

MARITIME STRATEGIC EVALUATION FOR ISRAEL 2017/18

Chief editor: **Prof. Shaul Chorev**

Edited and produced by: **Ehud Gonen**



Historic Look

The Israeli Navy in the Six Day War

Arieh Rona and Kochavi Azran

The buildup of naval power and naval strategy up to the war

In 1955, Admiral Shmuel Tankus was appointed as commander of the Israeli navy. At that time, the navy consisted of outdated ships that included patrol boats, torpedo boats, frigates and corvettes from the Second World War.

Immediately on his appointment, a characterization was made of the ship that would meet the needs of the navy. It was given the temporary name "archetype" and was classified as a light destroyer equipped with the most up-to-date technology of that day.¹

When Britain made an offer to the Israeli navy of two Z-model destroyers (which had been built in 1944), it was accepted and the initial contacts to have a new ship built were halted. With the receipt of the destroyers, they became the backbone of the navy and were given the names INS Yaffo and INS Eilat.²

The situation was different for *Shayetet 13*.³ Its commander at that time, Izzy Rahav, describes its development as follows: "In general, the naval units suffered from budget limitations; as the commander of *Shayetet 13* during Tankus' term, I did not feel any budget limitation in the acquisition of equipment or the expansion of the *Shayetet*."⁴ During the term of Shmuel Tankus, the *Shayetet* became a fighting unit and the old torpedo boats were replaced with new ones. Nonetheless, Moshe Dayan, the Chief of the General Staff at that time, was critical of the navy and considered it to be inferior to the other branches. Also his successor, Haim Laskov (who had served as the Commander of the Air Force in the past), felt that the navy has a limited role, which was in contrast to the opinions of Shmuel Tankus and his successor, Yochai Ben Nun.

These commanders, and Shlomo Erel after them, were of the opinion that a buildup of the navy is necessary in order to operate in the open seas and to protect the shipping lanes in the Mediterranean (within a range of about 1000 nautical miles). However, the senior echelons of the IDF felt that the navy's role was limited to defense of the coastal waters. While serving as commander of the navy, Yochai ben Nun stated: "Israel's navy needs to be diversified, efficient and able to operate at long distances. It should be based on missile boats, submarines and *Shayetet 13* and should have sophisticated and diverse weaponry. I believe in tactical flexibility and the superiority of the fighter."⁵

1 Eshel Tsadok, Shmuel Tankus. *From the Yarkon to the Navy*, Tel Aviv 2003, pp. 78–79. [Hebrew]

2 INS: Israeli Naval Ship.

3 *Shayetet 13*: The naval commando unit of the Israeli navy.

4 Ibid., Ibid.

5 Ben Nun, Yochai, *The Period Took Us*, Tel Aviv 2003, p. 116. [Hebrew]

The navy had low budget priority in the IDF's long-term plans. As part of the Bnei Yaakov plan for the period 1959-1961, priority was given to the armored forces and the paratroopers, a situation that continued with the Hashmonaim plan for the period 1962-1964.⁶

The navy sometimes found a sympathetic ear among political leaders. In the debate over the submarines needed by the navy as part of the IDF long-term plan, Chief of the General Staff Rabin requested two submarines while Prime Minister Eshkol was in favor of four. In the end, three were acquired.

Despite this attitude, the navy's role was expanded as follows:

- Destruction of the enemy's naval forces.
- Prevention of attack on the country's coasts.
- Assistance to ground forces in combined operations and in transport.
- Severing the transportation lines of the enemy.
- Protection of shipping and the sovereign waters in time of peace.

The order of battle that was planned for the navy in the Bnei Yaakov plan in 1962 was as follows:

- 3 destroyers.
- 5 submarines.
- 12 torpedo boats.
- 2 tank carriers.

This plan was discussed several times but not implemented and finally the number of submarines was reduced to two and during the Six Day War the navy had six torpedo boats in the Mediterranean and three in the Gulf of Eilat.

During the implementation of the IDF's second long-term plan for 1963-1964, the navy formulated a strategy that would be based on missile boats, submarines and landing craft.⁷ Delays in the implementation of the plan, the cancellation of the construction of the missile boats in Germany and its shift to France, as well as the delay in the renovation of the T-class submarine, led to a delay of a year in the arming of the navy.⁸

During the period of that plan ("Hashmonaim"), the Egyptian navy was growing in strength, following the arms deal with the Soviet Union. It also received Ossa-model

6 Oren Eli, *"The Six Days" in Nachshonim – 40 Years Since the Six Day War*, eds. Hagai Golan and Shaul Shai, Tel Aviv 2007, pp. 181–204. [Hebrew]

7 See Oren, *"The Six Days"* according to: *Navy Headquarters – Highlights of the Work Plan 63–64*, March 63. IDF Archives. [Hebrew]

8 Erel Shlomo, "The Maritime Conception", in *The Six Day War – The Commanders and Researchers Chair*, Michaelson and Effy Meltzer eds., Reut 1996, p. 293. [Hebrew]

missile boats that carry four Styx sea-to-sea missiles and Komar-series ships that carry two. The navy planned to renew its order of battle and was in the midst of a process to gradually upgrade its forces; and it was about to allocate manpower and resources to the process of rejuvenating its missile boats and submarines. This was at a time when the IDF predicted that war is not expected before 1970.

Preparations for war and the status of the forces

When the country went on alert for war, the navy went into action to achieve battle readiness. Of the three destroyers, only the Yaffo was ready; the Eilat was in renovations and the Haifa was in the process of being dismantled. The Tanin submarine was ready but its sister ship, the Rahav, could not dive. *Shayetet 13* and the torpedo boats in the Mediterranean and the Red Sea were at a high level of readiness and well-trained.



Figure 1 – Right INS EILAT, Left INS YAFFO

The navy used the period of alert to prepare its ships and the coastal deployment. During this period, the INS Eilat and INS Noga were returned to service and the navy was reinforced by armed fishing vessels. A forward base was set up in the port of Ashdod, radar systems were put in place to reinforce the coastal detection system and landing craft were brought down to the base in Eilat.⁹

Shlomo Erel, the commander of the navy, described the situation as follows: "The navy was compared to someone who had one leg abroad, i.e. the missile boats and the new submarines, and one leg on the ground, which is losing its footing: the forces under my command at the beginning of the alert were somewhere between absurd and ridiculous."¹⁰

Up until June 5th, on the eve of the war, the navy managed to ready most of its vessels for battle. The three destroyers, the landing craft and the torpedo boats were ready, as was *Shayetet 13*, which consisted of about 70 fighters.

9 Lifshitz Eitan and Kahana Rivka, *The Six Day War – the Navy*, Training and Instruction Department – History, 1970, p. 19.

10 Erel Shlomo, *Before us the Sea – The Story of a Sailor, a Commander and a Warrior*, Tel Aviv (1998), p. 258. [Hebrew]



Figure 2 – Torpedo attack boat

The activity of the navy was to take two forms:

1. Attacking enemy ports using *Shayetet 13*.
2. The carrying out of ambushes at the entrances to the enemy's bases by means of the navy's surface forces and the Tanin submarine which was operational.



Figure 3 – Submarine INS TANIN ready for action

Due to the poor situation of the navy's vessels and the small size of its forces, the commander of the navy decided to put emphasis on guerilla warfare, which generally requires surprise and initiative. He did not agree with the common view in the navy that *Shayetet 13* should be used for the first strike of the war. In any case, this was not made possible because the opening strike of the war was made from the air.¹¹

The operational planning rested on the plans that had been given to Navy Headquarters – the "Sadan" General Headquarters defensive plan and the "Kamrun" plan that involved the attack of enemy ports using *Shayetet 13*. In addition, the navy was capable of landing an IDF force in northern Sinai.

¹¹ *The Six Day War*, Training and Instruction Department, p. 19–20.

The navy had a fairly large landing craft force, which included 6 tank carriers that together could land a battalion-sized armored battle group. This was "disproportionate to the size of the navy's forces."¹²

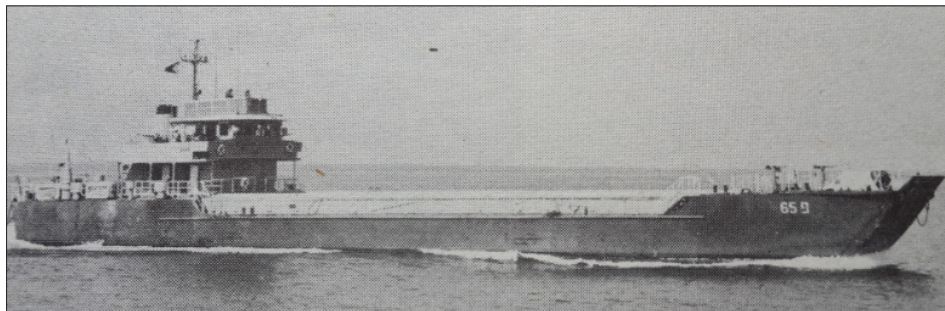


Figure 4 – Tank Carrier (TC) 60 meter

The General Staff did not attribute importance to a landing from the sea, but when the war began it "jumped" at the opportunity to use the navy's landing capability. To this was added the "Baram" plan which involved the attack of Syrian ports. The planned operations at this stage were the following:

1. Attacking Syrian ports: Minet el Beyda, Tartus and Latakia.
2. Attacking Egyptian ports: Port Said, the Alexandria port and Hurghada on the Red Sea by means of a submarine and *Shayetet 13*.

Starting from May 21st, the General Headquarters focused on solving the problem of the Straits of Tiran which were closed on May 23rd and the navy was ready to carry out a diversionary maneuver in order to draw forces to the area of Sharm el Sheikh. The torpedo boats patrolled the Gulf of Eilat and the Dolphin was ready to sail through the Straits. Preparations were made to have a tanker sail to Eilat and for landing in the area of the Straits in the day.

The enemy and its order of battle

Starting from mid-May, the Egyptian navy was on alert in its bases in the Mediterranean and the Red Sea. Its forces included the following: 6 destroyers and frigates, 7 Romeo and Whisky submarines, 18 Ossa and Komar missile boats and a large number of small vessels. The battle readiness of the ships was satisfactory, as was their operational capabilities.

The Israeli navy did not accurately evaluate the operational ability of the Styx missile, one of the new weapons in the naval arsenal. Most of the Egyptian navy was concentrated

¹² Erel, *Before us the Sea*, p. 259.

in the port of Alexandria on the Mediterranean. The navy was also located at Port Said and at Mersah Matruh in western Egypt. In the Red Sea, the navy was located at the main port of Suez in the southern part of the Canal and the port of Hurghada near Sharm el Sheikh. Two destroyers were sent southward to the Red Sea in order to impose a blockade on shipping to Israel and patrols were reinforced in the area of the Tiran islands. By May 14th, the Egyptian navy had completed its preparations.

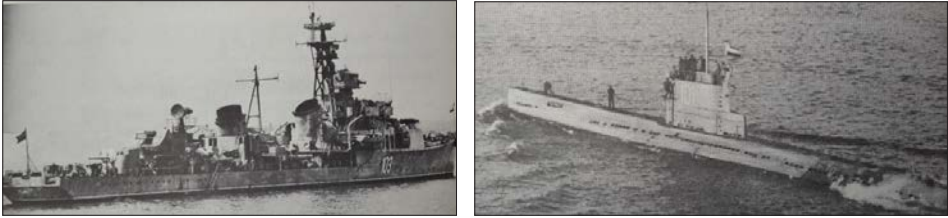


Figure 5 – Right Egyptian destroyer class 'skoryy' , Left Egyptian submarine class W

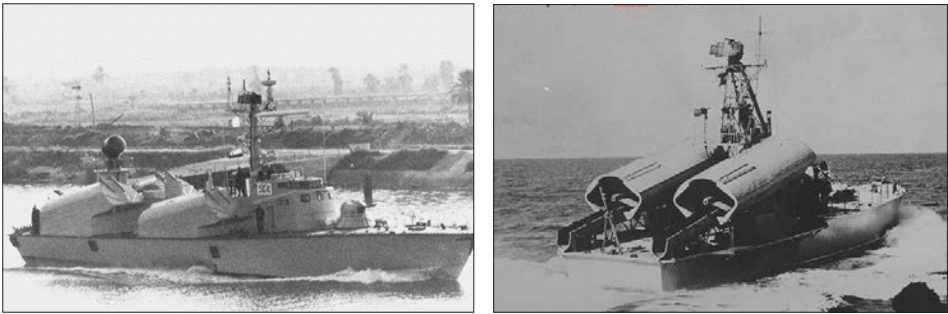


Figure 6 – Right Osa class missile ship, left Komar class missile ship

The Syrian navy, which had a defensive orientation, consisted of 6 Komar missile boats, two minelayers and K-123 torpedo boats. It was located in four harbors: Minet el Beyda in the North, the port of Latakia, the Baniyas harbor and the port of Tartus which was under construction. In addition, there were a number of coastal radar stations and batteries of 152 mm coastal cannons (not radar directed).



Figure 7 – Right Komar class missile ship performing missile launch, left Torpedo attack boat class K-123

Operations on the Syrian coast during the war

The operational planning of the Israeli navy was frequently modified during the course of the war, which was the result of the small size of its forces (and primarily a lack of ships), as well as an unwillingness on the part of the General Headquarters to approve operations with potentially high risk.

The IDF landing operation in the area of el Arish, which was planned but not implemented, tied down much of the navy's forces and therefore "Galim" and "Shikmona" fishing vessels were mobilized under the command of Yochai ben Nun and Yossele Dror to be used as transport vessels for *Shayetet 13*.

On May 24th, Captain Avraham Botzer was appointed as commander of the Red Sea theater. After encountering difficulty in obtaining approval for operations, the Commander of the Navy met with the Prime Minister and presented his plans in the maritime theater:¹³

1. The balance of forces was such that actions should involve *Shayetet 13*.
2. There is a need to quickly sink most of the enemy forces.
3. The enemy should not be allowed to attack the Israeli coast.

After the meeting with the Prime Minister, he met with the Chief of the General Staff, his Assistant and the Head of the Operations Branch. Since the landing operation had been canceled, the naval forces were directed to act against the Banias harbor, while the ISN Yaffo and the torpedo boats were directed to act against Port Said together with a group of *Shayetet 13* divers.

On June 5th, approval was given by the General Headquarters to act against Egyptian and Syrian ports.¹⁴ The navy planned to operate against five targets on the first night using *Shayetet 13*, from Minet el Beyda in northern Syria down to the port of Alexandria in Egypt. These operations were carried out 24 hours after the start of the war, so that the advantage of surprise did not exist. Thus, the operations were carried out while the enemy forces were ready and on guard with defensive measures and patrols. The changes required hasty planning and there was no up-to-date intelligence for any of the operations with regard to the deployment of the vessels in the ports.¹⁵

The "Galim" fishing vessels under the command of Commander Yossele Dror which were at sea returned to port on May 26th and set sail again on June 4th. On June 5th, approval was obtained to carry out the operation of *Shayetet 13* in the Minat el Beyda port on the Syrian coast. There were a number of problems with the rubber boats and

13 Oren, *The Six Day War*, p. 189; Erel, *Before us the Sea*, p. 264.

14 In his approval of the operation, the Chief of the General Staff gave the following instruction: "Don't go in if you are uncertain," Training and Instruction Department, *The Six Day War*, p. 79.

15 Erel, *Before us the Sea*, p. 262. The Commander of the Navy claimed that despite the loss of the element of surprise there was no choice but for the forces to act as they did.

not enough limpet mines. The force was reduced to three pairs of divers and due to the slow pace of progress in the rubber boats it was not possible to carry out the mission. As a result, the commander of the operation decided against penetrating the port. In the morning, the commander of the operation notified naval headquarters of non-completion of the mission. The ship remained in the operational area. The force was returned to its base in Haifa on June 7th. In summing up the operation, Dror stated the factors that led to the delays: slow progress, an error in navigation, mishaps with the boats and the lack of communication between the force and the leading ship.

The "Shikmona" research/fishing boat was modified prior to the war in order to carry a *Shayetet 13* force. The boat, under the command of Yochai ben Nun, and the fighters, under the command of Lieutenant Paz (Paulene), carried the rubber boats and the "pigs" (underwater vessels that carry two fighters). The "Shikmona" ship that was meant to operate in the port of Tartus arrived at the drop-off point opposite the port at a range of about 10 miles during the night, when it was not possible to carry out the mission. The commander of the operation decided to delay implementation and thus the mission was cancelled.

The INS Noga under the command of Lieutenant Commander Zeev Ariel was meant to attack the port of Latakia in Syria by means of *Shayetet 13*. This target was changed when Noga could not arrive in time from the landing operation that was cancelled and the new target decided on was the Baniyas harbor. The *Shayetet 13* force under the command of Lieutenant Commander Amnon ben Tsion was not familiar with the target and did not possess up-to-date intelligence-gathering means. After the force was lowered into the rubber boats at 22:00 problems arose in locating the harbor and since they were unable to identify their location, the mission was cancelled. On its way to the pickup point, the boat encountered three Syrian vessels but refrained from attacking them so as not to endanger the operation to pick up the *Shayetet 13* force.

Summary of the operations on the Syrian coast

In some of the operations, the forces were dropped off late since the speed of movement of the *Shayetet 13* force was not correctly estimated. The large number of changes and the different plans resulted in a shortage of equipment, as well as a serious deficiency in up-to-date intelligence. The Head of the Naval Department, Captain Izzy Rahav, felt that in some of the operations mistakes were made in estimating the time needed and with better preparations the missions could have been carried out.

In his summary of the operations, Yossele Dror wrote: "I kept my doubts and uncertainties to myself in order not to undermine the men's confidence and indeed I feel that we did everything we could to carry out the mission. I am doubtful that there are many other

units in the IDF that would set out on a mission knowing that there was little chance of them coming back in one piece."¹⁶

The operations on the Egyptian front

On June 5th, the INS Yaffo was joined by a force of *Shayetet 13* under the command of Lieutenant Commander Zeev Almog, which included two "pigs" (underwater vessels) and a "bird" (a fast command boat) with the goal of attacking vessels in Port Said. The plan was based on intelligence reports that missile boats are docked in the port and it is possible that a submarine will be joining them. The force was under the command of Captain Benyamin Telem and the ship was under the command of Commander Yitzhak Katt.¹⁷

The INS Yaffo was accompanied by three torpedo boats from Flotilla 914 under the command of Lieutenant Colonel Oren.¹⁸ It was decided that the operation would finish by 23:30.

On that same morning of June 5th, a telegram was received from the commander of the navy by Captain Telem, which said among other things that: "We must not suffer casualties that will be exploited by the enemy for purposes of propaganda. Don't endanger the Yaffo in an encounter with the "Ossas". The priority is to operate in the port."¹⁹ This telegram was sent as a result of a conversation between the Chief of the General Staff and the commander of the navy: "Don't send them inside, don't get a destroyer sunk there, near Port Said."²⁰ At 20:15 about an hour before the drop-off of the *Shayetet 13* force, approval was received for the mission and it mentioned that there is no certainty that targets are located in the port. The drop-off was at a short range of 8 miles and thus a valuable hour was added to the schedule of the fighters. The INS Yaffo and the torpedo boats headed north. Two "pigs" carried out a comprehensive sweep of the port under attack of depth charges and did not find any targets (pair 1: Shamir-Soretski and Luria; pair 2: Dov Bar and Yeshayahu Goren). The "pigs" continued to search for 2 hours and 40 minutes but the Egyptians had evacuated the warships from the port, including two Ossa missile boats that were patrolling in northern Sinai.

At 5:00, Zeev Almog brought the "bird" in closer in order to pick up the "pigs". At relatively close range, Dov Bar and his partner were picked up and the pig was destroyed. A few

16 Almog Zeev, *Commander of Shayetet 13*, Or Yehuda 2014, p. 358, 60-359. And also the comments on statements of Yossele Dror, which discuss and analyze the issue of "at any price" and its effect on the soldiers.

17 Training and Instruction Department, *The Six Day War*, pp. 11-109.

18 The Torpedo Boats – 207, 206, 203.

19 Training and Instruction Department, *The Six Day War*, p. 113.

20 Ibid., *ibid.*

minutes later, Shamir and his partner were picked up and their "pig" was also destroyed. The "bird" then headed for the meeting point with the torpedo boats.

While this was taking place, the torpedo boats spotted two vessels entering the port which were later identified to be missile boats. The ships were attacked but the attack was called off at 02:38 so as not to endanger the pickup of the *Shayetet* fighters.

The torpedo boats opened fire on the missile boats from a range of about 1000 yards, at which there is no chance of hitting the target (effective range for 20 mm and 40 mm cannons at night is between 100 and 150 yards, based on the Rumani battle experience).²¹ The *Shayetet* force on the "bird" was picked up by the Yaffo at 06:00.

The Alexandria operation

The main Egyptian naval force was anchored at the port of Alexandria, the navy's main base. The port was protected by coastal cannons, radar and patrols. The Egyptian navy carried out patrols up to about 20 miles from the port.

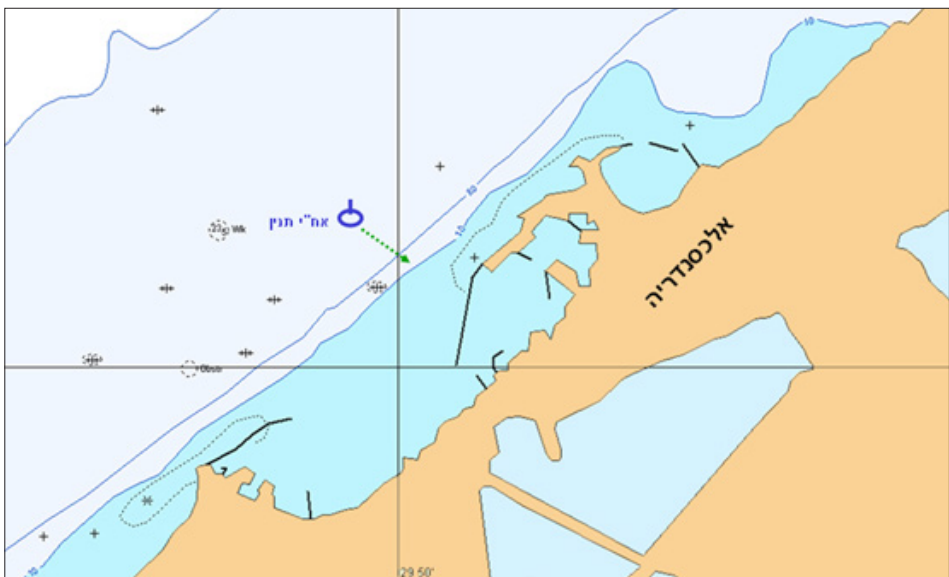


Figure 8 – Operation in Alexandria port – ROGEL 4

The INS submarine Tanin under the command of Lieutenant Commander Avraham Dror received approval to operate using two methods: attacking ships at the entrance to the port and putting into play a force of *Shayetet 13*, under the command of Lieutenant Commander Eitan Lifshitz, and three pairs of divers.

²¹ On the effective range at night from small-scale weapons, see: Pope, D., *Flag 4 – The Battle of Coastal Forces in the Mediterranean 1939-1945*, Annapolis 1998, p. 190.

In the afternoon of June 5th, the submarine received approval to attack the Egyptian ports.²² The submarine discharged the divers at 19:00 and the pickup was set for 03:00. The three pairs operated separately in the port and when they did not find any military targets they attached the explosives to a dredger and a dry dock. None of the three pairs managed to make contact with the markers sent out from the submarine. Two of the pairs joined together and returned to the breakwater to hide and there they met the third pair.

The commander of the submarine waited for the divers and later started moving slowly northward. On the way, he located a target and fired four torpedoes at it that did not make contact. In response, the submarine was attacked by depth charges which disabled its passive sonar. It moved out to 50 miles from the coast. In the afternoon hours of June 6th, Egyptian forces located the divers hiding in the breakwater and they were taken prisoner.

The commander of the submarine planned to come in again to pick up the fighters but towards evening, at 19:00, the submarine received word that the fighters had been taken prisoner. From that point onward, the Chief of the General Staff did not approve any further naval initiatives.

On the Syrian coast, none of the operations succeeded. At Port Said, the *Shayetet* did not find any targets and the torpedo boats did not destroy the "Ossas" that were coming into the harbor. Thus, "there was a heavy atmosphere at the naval headquarters."²³

Naval operations in the Red Sea

The Red Sea headquarters had made preparations to carry out an ambush using torpedo boats about 20 miles south of Eilat, based on information about a possible attack by Egyptian destroyers and torpedo boats. The force, commanded by Captain Avraham Botzer, included mobilized private vessels, *Shayetet 13* explosive boats and the "Tsala" tugboat. When enemy forces did not appear and the air force did not discover any enemy forces on the way, the force returned to Eilat.

On June 6th, it was decided to capture Sharm el Sheikh and the navy was given the mission of landing four MX tanks using a small vehicle landing craft, with protection from the torpedo boats of Flotilla 912. The torpedo boat force entered Sharm el Sheikh on June 7th and found that the Egyptian forces had abandoned the location. Two fishing vessels being used by the Egyptian commandos were captured. The landing force landed the tanks on that day.

22 See also: Oren, *The Six Day War*, p. 191. Oren comments on this as follows: "It should be mentioned that the intelligence telegram with a list of the targets sent to INS Tanin (Alexandria) was not received and requests for flights to be made above the main enemy bases in order to obtain aerial photographs before sunset were rejected"; *ibid.* p. 204.

23 Oren, *The Six Day War*, p. 198.



הטרפדות הגיעו למפרץ בשעה 11:30 ובשעה 12:12 הונף דגל ישראל על בנין בית החולים של כוחות האו"ם בשארם-א-שייח'. בוצר התקשר למפקד כוח הצנחנים והודיע לו על תפיסת המקום. כתוצאה מכך בוטלה הצניחה ובשעה 14:00 נחתו הצנחנים במסוקים.



Figure 9 – Capturing Sharm el Sheikh by Torpedo attack boats, landing craft and the tugboat TSALA on June 7, 1967.

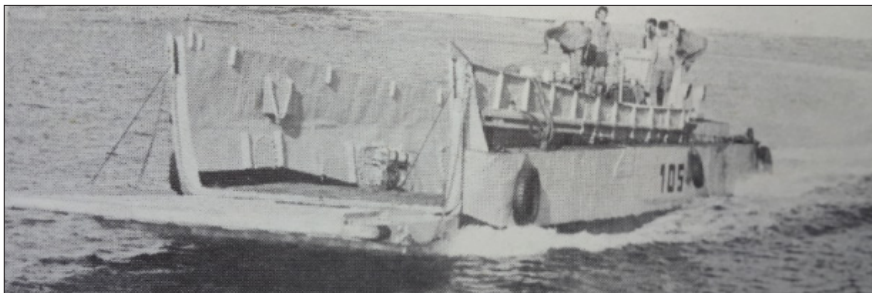


Figure 10 – small vehicle landing craft

The Liberty incident

On June 8th, the USS Liberty, an American surveillance ship, was attacked by mistake off the shores of northern Sinai. The ship was carrying out eavesdropping and intelligence gathering tasks. The ship was about 150 meters long with dozens of antennas that are used for eavesdropping and geolocation and it was armed with four 0.5 machine guns. The ship was sailing from the port of Abidjan and was in the Mediterranean under the command of the Sixth Fleet. It operated outside sovereign waters opposite the coasts of Israel and Egypt.

On June 8th, the Liberty was discovered by patrolling Israeli aircraft and identified as an American auxiliary ship; it was designated as such at the navy's control center. Sometime later it was removed from the control table.

In the afternoon of that day, reports arrived at naval headquarters of the shelling of our forces in el Arish from the direction of the sea, which turned out later to be incorrect. Three torpedo boats of Flotilla 914 were sent out from Ashdod and about two hours later the commander of the force reported a target moving at about 20 knots in the area of el Arish. The speed calculated by the torpedo boats was about 30 knots, which was incorrect. A pair of Mirage jets was dispatched which did not manage to identify the target and they received approval to attack along with another pair of aircraft. During the attack, the pilots by mistake read the markings on the ship's hull as CPR-5 and in the meantime the torpedo boats came closer in order to verify identification.

The commander of the force had mistakenly identified the Liberty as the "el Qusair", an auxiliary ship of the Egyptian navy, and as a result gave the order to attack it with torpedo fire. One of the five torpedoes hit the ship and ripped a large hole in the hull. When the torpedo boats came closer they discovered that it was an American ship.

With the assistance of the Sixth Fleet, the boat was accompanied to the Port of Valletta in Malta. The casualties on the ship included 34 dead and 17 wounded. Investigative committees on both sides came to the conclusion that the ship was attacked by mistake. The event—in which the navy had exhibited determination in carrying out its mission—turned out to be an error that led to disaster.²⁴

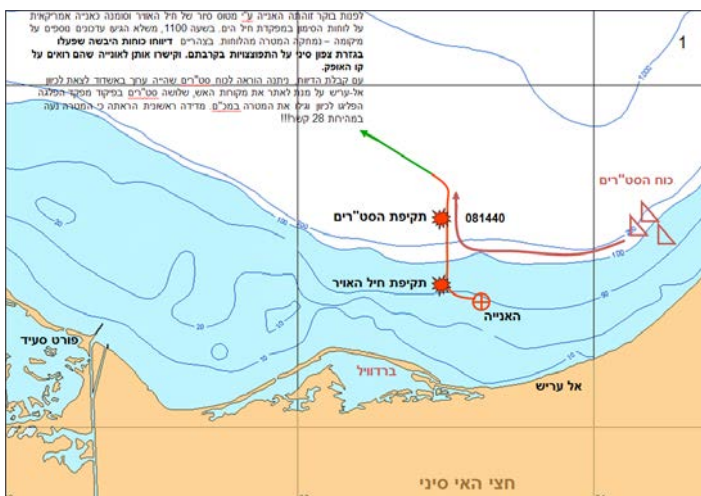


Figure 11 – USS LIBERTY incident, June 8, 1967

24 For a detailed description of the incident, see: Cristal, A.J., *The Liberty Incident*, Washington D.C., 2002, and also: Training and Instruction Department, *The Six Day War*, p. 198.

The Rumani battle

The Rumani battle occurred on the night between the 11th and 12th of July, after the end of the war and during the period of the ceasefire. From the navy's point of view, this was a continuation of the events of the war.

On July 9th, there was a briefing in naval headquarters for the commanders of the Eilat and the Yaffo and the second in commander of Flotilla 914, Eli Rahav. It concerned a patrol whose goal was to destroy Egyptian ships east of the longitude line that passes 12 miles from Port Said.²⁵

The intention was to carry out patrols with a destroyer and two torpedo boats. On the night between July 11th and 12th the ISN Eilat under the command of Yitzhak Shushan and the two torpedo boats from Flotilla 914 under the command of Eli Rahav carried the patrol. At around 21:45, the Eilat reported two vessels that had left Port Said. About an hour later, the torpedo boats identified a target about 8 miles away, which was the two targets moving together eastward. The two Egyptian vessels, which it turned out were torpedo boats, were found by the 914 Squadron force and the INS Eilat. The Egyptian vessels split up and a situation was created in which the Eilat closed in on one of them while the force under Eli Rahav closed in on the other.

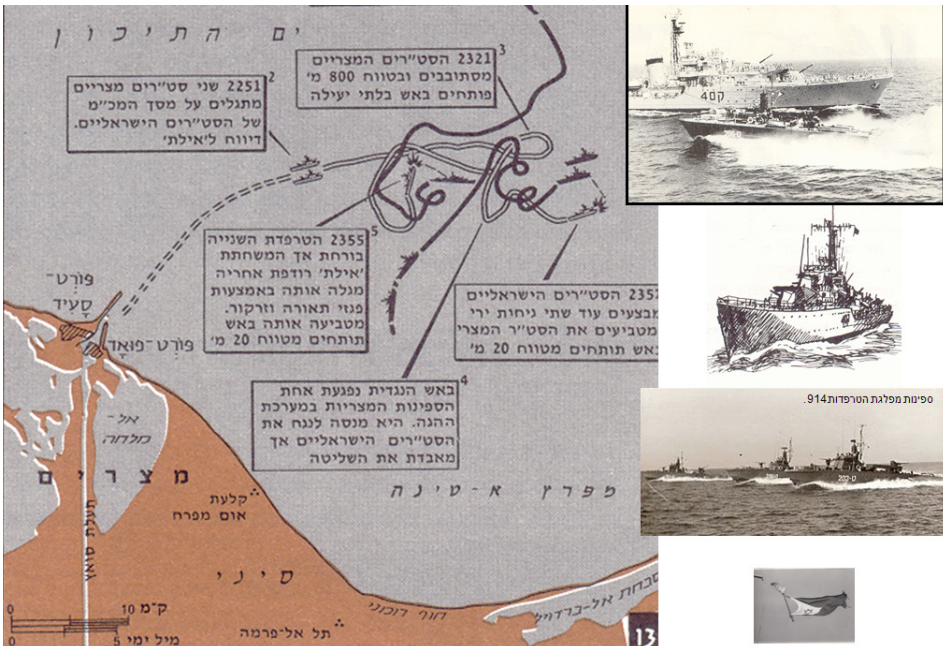


Figure 12 – The ROMANI fighting on the night of June 11, 1967

25 Shushan Yitzhak, *The Last Battle of the Destroyer Eilat*, Tel Aviv, 1993, pp. 206-207. [Hebrew]

While firing their cannons, the boat of Squadron 914 approached the Egyptian vessel and managed to hit their target at a range of about 150 yards. The Eilat also hit the second ship with fire from its main battery of guns and also from its light battery of 40 mm cannons. After looking for survivors, our forces left the area.

The Rumani battle lasted about 25 minutes and set new standards for the navy. These were applied in the mission of the Devora's during the Yom Kippur War in the Red Sea theater. In addition, the management of the battle by Eli Rahav from the battle information center of the torpedo boats set the standard for battle management and determination in carrying out a mission.

Conclusion

The five *Shayetet 13* operations that were planned and implemented did not achieve their goals. On the Syrian coast, the operations were not completed and in Alexandria the fighters did not manage to make contact with the submarine.

In the evaluation of the outcomes of the *Shayetet 13* operations in the northern theater, i.e. Syria, Zeev Almog, who took command of the *Shayetet* after the war, concluded that the operations were managed with a lack of attention to detail. Shlomo Erel, the commander of the navy, felt that that the appointment of overly senior officers who were not an organic part of the units did not contribute to the success of the operations.²⁶

In view of the assessment of the threat posed by the Egyptians and Syrians—which turned out to be exaggerated—the headquarters of the navy tried to attack the enemy's naval bases with improvised means, in a situation where up-to-date intelligence information was lacking. Guerilla warfare even under better conditions is a "step into the unknown" and the use of improvised means and non-organic commanders increases the uncertainty. It appears that under these conditions, the operations on the Syrian coast were beyond the abilities of the fighters.

The USS Liberty was attacked by mistake. The submarine in the port of Alexandria performed well even though it did not manage to sink the Egyptian "sloop".

The attack on the Egyptian missile boats at the entrance to Port Said was called off and the enemy vessels were not hit.

In the Rumani battle, the commanders exhibited determination in their mission and applied lessons learned from past battles and therefore achieved the hoped-for results.

In the Six Day War, the main weapon used was the torpedo. The four torpedoes of the Tanin in Alexandria did not hit the target due to a technical problem discovered after the war. In the attack on the Liberty, only one torpedo out of five hit the target, despite the

26 Almog, *The Voyage of my Life*, p. 382 [Hebrew]; Erel, *Before us the Sea*, pp. 364–365.

good firing conditions. This was the result of using a simple sight, which resulted in only a small chance for a solution of the firing equation.²⁷

With regard to the efficiency of the torpedo, see also the comments in Cristal's book (footnote 24). The navy fired about 50 torpedoes in training exercises prior to the war and 48 of them missed their target. It would have been worthwhile for the navy to find a different type of torpedo for its vessels. The torpedo's accuracy was even lower than during the Second World War.

Three of the ships in Squadron 914 had Packard engines which ran on high-octane gasoline (115 octane). This is very flammable fuel that is not appropriate to a military environment. The torpedo boats were also limited in their range since they carried only 10,000 liters of fuel. It was clear that the torpedo boats constitute an important force within the navy and that installing them with Napier engines that run on diesel fuel could have improved their performance in times of both war and peace and could have increased their range.²⁸

The cannons on the torpedo boats are instinctive, i.e. they are aimed with the naked eye (with or without a simple "clock" sight). In the daytime, a target can be hit at up to 1000 meters while at night this is reduced to no more than 150-200 meters.

Most of the radar systems were outdated (except for that on the T-204), particularly on the ships that ran on gasoline. The Flotilla 912 ships also had Decca radar systems, though of a different model. This radar had only a small range of detection.

The outcome of the war lengthened Israel's coastline many fold. Thus, over 250 nautical miles of coastline in Sinai were added.²⁹ Furthermore, the navy and also *Shayetet 13* accumulated battle experience in the War of Attrition and the units of the navy were completely overhauled. This included the development of tactics and the introduction of new standards that were applied in the Yom Kippur War.

27 Such sights were installed on ships in the Second World War. Cooper, B., *The War of Gunboats*, Barnsley, 2009, pp. 96–97.

28 For more details about the engines, see: Eden, Shimshon, *The Iron Men of the Wooden Ships*, Reut 2000, pp. 206–222. [Hebrew]

29 See the estimate in Oren, *The Six Day War*, p. 203.