Naval Flanking in Ground Warfare

Gideon Raz

"The indirect [approach] is by far the most hopeful and economic form of strategy."
B. H. Liddell Hart[1]

Israel's Coastal Border

The Mediterranean Sea, Israel's only open border, also borders Israel's enemies to the north and the Gaza Strip to the south, thereby linking it to enemy states. Thus, Israel's control of this naval arena would enable it to project military strength from the sea, and afford it the capability to embark on landing operations of various types. "The shores of the State of Israel, the naval interface with each of our enemies, require us to expand our naval strength to the point of being able to land forces from the sea. David Ben-Gurion even said that we are bound to view the sea as Israel's extended western territory."[2] The naval arena is the Achilles' heel of Israel's enemies and therefore also an opportunity for the IDF.

The Operational Need

> Today the threat of high trajectory fire, based on the use of conventional weapons (missiles, rockets, mortar bombs) in massive quantities, tops the list of threats Israel confronts. It joins the classical, conventional threat that was based on the use of large military systems engaging in battles of ground maneuvers...The IDF must use the two major components of its capabilities, firepower and ground maneuver, in order to damage both the enemy's military capabilities and its political or organizational infrastructure...An enemy seeking to avoid severe blows operates purposefully and cynically within civilian population centers.[3]

Rear Admiral (ret.) Gideon Raz, former Deputy Commander of the Israeli Navy

Frontal assault has traditionally been the IDF's main maneuver. Activity deep in enemy territory was usually reserved for special operations, with a limited effect on the duration and results of the fighting. An exception to this rule was the landing of paratroopers from the sea during the First Lebanon War. Now, especially in light of the change in the threat, it behooves us to consider whether the IDF should continue to focus only on frontal maneuvering or whether it should also consider expanding the capability to carry out substantive maneuvers deep in enemy territory. Naturally, transferring a significant maneuvering force into the depth of enemy territory, operating there, and maintaining it would mean that the IDF would have to rely on naval capabilities as the primary platform, with the aerial storming forces playing a complementary supporting role.

Conducting substantive maneuvers deep in enemy territory has several advantages: dispersing the enemy's forces and upsetting its link between the front and the depth; surprising the enemy and upsetting its equilibrium; and finally, tackling the elements deep in enemy territory where there is a clear advantage to the use of ground maneuvers rather than firepower.

The need for flanking maneuvers[4] stems in part from the growing urbanization along the Syrian front, which appears to be the result of intentional Syrian policy designed to thwart IDF maneuvering and firepower. According to Liddell Hart, the flexibility provided by amphibious capabilities is the strategic resource at the disposal of a state with a coastline. The primary benefits of landing operations are mobility and flexibility, i.e., concentrating force and hitting the enemy whenever and wherever a state chooses. Such operations aim to take advantage of the surprise element and the enemy's weaknesses. The enemy, aware of Israel's ability to conduct landing operations on its shores, is stymied by its inability to guess when and whence the attack might come.

However, even if Israel enjoys superiority in the naval arena, it is clear that the battle cannot be decided at sea. In fact, the IDF has aerial and naval superiority, two essential components for the existence of a naval flanking option. In constructing a larger amphibious force, the IDF would be able to translate its naval superiority into a significant contribution for attaining decisions in ground battles. The essay below examines the components of the landing process and offers some recommendations on construction of this type of force.

Amphibious Operations: Historical Background

The history of naval power documents amphibious operations of various types and scopes.[5] These played a large and decisive role in World War II, from bombardments with naval gun fire and commando raids, through naval raids, to the landing of entire armies. An impressive range of amphibious operations – in terms of scope, operational conditions, and forces used – likewise took place following World War II. Among the most notable were the Anglo-French landing at Port Said (1956), the Turkish landing on Cyprus (1974), and the British landing on the Falkland Islands (1982), but the most striking landing in the post-World War II era was the Inchon landing in 1950.[6] While the American landing capabilities in the Korean War were but a faint shadow of what they had been in World War II, the United States was still capable of creating a quick maneuver from the sea and providing logistical support at shores that had not previously been prepared for landing.

The IDF's short naval history is studded with fairly impressive landing operations; especially given the relatively low priority the Israeli military has usually accorded this type of fighting. There were several operations representing milestones in this field, beginning with the Sinai Campaign, when Israeli Navy landing craft accompanied Brigade 9 troops along the shore in the move to capture Sharm el-Sheikh. The ships fired on Egyptian positions and assisted the provision of fuel to the force, which was isolated from every other supply route. In certain cases, even tanks were landed to strengthen the brigade. It is highly doubtful that these tanks would have reached their destination any other way or would have arrived in time to make a difference.

The Raviv Operation on the western shore of the Gulf of Suez in the War of Attrition was a joint operation of naval landing and armored vehicle activity, and may be considered one of the most successful of all IDF operations. Raviv had all the components of a classic joint landing, integrating tools and forces from all three branches of the military. The armored force did its job by attacking military camps, sentry posts, radar stations, military vehicles, and tent formations, causing heavy casualties to the enemy (some 150 dead) and heavy damage to installations, staying on the Egyptian shore some ten hours, and moving along an extended axis by daylight. More importantly, the operation achieved its strategic goal by demonstrating to the Egyptians that their rear was vulnerable,

thereby forcing them to mobilize forces there, which resulted in an easing of the military pressure on the canal sector for some time.

No naval landing was carried out in the Yom Kippur War,[7] despite long, exacting preparations in the Red Sea by the Israeli Navy in conjunction with armored formations that were designated to participate in the operation. According to one school of thought, this would have been the optimal use of the IDF's amphibious capabilities since the navy had the naval superiority that allowed the plan to be put into practice. However, the IDF found it difficult to allocate a sufficient number of forces at the beginning of the war and did not need the operation in order to reach a decision toward the end of it.

As part of the Peace for the Galilee war, the Israeli Navy undertook a large number of landings and raids from the sea. The most prominent was the landing of infantry and armored forces at the mouth of the Awali River, a naval flanking operation that led to successful flanking missions around terrorist forces that were concentrated in the Sidon area.

Many people within and outside the IDF claim that given the current geopolitical array, and especially the peace agreement with Egypt, the IDF no longer has the possibility to carry out naval flanking maneuvers that would help attain a decision on land. Yet according to Maj. Gen. (ret.) Amos Yaron,[8] who commanded the landing operation on the Awali shore in Operation Peace for the Galilee, the landing array was highly critical during the years Israel controlled the Sinai Peninsula and when Lebanon formed the background of every security discussion. The IDF retained the idea of naval flanking throughout; coordination and training were an integral part of IDF's state of preparedness.

The Future of IDF Amphibious Operations

As part of the formal definition of the objectives of the Israeli Navy, the mission of supporting the ground forces towards a decisive victory in the ground battles is accorded high priority. Assisting a decision on land encompasses a range of activities, including:[9]

a. Defending Israel and the areas in which the IDF is active from attacks from sea, thereby relieving the ground forces of the need to secure the sea sector.

b. Preventing the flow of reinforcements to the front through enemy ports.

c.   Pinning down the enemy's forces in defensive missions to protect military and civilian infrastructures along its shore.
d.   Bombarding targets along the shore.
e.   Carrying out commando raids from the sea.
f.   Gathering intelligence via the sea.

Nonetheless, the most significant support by the Israeli Navy in reaching a decisive result in a ground battle lies in outflanking naval maneuvers. In general the final objective of the navy's battle is in the land battle; the naval battle does not take place for its own sake. The primary goal of navies is to reach superiority at sea in order to support the ground forces, both using fire from the sea and by carrying out naval outflanking maneuvers. The direct effect of the naval force occurs (inter alia) by means of sea-to-land fire with various types of missiles, aerial attacks from aircraft carriers, naval artillery, and landing of forces of various scopes.

The assistance of naval forces to the primary ground effort requires several underlying conditions:[10]
a.   Transport and landing capability of armored troops at least at the brigade level in one round (which means landing capabilities for a division in four to five rounds).
b.   A total control of the transport and landing route with every type of warfare – in the air, at sea, underwater – so that the landing force is not exposed to attack during sailing or during beaching.
c.   Systemic targets on land suitable to attack by the landing force coming from the sea based on the following criteria: the lack of easy land routes to these targets; the existence of an appropriate area for landing in terms of accessibility from the sea and suitable terrain conditions for organizing after beaching; the likelihood of operational surprise likely to destroy the defensive systems of the enemy; and the ability of the landing force to join up with other forces arriving by land or that have landed in other locations.

Except for the landing operation at the mouth of the Awali during the Second Lebanon War, no significant outflanking naval operations were carried out by the IDF, apparently for several reasons. One, there were concerns about the risks to IDF forces from the sea route of the landing forces. Two, the targets appropriate for attack were far from where primary efforts were underway and there was concern that dividing the

ground forces among remote targets would do more harm than good to the primary effort. Three, constructing a massive landing force of troops via the sea requires systematic investment in equipment, weapons, and training at sea, in the air, and on land.

Executing a Landing Operation

An operation of landing troops on enemy shores, in order to conduct an outflanking naval maneuver, is a joint naval-ground-air operation. Such an operation is likely to include the following:

a.   Conquering the beachhead from which operations will be launched in the depth and rear of enemy territory.

b.   Taking control of the area in order to join up with other ground troops or for use by naval and aerial forces as a base for further operations.

c.   Taking control of the area in order to deny enemy access to it.

d.   Destroying enemy installations.

Naval landings are considered the most complex of military operations. For this type of action, a great deal of training and rehearsal is necessary. In addition, coordination and control of the composition of forces – ground, naval, aerial, and firepower – are critical. There are a few main stages of an operation. The first involves concentrating and training the forces in an area that in terms of sea, shore, and adjacent ground conditions is similar to the enemy area planned for the landing. Rehearsals involve the staff of the designated unit and navy vessels and equipment. The second stage involves rehearsing loading of the troops and their equipment. The third stage is transport oversea from the loading point to the point of debarkation. The fourth stage is the landing itself, from the rendezvous point of the vessels to the landing, and the securing of the beachhead.

A number of considerations – many of which are common to ground offensive operations – affect the landing operations. The operation will usually enjoy the advantage of taking the initiative and the ability to choose among a number of targets. Until the execution of the landing, the landing area must be kept a tightly guarded secret. However, more time is needed to embark on an assault from a shore landing than what is usually assessed for attacks on the ground.

From the time of the landing, the ground troops are limited in terms of assault abilities but are highly exposed to enemy fire. Fire support

during the first stages of the operation is based entirely on support from the sea and the air, taking advantage of long range precision armaments capabilities. The navy must make sure[11] to neutralize shore-to-sea missiles aimed at the debarking forces. The importance of preparations and planning has been summed up as follows:

> In the operational plan, the organization and implementation of the loading shore will have been spelled out in detail...the manner of transporting the troops and the armored vehicles at sea, the method for taking control of the beachhead and securing it. The plan will also have listed in detail the actions required to prepare the landing zone, preparing the landing crafts for the landing, the order of the landing, and manner in which the troops and the armored vehicles are to be taken out of the ships and placed on the shore.[12]

Choosing the Landing Zone

The primary considerations for choosing a landing zone include the sea and land conditions required for establishing a beachhead with sufficient depth to defend the zone from enemy fire. The choice of landing zone is dictated by the specific mission, the strength of enemy outposts, the existence of installations such as piers and quays, the number of landing shores and their features, ground conditions for carrying out the mission at its later stages, timetables, and weather conditions.

a. The mission: The zone chosen must allow for landing by a force of the required size, from which point the force will be able to proceed with carrying out its missions.

b. Daytime versus nighttime is the primary consideration, in context of the relative effects on the element of surprise, the ability of the aerial force to operate, enemy troops on the ground, at sea, and in the sky, navigation difficulties, and the ability to operate after the landing. Nighttime is useful in gaining a level of surprise and makes it difficult for the enemy to attain the information necessary to organize its troops.

c. The beachhead is the sector where a navy unit (usually a naval commando unit) lands and defends the area, assisted by other units, until a ground force of sufficient size lands, deploys, and begins to advance towards the predetermined targets. There is an operational option to take control of the beachhead and control sites in the vicinity

by troops flown in by helicopter. At the first stage, a commando force determines the situation on the shore and the immediate area; later, it is possible to reinforce the area with troops flown in by helicopter or brought in from the sea, or both.

d. Rehearsal and training:[13] Preparations for landing operations require strict, individualized rehearsal and training to ensure close cooperation and full coordination between all operation participants. The planned forces must train together so that each part understands the jobs, capabilities, and limitations of every component in the combined force.

The Force Units and their Missions

It is essential that the force components operate according to clear command and control principles. Cooperation between the ground and naval forces may be ensured through the normal procedures of inter-branch cooperation or through training of the force with a joint command for the operation. The command groups of the ground and naval forces must be located together on the command ship, preferably with a multi-branch presence at all command and control levels. A breakdown of the force structure and its missions shows:[14]

a. A naval task force, whose missions are intelligence gathering, defense against the enemy's naval forces, landing the troops and their equipment on the shore, assistance with sea-to-shore fire, and management of the sea-to-shore communications system. The naval force is to be divided into secondary forces on the basis of the missions. These include a unit to examine the landing shore, which entails identifying enemy outposts in the beachhead zone and vicinity; determining the state and conditions of the sea and landing beach; and checking for obstacles in the water and on the landing shore. There must be a unit to gather information on the enemy's aerial presence, and a unit to assist with fire from the sea, which will provide gun and precision fire to support the landing troops. "Naval platforms, which are mobile, carry large numbers of missiles (and other precision arms), and supported by satellite navigation capabilities, can play a central role in offense missions. In terms of the capacity to carry weapons, the naval platform is equal to many fighter jets. While naval platforms too are vulnerable, the naval

battlefield has become sophisticated and endowed with technology in ways that strengthen Israel's superior capabilities."[15] In addition, there must be a control unit, i.e., one or more ships controlling or helping to control the movement of troops to the landing point, ensuring ongoing and intact communications with all landing vessels, and assisting in controlling fire from the sea and creating smoke screening, if required. After the first landing wave, the control unit will direct the vessels of the second wave, as well as the landing of the equipment and the armored and other vehicles as required by the operation.

b. The landing force, which is transported by landing craft operated by the navy. These forces take control of the shore immediately upon landing, lead the troops parachuted in or dropped by helicopters, and provide close fire assistance to the landing troops.

c. Air support, which will assist in intelligence gathering, prevent interference by enemy airpower, attack enemy targets, transport parachutists or forces by helicopter, and provide close air firepower for the landing forces.

d. The beach party: The beachhead link is a naval force, commanded by the beach master, in charge of activity along the waterline of the landing shore. The size of the party depends on the size of the landing beach and the number of the planned landing troops. It will generally contain signal communication, boat maintenance personnel, a medical team, representatives of the battalions that are landing, and liaisons with the air force and ground firebases.

e. The shore party is a group of landing troops responsible for organizing and directing the troops as they land, comprising representatives of all landing units, including medical, engineering, and communications. The commander of the party is in charge of communications with the navy's beach master.

f. Beach activity:[16] During the landing, it is necessary to maintain the organizational structure of the units, from the squad level up, in the sea and on the shore. The loading of the troops and their debarkation must be planned accordingly. Once it lands, every unit is relied on for the landing of the remaining units from its parent unit. This means that it is necessary to load the troops in such a way that organic units arrive sequentially on the landing shore. Success in the critical phase

of the fighting that takes place immediately upon landing is based on the fighting capabilities at the squad and platoon levels. Every small unit is built up with the landing of its parent unit.

g. Intelligence reconnaissance before and during the landing: Landing a patrol unit for the purpose of intelligence gathering is common near the time of the landing of the main force. The most important information includes: the location and strength of enemy positions; the location and type of enemy fire positions (shore-to-sea batteries, artillery, anti-tank); the location of obstacles on shore and in the water; data about waves on the shores, the type of shore, and ground conditions leaving the beachhead; the location of communications, command and control centers, and observations posts; identification of landing areas for aircraft in the landing shore area; and discovery of errors on the map of the region.

In addition to the force components, there are further aspects to the landing operations, including:

a. The size and structure of the beachhead. The beachhead should be deep enough to allow defense against mid-range artillery. Conquering a beachhead of this size requires a relatively large force without exposing the flanks of the troops. The shorefront is determined on the basis of the topography of the area and in response to threats in the immediate surroundings.

b. Establishing the beachhead: At the first stage, the naval commando unit must inspect the landing shore, undertake hydrographic examinations of the shoreline and the sea, and ascertain that there are no natural or other obstacles that might interfere with the landing. The unit must observe the area and identify enemy presence. At the next stage, it will direct infantry troops arriving by specialized navy vessels to the shore to take the beachhead before the landing of the first wave of the main force.

c. Advancing from the beachhead: In landing operations, ground units must evacuate the beach as quickly as possible, moving rapidly away from the shore into the rear or in whatever direction has been assigned. Despite the importance of creating a secure perimeter around the landing shore, the landing force commander must not act defensively. Offensive activity is the best way to secure the landing shore.

d. The action plan: The choice of the landing shore is a function of the goals of the operation, an assessment of the enemy in the surroundings, the topographical features of the possible shores, and the ground conditions beyond the landing zone, time, and target ranges. The time of the landing, day or night, depends on the nature of the operation. The scope of the landing force is a function of the size and composition of the landing troops, the ORBAT of the landing at the navy's disposal, the size of the landing shore, and the plan of action following the landing. The depth of the beachhead taken by the landing force is a factor influencing the action plan for the coming stages. In the initial landing stages, the ground force will rely on effective cover provided by the navy and air force. Fire from the sea, aerial cover, and guided precision fire must be concentrated in order to ensure the success of the landing. Usually there is only a single opportunity to carry out a successful landing. Should the attempt fail, it is very difficult to change the situation. Therefore, it is necessary to deepen the hold on the ground in conjunction with the fire support that may be provided to the attacking force.

e. Protected beaches: It is preferable to avoid landings across enemy positions, to land light forces on unprotected flanks (even if the geographical conditions are not optimal), and to neutralize enemy positions with fire from the flanks before attempting the primary landing.

f. Using existing infrastructures:[17] In the first stage the preferred mission of a landing operation is to take control of the pier/jetty to allow quick, efficient flow of the forces and their equipment, even before the surprised enemy has had a chance to organize its troops for a counterattack. A preemptive, in-tandem strike of the raiding party's forces against enemy defensive systems liable to act near the pier/jetty should be considered. Special forces should land from the sea or air near the jetty, take control of it or part of it, and allow the landing vessels to enter with the first wave followed by the vessels with the main force and its equipment.

Types of Landing Operations

There are several types of landing operations.[18] One is intended for deception: a naval force arrives in the area and carries out what looks like

a landing. The aim of the action is to force the enemy to dispatch large forces to the area at the expense of the true destination. In World War II and in the 1991 Gulf War the US Marines undertook many actions of this kind.

The second type of landing operation is a raid from the sea.[19] The naval raid is an operation of a limited scope – relative to the size of the force and the length of the operation – taken by a force with high mobility operated from the sea. The nature of the raid is a type of mini-warfare based on the naval force. It is designed to unsettle and wear down the enemy, suppress its assault initiatives, and force the enemy into a defensive posture. By its nature, a naval raid is not likely to change the fate of the war but often its utility is likely to be high, especially in terms of morale.

A third type involves landing for the sake of assuming control of an isolated target, such as a jetty or an airfield. In such an operation, there are no missions requiring further movement of the troops into the depth of enemy territory. In a similar vein, there is landing operation for the sake of conquest. This operation opens a beachhead or a jetty for the sake of the quick offloading of troops as part of a comprehensive assault. This type of operation is the most complex, and speed is critical. It must allow the flow of troops in order to capitalize on the success of the surprise element. Taking control of a pier/jetty is a preferred goal.

Finally, there is evacuation by sea. The operation plan will include the evacuation of the troops by sea or their joining up with ground forces. Evacuation will take place as the result of strategic considerations or as a retreat forced by developments in the battlefield. Retreat and evacuation by sea under enemy assault is a complex operation accompanied by many risks to the evacuating troops.

Command, Control, and Logistics

A naval flanking operation is considered the most complex among all military operations. It combines forces from all three branches of the military and troops from different corps that are not trained in the unique battle doctrine of amphibious operations. It also requires full coordination between all participants and is (usually) controlled by a unified command post. The database of all units of the force must be shared and up-to-date. A conceptual (as opposed to technical) summary based on the US Marine Corps Command and Control Doctrine deals with

understanding the system known as "mission command and control."[20] Accordingly, the command and control plan for a joint amphibious operation depends on the unique requirements of the specific conditions of the operation. In most cases, one should prefer the "mission command and control" approach as it more effectively deals with the unexpected and with changing timetables. Since uncertainty defies control, flexibility and speed are preferred. The approach allows flexibility in handling rapidly changing conditions and better use of windows of opportunity. The approach provides for the degree of cooperation necessary to an integrated effort yet gives commanders at all levels the latitude to act with initiative and daring.

As part of the landing forces, there will be a secondary force whose function is to establish an infrastructure for a logistical base (supplies, maintenance, and medical) as well as a helicopter landing pad. At a later stage, it will be necessary to maintain a continuous flow of supplies from the rear through the naval force to the beachhead. The supplies will arrive according to a timetable and contents determined by the commands of the operations and according to operational developments on the ground.[21] The US Marines have held deliberations on the value of maintaining the logistical base on ships outfitted to this end and located in the naval sector beyond the enemy's range of fire. Such a ship or ships would be secured by a navy task force. Should the landing force wrest control of the jetty or pier, this would become the logistical base. The operations plan should determine the logistics plan on the basis of the following considerations: the logistical contents on the beachhead relative to the scope of the force landing in order to complete its missions; the conditions and tools available to the force allowing them the opportunity to establish logistical support at sea; and the distance between the logistical base at sea and the fighting force on the beach (depending on the enemy's ability to threaten the ships at sea).

In the medical context, it is necessary to find the balance between the need for providing medical assistance on the beachhead and medical treatment on the ship outfitted for this purpose until evacuation to a hospital. The plan must solve the problem of providing first aid and stabilizing the injured near the fighting force and later evacuating to a medical base on a hospital ship or a hospital in the rear, depending on the type of injury and the decision of the doctors in the zone.

Conclusion

The very existence of an active amphibious force in the IDF order of battle[22] would lock enemy troops into defending targets on the shore at the expense of placing forces in the primary arena. Operations such as outflanking naval maneuvers are likely to upset the equilibrium of the enemy's political and military leadership. By landing troops from the sea, for example, it is possible to threaten Hizbollah leadership centers in southern Beirut. Large, tightly clustered orders of battle − armored corps, anti-missile systems, and rocket, missile, and artillery batteries − would present themselves on the main front line.[23] Some of the Syrian rocket launchers are located in the depth of the country, as a result of the missiles' extended ranges. Therefore, fire from the sea and forces arriving by a flanking maneuver to take action against these systems have important functions.

A common argument in the IDF against developing and maintaining naval flanking capabilities relates to the allocation of the necessary resources. Accordingly, in order for troop landings to be effective in wartime, it would be necessary to land a joint force at the division level in a very short period of time, requiring transport and landing capabilities of an armored force of brigade size at every landing round. Such a capability would require a major investment of resources, at a time when the IDF is in a tight budgetary position. Other claims touch on the high risk inherent in such operations (a factor that lessens leaders' motivation to approve them) and the inability to allocate a ground ORBAT formation for a flanking maneuver. There is also doubt about the presence of targets for which it is possible to execute a naval flanking move that would at the same time allow the flanking force to join up with the primary ground force and have a tangible effect on the main ground battle. This skepticism grew once Egypt left the circle of active warfare against Israel.

Despite these claims, it seems that naval landing operations are still fully relevant both for the world at large and for Israel. The peace treaty with Egypt and the withdrawal from the Sinai Peninsula may have taken the most natural target for sea-to-shore landing operations on the Gulf of Suez off the table, but there are still many contexts, both in terms of Israel's routine security measure and in terms of warfare, in which landing on the Lebanese or Syrian shore would effectively serve various

Israeli interests. In any situation they can contribute to pinning down enemy forces and keeping them away from the front lines.

The question of resources allocated by the IDF to amphibious goals requires clarification. First, the attainment of naval superiority, which is a requisite precondition to a significant naval landing on enemy shores, is already obligatory on the basis of the Israeli Navy's other missions, first and foremost securing the nation's shores. Therefore, the core of the required resources for creating the conditions necessary for naval flanking maneuvers is already invested. The additional marginal resources required to construct a flexible, effective amphibious force to carry out naval flanking maneuvers are not high (primarily landing craft). Yet the IDF's ability to translate naval superiority attained in the first days of fighting into a significant contribution to a victory on the ground is highly limited.

Staff work is underway in the IDF in order to budget and strengthen the IDF's landing capabilities. The Israeli Navy is undertaking a professional examination of the different options for the various types of landing vessels that could provide responses to the requirements of the ground forces. By using the navy and a designated formation of ground forces, the IDF must construct amphibious capabilities that will allow it to use the advantages of the sea and the indirect approach by landing troops on selected targets along the coastline in the enemy's rear.

The objective must be construction of a designated force that would be ready and prepared to carry out large scope flanking operations that would be carried out jointly from the sea and the air. In order to promote the subject of flanking maneuvers effectively, there seems to be room for establishing a designated command that would incorporate commanders from the naval and aerial branches. This command would bear overall responsibility for the subject, and command flanking operations in war.

Notes

1 B. H. Liddell Hart, *Strategy: The Indirect Approach* (New York: Frederick A. Praeger, 1954), p. 162.
2 Maj. Gen. Sami Turgeman, CO ground forces, in a lecture to students at the Command and Staff College, December 30, 2009.
3 Gabriel Siboni, "War and Victory," *Military and Strategic Affairs* 1, no. 3 (2009): 40-42, at http://www.inss.org.il/upload/(FILE)1269344811.pdf.
4 Author interview with Maj. Gen. Gadi Eisenkot, GOC Northern Command, November 15, 2010.

5   Gideon Raz and Ariel Levite, *Whither the Navy? Some Thoughts on Doctrine and the Construction of the Israeli Naval Force*, Memorandum No. 19, Center for Strategic Studies, July 1987.

6   Donald Boss, "Army and Security," The Second Latrun Conference on Ground Warfare, September 16-17, 2008.

7   Zeev Almog, "Israel's Naval Arena: Assessment and Lessons," *Maarachot* 299 (July-August, 1985).

8   Author's interview with Maj. Gen. (ret.) Amos Yaron, November 24, 2010.

9   Raz and Levite, *Whither the Navy*.

10 Ilan Amit, "Constructing a Naval Force for the 1990s," *Military Studies*, Rafael Advanced Defense Systems, December 1980, p. 72.

11 Author interview with Maj. Gen. (ret.) Amos Yaron, November 24, 2010.

12 Zeev Almog, "The Israeli Navy in Operation Peace for the Galilee," *Maarachot* 413 (July 2007).

13 *Landing Operations on Hostile Shores*, War Department, June 2, 1941.

14 Ibid.

15 Gideon Raz, "Naval Firepower and Its Role in Land Battles," *Military and Strategic Affairs* 2, no. 2 (2010): 22 at http://www.inss.org.il/upload/ (FILE)1298302355.pdf.

16 *Landing Operations on Hostile Shores*, War Department, June 2, 1941.

17 Carlton Meyer, *The Spectrum of Future Warfare*, www.G2mil.com , 2010, Chapter 9.

18 Ibid.

19 Raz and Levite, *Whither the Navy*.

20 *Command and Control*, U.S. Marine Corps, October 4, 1996, p. 105.

21 *Naval Expeditionary Logistics: Enabling Operational Maneuver from the Sea*, National Academies Press, 1999.

22 Author interview with Brig. Gen. Shai Brosh, former commander of Shayetet 13, October 22, 2010.

23 Author interview with Maj. Gen. Gadi Eisenkot, GOC Northern Command, November 15, 2010.