which collects intelligence from social media platforms.⁷⁷ The most significant addition to the SIGINT unit was the establishment of the Operational SIGINT Battalion. Intelligence analysts belonging to this battalion provide combat forces with real-time intelligence during operations.⁷⁸ In practice, this means that intelligence analysts of the Operational SIGINT Battalion are annexed temporarily to a field unit for specific missions or operations. They join the field unit's operational control center and synthesize existing information with real-time reports from the battlefield and other sources such as drones, cameras, and wiretaps. They communicate their assessments directly to operational forces in the field to warn them of imminent threats, verify their observations, and support them amid the uncertainty of battle.

The VISINT unit, known as 9900 Unit, also grew significantly. In the 1990s, the VISINT unit began expanding its intelligence-collection platforms to include human observation and static cameras, as well as vehicles, vessels, aircraft, and, most importantly, satellites.⁷⁹ In 1988, Israel became the eighth country in the world to launch a surveillance satellite into space independently. Israel successfully launched eight more satellites into orbit over the next three decades. The last one, the reconnaissance satellite Ofek 11, was launched in 2016.⁸⁰ The VISINT unit was expanded to develop new techniques for producing intelligence from

existing visual images and to cope with the constantly growing flow of visual data coming from the new collection resources.⁸¹

The IDF Intelligence Directorate also implemented cross-organizational changes to be more effective against nonstate adversaries and unconventional capabilities. In the past, internal groups within the research, SIGINT, VISINT, and HUMINT units had been organized around geographic areas or particular stages of the intelligence process. Now, for the first time, relevant sections were not

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limited to working on specific geographic areas but instead were organized to focus on organizational or ideological targets, such as the Islamic Jihad and ISIS. Other sections were organized by the type of threat, such as weapons of mass destruction or low-intensity conflict. Finally,

some units were aligned to different scopes of intelligence: national-level intelligence for the prime minister, strategic-level intelligence for the chief of general staff, operational-level intelligence for headquarters and high commands, and tactical-level intelligence for combat forces.⁸²

Moving from a geographic paradigm to a capability and organizational one necessitated additional reforms to military intelligence. Following the Arab Spring, the IDF Intelligence Directorate recognized its failure to anticipate the severity of the uprisings and the regional instability that resulted. As a result, Major General Kochavi, then serving as the Military Intelligence director, established the Regional Section within the Research Department of the IDF Intelligence Directorate. The section's purpose was to investigate and monitor economic, social, and political developments, primarily in the Middle East, and identify potential geopolitical shifts of strategic significance to Israel. General Kochavi also enacted a new approach of assembling ad hoc multidisciplinary teams, subcommittees, and provisional headquarters to address time-sensitive threats.⁸³ Lastly, the IDF Intelligence Directorate established a new section—the Target Section—to build a database of targets using deep-learning algorithms and big data to take advantage of advances in developing information and analyzing trends, patterns, and associations. The algorithms can scan billions of data points (e.g., images, videos, audio, and electronic signals) to identify potential targets.⁸⁴ Analysts then can investigate the suggested targets, after an initial triage by the algorithms, and confirm correct selections, which in turn improves the algorithms' performance.

CYBER

The IDF established its first cyber units in 2011. Initially, the Shin Bet, Israel's civilian internal-security service, was responsible for defending Israel's critical cyber infrastructure. However, the IDF had greater organizational and technical capacity to establish and operate larger cyberoperations centers. As the cyber threat expanded beyond the capacity of any single agency's resources into a strategic, crosscutting dimension of war, the IDF began to prioritize cybersecurity and took over responsibility for protecting both Israel's security and civilian cyber infrastructures. The IDF's cyber activities were divided between two directorates. The Intelligence Directorate was responsible for offensive cyber operations and the collection of intelligence; the Computer and Information Technology (IT) Directorate was responsible for protecting the military and civilian infrastructures from attacks.⁸⁵ The Computer and IT Directorate then was expanded to include a new division, the Cyber Defense Division. Subsequently, the name of the Computer and IT Directorate was changed to the Computer, IT, and Cyber Defense Directorate.

The Cyber Defense Division is responsible for providing defense for air, sea, land, and cyberspace, and is the senior authority for cyber protection in the IDF. The division protects the IDF's communication and computing systems and its technology-based offensive and defensive cyber capabilities, and it trains all IDF forces in countercyber practices and operations. The Cyber Defense Division's primary objective is to prevent electronic information from leaking out of the IDF, and it ensures the continuity of IDF operations without IT disruptions.⁸⁶

The organizational structure of the Cyber Defense Division is unique and reflects the unit's significance within the IDF. A brigadier general was appointed to command the division; in the IDF, staff divisions more typically are led by colonels.⁸⁷ The Cyber Defense Division also, rather than the normal three sections, has four—operations, intelligence, technological, and electronic warfare—each commanded by an officer at the rank of colonel.⁸⁸ Finally, the Cyber Defense Division was given a unique modular structure in which soldiers could work as part of a large task force but also could be annexed to combat branches of the IDF to work independently or in small teams.⁸⁹

Two additional organizations were created to assist the Cyber Defense Division in implementing its policies and improving connectivity and cooperation. The first was a cyber branch within the IDF multi-corps command headquarters, which already had air force, armored, naval and infantry branches. The purpose of the cyber branch was to protect offensive and defensive military capabilities (e.g., armored personnel carriers, weapons, radars, and computing systems) from cyber attacks. In practice, this required ensuring the safety of the entire manufacturing process and supply chain, as well as routine checks against malware.⁹⁰

The IDF also established a Cyber Situation Center to manage cyber-related emergencies, track international trends in cyberspace, and coordinate between the separate cyber units in the IDF.⁹¹

The establishment of these organizations and priorities for cyber defense marked a significant cultural shift within the IDF. The Israeli military had a long-standing tradition that prioritized combat units above all others in competitions for qualified manpower, budgets, and positions. IDF recruitment protocols dictated that new recruits were directed first to combat units, and only those who were not assessed to be qualified for combat duty were directed to noncombat units. But by 2011 the IDF prioritized cyber defense as the most pressing need within the military, and new recruits who were eligible for combat service but also passed cyber units' requirements were sent directly to the cyber units. Moreover, the IDF, for the first time in its short history, launched a program that offered eligible soldiers in combat units the option to transfer to a cyber unit.⁹² Finally, while combat forces were experiencing a significant reduction in manpower and the IDF cut five thousand officers, the cyber units were provided with a hundred new positions for commissioned and noncommissioned officers in 2015, in addition to ten thousand new cyber posts already allocated.⁹³

A TRANSFORMED IDF AND THE RISKS OF "SELF-FORTIFICATION"

At the center of Israel's military transformation stands a new, defensive approach. Toward the end of the 2010s, Israel's perception of its military objectives in a conflict changed dramatically. Israel no longer sought the total defeat of its opponents or to uproot threats; it now sought to avoid large-scale confrontations by showing restraint, carrying out precision strikes, and building multiple layers of sophisticated defensive infrastructure and technology to protect itself. This defensive, rather than offensive, approach evolved into a new doctrine of "self-fortification." Instead of incorporating tactical defensive measures as part of a larger offensive effort to combat threats, these tactical measures, often based on groundbreaking innovations in military technology, became the principal deterrent to Israel's nonstate adversaries.

Beyond surrounding itself with fences and concrete walls along its borders, Israel has integrated advanced technologies to increase the effectiveness of these physical barriers. Throughout the years, Israel's border barriers have been fortified and equipped with day- and night-vision cameras, touch sensors, motion detectors, and floating cameras. These measures are reinforced with military patrols, human observers, and sand-filled areas near the fence that professional military trackers scan for footprints. In some locations, Israel has replaced its border fence with concrete and steel walls, particularly in places with a higher

risk of infiltration and sniper fire. In 2017, Israel began replacing the border fence with Lebanon, which stretches across 130 kilometers, with a nine-meter-high concrete wall topped with another three meters of steel fencing.⁹⁴

A year later, Israel began building the new Israel-Gaza barrier. The six-meter-high barrier is made of galvanized steel and will stretch across the entire border between Israel and the Gaza Strip at completion.⁹⁵ Under the Israel-Gaza barrier, Israel has constructed a belowground concrete wall to protect against infiltration tunnels. The underground wall is expected to stretch across the sixty-five kilometers of the Israel-Gaza border. The barrier will consist of concrete and steel and will penetrate the ground as deep as thirty meters.⁹⁶ In 2018, Israel completed the construction of a new sea barrier along the maritime border with the Gaza Strip. The barrier consists of three layers—a regular breakwater, reinforced stone, and barbed wire—all reinforced by smart fences equipped with alarm systems and touch sensors, day- and night-vision cameras, and motion detectors.⁹⁷

Israel has an active, multilayered missile-defense system arrayed against barrage threats from adversary states and militant organizations alike. This includes the Arrow 3, Arrow 2, David's Sling, Iron Dome, and Iron Beam—a newly developed active missile-defense system that uses concentrated laser waves to intercept smaller objects such as mortar shells and small drones. The multilayered defense system is under constant development and is expected to provide defense against mortar shells; short-, medium-, and long-range surface-to-surface missiles and rockets; medium- and long-range conventional and nuclear ballistic missiles; and UAVs.

Colonel Yehuda Vach, commander of the Heiram regional brigade of the Northern Command and one of the fiercest critics of Israel's doctrine of self-fortification, warns against the illusion of security that it creates: "[A] nation that fortifies itself [with fences, barriers, and walls] is a nation that lives in fear. The more fences we built across the borders, the more our security doctrine became dependent on defense and self-fortification. A society that builds more and more fences is a society that lives in fear. Logically, it might seem that fortifications project strength but the truth is that it does not[;] if anything, it projects fear."⁹⁸ Through this lens, Israel's doctrine of self-fortification can be perceived as a symptom of national weakness. As Vach observed: "[T]he fighting spirit of the military will not be reinforced by physical barriers but by its mental strength. A nation that hides, projects mental weakness, is making it easier for the enemy to defeat it. . . . [T]he fence creates an illusion, a false perception that [misleads people into believing that] they are safe."⁹⁹

Major General (Ret.) Yitzhak Brick, who served as IDF chief ombudsman and examined the operational readiness of more than a thousand military

units during his service, is another fierce critic of the current trend in the IDF. Brick criticized political and military leaders for shifting the IDF's force planning toward defeating nonstate adversaries and disregarding the possibility of a conventional war in the future. According to Brick, "the current misconception [among] the IDF military command [is] that there won't be any more big [conventional] wars. They do not consider the possibility that the Middle East will change . . . that the Syrians might recover, that the Egyptians will change their attitude, nothing. Just a small military for two arenas [the Gaza Strip and Lebanon]." ¹⁰⁰

But Brick believes the IDF still will encounter difficulties facing nonstate adversaries, even with a self-fortification doctrine.

The next war will be a multi-front war against Hamas from Gaza, Hezbollah from Lebanon and [at the same time we will have to deal with] missile attacks from Syria and perhaps from Iraq. . . . [The next war] will include pounding [heavy missile barrages] of population centers in Israel by hundreds of thousands of rockets. . . . [Israel will be] attacked by 1500–2000 missiles every day, . . . among them, missiles with 600–700 kilogram warheads. . . . [Israel] is facing a serious problem, as it is currently incapable of blocking such [heavy, coordinated bombardment]. The air force alone cannot do it, as we saw during the previous campaigns in Gaza. Our [anti]missile [systems] are not developed enough to deal with such a large number of missiles. ¹⁰¹

Senior officers in the IDF have explained that the only way to prevent massive and destructive barrages from raining into Israel is to capture temporarily the hostile areas from which the shelling is taking place. ¹⁰² Previous military campaigns in the Gaza Strip and southern Lebanon demonstrated that the air force alone, despite its advanced antimissile capabilities, could not prevent missile launches into Israel altogether, much less a coordinated missile attack on four fronts. Thus, defending Israel effectively from major multiaxis barrages would require a major military ground operation in which the IDF captures and controls launching areas in Gaza, Lebanon, and Syria and, if need be, extends this ground control as far as Iraq or Iran. Because the IDF reduced and deprioritized its conventional fighting forces over the past decade, it is reasonable to conclude that the IDF is not sufficiently prepared to contend with this worst-case scenario and contemporary existential threats to Israel.

Overall, this article provides a primary analysis of recent structural changes in the IDF at the tactical level, based on interviews with IDF soldiers, and points to five observable trends: decreasing conventional capabilities, investing in and developing defensive capabilities, reorientation of the practices and structure of IDF combat forces toward guerrilla warfare, prioritizing cyber and intelligence capabilities, and expanding nuclear capabilities in the air and at sea.

These trends indicate a doctrinal evolution in Israel toward prioritizing nonstate adversaries. The rise of nonstate adversaries and the declining conventional threat from nation-states, along with groundbreaking innovations in military technology, drove this transformation. Israel's shift toward a defensive security doctrine has shaped the IDF's force planning and readiness for war, which now reinforce that doctrine in turn. The cementing of both the IDF's transformation and Israel's self-fortification approach to security means that the IDF may not be properly prepared to contend with evolving complex threats as nonstate adversaries grow in size and acquire rocket and missile capabilities that once belonged only to states.

NOTES

- Some names have been anonymized to protect interview sources but relevant information about their positions or expertise is provided where possible.
1. Benny Gantz (alternate prime minister of Israel and former chief of general staff, IDF), interview by author, June 2018.
 2. Ibid.
 3. Clifford D. May, "Careless in Gaza," *Foundation for Defense of Democracies*, 20 November 2019, fdd.org/.
 4. Nicholas Blanford, *Hezbollah's Evolution: From Lebanese Militia to Regional Player*, Policy Paper 4 (Washington, DC: Middle East Institute, 2017), p. 7; Nicholas Blanford and Jonathan Spyer, "Israel Raises Alarm over Advances by Hizbullah and Iran," *Jane's Intelligence Review* (2017), pp. 1–12.
 5. Hassan Nasrallah (speech, Beirut, Leb., 12 July 2019).
 6. Gantz interview.
 7. Moti Elmoz, "Change of Perception on Force Planning—Gideon Multi-year Plan: Trends and Objectives," *IDF Journal Maarachot*, no. 473 (2017), pp. 34–38.
 8. Shmuel Even and Sason Hadad, "Shortening Compulsory IDF Service for Men," *Institute for National Security Studies Insight*, no. 1,221 (2019).
 9. "All about IDF's Multi-year Plan," *IDF System*, 21 July 2016, www.mitgaisim.idf.il/.
 10. Danni Asher, "The Division Headquarters: A Force Multiplier That Changed Course" [in Hebrew], *IDF Journal Maarachot*, no. 471 (2017), pp. 37–43.
 11. Gantz interview.
 12. Michael Uria, "The New Structure of the Fighting Divisions," *IDF System*, 12 August 2018, www.idf.il/.
 13. Ibid.
 14. "Introducing: The Kfir Brigade," *IDF System*, www.idf.il/.
 15. "Introducing: The Caracal Battalion" [in Hebrew], *IDF System*, www.idf.il/; "Introducing: The Jordan's Lions Battalion" [in Hebrew], *IDF System*, www.idf.il/; "Introducing: The Bardelas Battalion" [in Hebrew], *IDF System*, www.idf.il/; "Introducing: The Valley's Lions Battalion" [in Hebrew], *IDF System*, www.idf.il/.
 16. Author's visit to IDF Ktziot Base to observe Basic and Advanced Training, 5 December 2018.
 17. "The Armored Corps in the Second Lebanon War," *Armored Corps Memorial Center*, p. 58, yadlashiryon.com/.
 18. "Battle of Abu-Ageila," *IDF System*, www.idf.il/.
 19. "The Armored Corps in the Six-Day War," *Armored Corps Memorial Center*, yadlashiryon.com/.
 20. "The Armored Corps in the Yom Kippur War," *Armored Corps Memorial Center*, yadlashiryon.com/.

21. Halutzi Rodoi, "The Mechanized Maneuver and the Armored Tank in the Second Lebanon War," *Armored Corps Memorial Journal*, no. 50 (2017), pp. 20–23.
22. *The Patriots*, aired 20 July 2015 on Channel 20 (Isr.).
23. Amos Harel, "Restructuring in the Armored Corps: Infantry Troops Will Be Incorporated in the Companies," *Haaretz*, 23 October 2013, haaretz.co.il/.
24. Benny Michalson, "The Armored Corps in Operation PROTECTIVE EDGE," *Armored Corps Memorial Journal*, no. 46 (2014), pp. 10–16.
25. "Be a Fighter," *IDF System*, www.aka.idf.il/.
26. Noa Rokani, "New UAV Operators Have Joined the Corps" [in Hebrew], *IAF System*, www.iaf.org.il/; "Hermes 450," *Elbit Systems*, elbitsystems.com/.
27. May Efrat, "Riding on the Back," *IAF Journal*, no. 201 (2011).
28. "Skylark I-LEX," *Elbit Systems*, elbitsystems.com/.
29. "Be a Fighter."
30. *Ibid.*
31. Michael Uriah, "Without These Fighters the Artillery Cannot Open Fire," *IDF System*, 2 October 2019, www.idf.il/.
32. Gantz interview.
33. "Artillery Corps," *IDF System*, www.idf.il/; "Artillery's Battalions and Formations," *IDF System*, www.idf.il/.
34. Lt. Col. O. B. (F-16 squadron commander, IDF), interview by author, 18 June 2018.
35. *Ibid.*
36. "Operation Focus," *IDF System*, www.idf.il/.
37. "The Six-Day War," *IAF System*, www.iaf.org.il/.
38. Dov Tamari, "Where Is the Air Force Heading?," *IDF Journal Maarachot*, no. 437 (2011), pp. 4–14.
39. Shir Golan, "The IAF Marks 40 Years since the Yom Kippur War" [in Hebrew], *IAF System*, www.iaf.org.il/.
40. "IDF Fighter Jets from the 1980s till Today," *IDF System*, www.idf.il/.
41. Tamari, "Where Is the Air Force Heading?," pp. 4–14.
42. "The Second Lebanon War," *IAF System*, www.iaf.org.il/.
43. Lt. Col. G. W. (helicopter squadron commander, IDF), interview by author, 14 November 2018.
44. "A Great Move: The F-35 Purchase Deal Has Been Signed," *Israel Ministry of Defense System*, 22 February 2015, www.mod.gov.il/.
45. Gur Laish, "Israel and the F-35," *Institute for National Security Studies Journal* 13, no. 4 (2011), p. 8.
46. Eitan Ben-Eliyahu, "Israel's Security Doctrine" (lecture, Tel Aviv University, Tel Aviv, Isr., 8 April 2013).
47. Capt. A. Z. (F-16 pilot, IAF), interview by author, October 2018.
48. Akiva Lorenz, "The Threat of Maritime Terrorism to Israel," *International Institute for Counterterrorism*, 24 September 2007, ict.org.il/.
49. Michael Bort, *The Maritime Option* [in Hebrew] (Haifa, Isr.: Chaikin Chair in Geostrategy Department at the Univ. of Haifa, 2014), p. 9.
50. Shaul Chorev, ed., *Maritime Strategic Evaluation for Israel 2016* (Haifa, Isr.: Haifa Research Center for Maritime Policy and Strategy, 2017), pp. 126–31.
51. *Ibid.* See also Amir Rapaport, "The Navy Is Testing New Ships," *Israel Defense*, 22 June 2012, israeldefense.co.il/.
52. Seth Carus, *Cruise Missile Proliferation in the 1990s* (Santa Barbara, CA: Greenwood, 1992), p. 35.
53. Chorev, *Maritime Strategic Evaluation for Israel 2016*, pp. 126–31.
54. Zé'ev Almog, "Israeli Naval Power: An Essential Factor in the Operational Battlefield," *Military and Strategic Affairs* 3, no. 1 (2011), pp. 35–36.
55. *Ibid.*, pp. 25–37.
56. Chorev, *Maritime Strategic Evaluation for Israel 2016*, pp. 126–31.
57. *Ibid.*; David S. Salame, "Unmanned Surface Vehicle: Challenges and Development Paths," *IDF Journal Maarachot*, no. 456 (2014), pp. 16–21.

58. Commission of Inquiry into the Events of Military Engagement in Lebanon in 2006 [hereafter Winograd Commission], *Final Report of the Commission to Investigate the Lebanon Campaign in 2006* (Jerusalem, Isr.: 2008), p. 3. See also “The Second Lebanon War (12 July–4 August 2006),” *IDF System*, www.idf.il/.
59. Dov S. Zakheim, *The United States Navy and Israeli Navy: Background, Current Issues, Scenarios, and Prospects* (Arlington, VA: CNA, 2012), p. 28.
60. Yuval Eilon, “Examining Israel’s Defense on Its Water Energy Resources,” *IDF Journal Maarachot*, no. 472 (2017), pp. 4–11.
61. Simon Henderson, *Natural Gas Export Options for Israel and Cyprus* (Washington, DC: German Marshall Fund of the United States, 2013).
62. Benjamin Netanyahu (prime minister of Israel) in Hai Cohen, “Netanyahu Reveals Classified Document: Gas Supply Is Necessary for Our Existence,” *Globes*, 8 December 2015, globes.co.il/.
63. Chorev, *Maritime Strategic Evaluation for Israel 2016*, pp. 126–31.
64. Ibid.
65. Meir Cohen, *Israel—a Nuclear Superpower? Israel’s Nuclear Secrets* (Kiryat Gat, Isr.: Korim Publishing, 2018), pp. 73–83.
66. 1st Sgt. (Ret.) N. M. (submarine crew, Israeli navy), interview by author, May 2019.
67. Tamari, “Where Is the Air Force Heading?” pp. 4–14.
68. Winograd Commission, *Final Report*, pp. 357–58.
69. “The IDF Is Establishing a Depth Corps for Multi-branch Operations in the Strategic Depth,” *IDF System*, 15 December 2015, www.idf.il/.
70. Gabi Siboni, *IDF’s Lessons from the Second Lebanon War* (Tel Aviv, Isr.: Institute for National Security Studies, 2016), p. 5.
71. Author’s visit to IDF Ktziot Base to observe Basic and Advanced Training, 5 December 2018.
72. Maj. G. L. (Commander of Training, Shayetet 13, IDF) interview by author, June 2017.
73. Alon Tshuva, “Everything about the New Service Track of Sayeret Matkal,” *IDF System*, 24 May 2017, www.idf.il/.
74. “The Sections of the Intelligence Directorate,” *IDF System*, www.idf.il/.
75. “What Can Be Said about Unit 504,” *IDF System*, www.idf.il/.
76. A. A., “The Intelligence Handling of Multi-arena Complex Issues—the Organizational Perspective,” *Theory and Practice of Intelligence Journal*, no. 1 (2016), pp. 25–44.
77. Ibid.
78. 1st Sgt. (Ret.) I. H. (former intelligence analyst, IDF Intelligence Directorate), interview by author, January 2019.
79. Ibid.
80. “Ofek” [in Hebrew], *Israel Space Agency*, www.space.gov.il/.
81. Sgt. (Ret.) H. S. (former field observer, IDF Intelligence Directorate), interview by author, September 2018.
82. A. A., “The Intelligence Handling of Multi-arena Complex Issues,” pp. 25–44.
83. Ibid. See also A. B., “The Changing Intelligence Agencies,” *Theory and Practice of Intelligence Journal*, no. 2 (2018), p. 6.
84. “The New Target Section Has Been Launched,” *IDF System*, 14 March 2019, www.idf.il/.
85. Ibid. See also “Introducing: The Cyber Defense Unit,” *IDF System*, www.idf.il/; and “Preserving Cyber Superiority,” *IDF System*, 14 March 2019, www.idf.il/.
86. “The Most Intriguing Position at the Computer and IT Directorate—the Cyber Defender,” *IDF System*, 4 September 2018, www.idf.il/.
87. “The Annual Cyberdome Drill: Conclusion,” *IDF System*, 7 November 2019, www.idf.il/.
88. “Introducing: The Cyber Defense Unit.”
89. “The Most Intriguing Position at the Computer and IT Directorate.”
90. Alon Tshuva, “The First Cyber Branch in the GOC Army Headquarters Was Launched,” *IDF System*, 18 December 2017, www.idf.il/.
91. Naama Zeltsman, “The New Computer, IT and Cyber Defense Directorate Was

- Launched,” *IDF System*, 14 May 2017, www.idf.il/.
92. Koby Shtukman, “Combat Soldiers? The New Track That Enables Shifting to the Intelligence Directorate,” *IDF System*, 2 April 2019, www.idf.il/.
93. Shai Shaul, *The Decision on Establishing the National Cyber Bureau and the IDF Cyber Branch* (Herzilyya, Isr.: Institute for Policy and Strategy, 2015).
94. Michael Uria, “The New Cement Wall on the Northern Border That Would Stop Hezbollah’s Radwan Force” [in Hebrew], *IDF System*, 6 September 2018, www.idf.il/; Omer Dostri, “The Buildup of Forces for IDF Underground Warfare,” *Jerusalem Institute for Strategy and Security*, 15 January 2019, jiss.org.il/.
95. “Construction of Upper Barrier on the Gaza Strip’s Border Launched” [in Hebrew], *Ministry of Defense System*, 3 February 2019, www.mod.gov.il/.
96. Yossi Melman, “Gaza Barrier: Israel’s Handling of the Tunnel Threat,” *Forbes Israel*, 5 May 2017, www.forbes.co.il/; Hagai Amit, “The Three Billion Shekels That Should Stop Hamas,” *The Marker*, 20 August 2018, themarker.com/.
97. “Construction of Upper Barrier on the Gaza Strip’s Border Launched”; Yaniv Kubovich, “200 Meters Long, in the Northern Gaza Strip: The Sea Barrier That Will Provide Protection from Hamas Naval Commandos” [in Hebrew], *Haaretz*, 5 August 2018, haaretz.co.il/.
98. Yehuda Vach, “From Metal Strings to a Fortified Wall: Israel’s Fence Syndrome and Its Impact on the IDF,” *IDF Journal Bein-Haktavim*, no. 22/23 (2019), pp. 165–81.
99. Ibid.
100. Maj. Gen. (Ret.) Yitzhak Brick (former Comptroller, IDF), interview by author, February 2020.
101. Ibid.
102. Maj. Gen. (Ret.) Amos Gilad (former head of Research Department, IDF Intelligence Directorate), interview by author, December 2017.

