

MARITIME STRATEGIC EVALUATION FOR ISRAEL 2020/21

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The Turkish Navy – Its strengthening process and operational doctrine

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Over the past year, against the background of the adoption of the "Blue Homeland" doctrine and the nostalgia about the Ottoman Empire,¹ we have been witnessing relatively large-scale operations by the Turkish navy in different areas of the eastern Mediterranean Sea, the Aegean Sea and the Black Sea. Beyond the extensive operations in these seas, we can also see a Turkish trend to set up bases and establish maritime outposts in northern and eastern Africa and the Persian Gulf such as a naval base in the port of Misrata in Libya, a naval base in Qatar, a naval base in Somalia, and an unsuccessful attempt to establish a naval base in Sudan. Moreover, we note the obvious military presence including a naval presence in TRNC (Turkish Republic of Northern Cyprus), in the northeastern part of the island of Cyprus, which is a Turkish protectorate.

Accordingly, it is worthwhile highlighting the present strength of the Turkish navy and its ongoing enlargement process, which today is at an advanced realization stage and that is expected to continue in the near term. The Turkish maritime component is becoming an significant factor that may eventually constitute a challenge for neighboring states in the eastern Mediterranean, including the state of Israel and its Navy.

Historical background

The Turkish navy draws its heritage from the Ottoman navy that reached its pinnacle of power and achievements between the beginning of the 14th century and the middle of the 17th century. The Turkish people were originally 'men of the plains' but they recognized the importance of the maritime domain to their expansion and, therefore, the Turkish sultans very quickly drafted pirates who agreed to raise the Ottoman flag into their service to fight their maritime battles. During the height of

1 Regarding the "Blue Homeland" doctrine and the President of Turkey's nostalgia about the country's Ottoman past, see the chapter herein by Omri Eilat and Ayal Hayut-Man, The Turkish maritime doctrine (Mavi Vatan). For more information about the main concept in the "Blue Homeland Doctrine", see footnote 4, below.

the navy's success, except for one rout at the Battle of Lepanto (October 1571),² the Turkish navy cast its shadow in different areas throughout the world, including being active in the Atlantic and Indian Oceans.

Between the 17th and 18th centuries, the Ottoman navy focused on the Mediterranean Sea, the Black Sea, the Red Sea, the Persian Gulf and the Arabian Sea. In the 18th century, the navy entered a period of stagnation while at the beginning of the 19th century and beyond, a further deep-felt drop in the power of the Ottoman navy occurred and it even beseeched the help of the Ottoman Empire governor in Egypt—Muhammed Ali, both in the Red Sea region and in the Greek archipelago region.

Due to lack of space, we will not review all the milestones in the history of the Ottoman navy. We just note that during the 19th century the navy suffered losses such as the Battle of Navarino, on the western shore of the Peloponnesian peninsula, in Greece, in 1827, when a joint Egyptian-Ottoman navy engaged the British, French and Russian navies. Later on, during the Egyptian battle to conquer the land of Israel, the Levant and Asia Minor, the Ottoman navy was captured when its commander surrendered at the Battle of Alexandria. Another loss to the joint Egyptian-Ottoman navy occurred during the Battle of Sinop in 1853, when it engaged the Russian navy in the Black Sea during the Crimean War.

Toward the end of the 19th century, Germany consented to rehabilitate the Ottoman army including its maritime component. During World War I, the Ottoman Empire joined the Central Powers, led by the German Empire, which extended maritime aid and advisors to the Ottoman army during the war. At the end of the war, despite the Turkish success in averting the allies landing during the Gallipoli campaign, the Ottoman Empire broke apart, and its imperial navy ceased to exist. In August 1920, the Treaty of Sèvres was signed with Turkey. Between 1919–1922, the Turkish "war of independence" was waged, led by Mustafa Kemal, a Turkish hero from the Gallipoli campaign.

We will not expand on the maritime aspects of the Turkish civil war, but only note that at the height of the war, on July 10, 1920, the foundations for the establishment of the modern Turkish navy were laid. About three years after this, in October 1923,

2 The Battle of Lepanto was a large sea battle that took place on October 7, 1571 between the Christian "Holy League", comprising the united forces of Venice, Spain, and the Papal State, and the Turkish navy (the Ottoman Empire), near the Greek coastal city of Lepanto. This was the last major maritime battle in the history of naval warfare using rowing vessels. The engagement took place near the northern coast of the sea strait connecting the Gulf of Petras and the Gulf of Lepanto (today the Gulf of Corinth).

Mustafa Kemal (who then became known as Mustafa Kemal Atatürk—*The father of the Turkish nation*) proclaimed the establishment of the Republic of Turkey.

During World War II, the Republic of Turkey remained neutral and postponed joining the Allies until February 1945. In 1950, Turkey sent armed forces to join the US in the Korean War, and as a result of this and also because of Turkey's strategic importance in controlling the Bosphorus and Dardanelle straits, it joined NATO in February 1952. Since then and up until today, it has been and continues to be part of the NATO fleet, alongside the Greek navy, its longstanding traditional enemy.

An additional important milestone relating to the Turkish navy in the modern era, worth mentioning in this brief historical recap, is its involvement in Turkey's invasion of the island of Cyprus and conquest of one third of the island during July–August 1974. One year after this, the Turks announced the establishment of the federal Turkish state of Cyprus, which became the Turkish Republic of Northern Cyprus eight years later. This state, recognized only by Turkey and operating as its vassal state, later on influences, as reviewed below, the present-day processes in the context of economic waters that Turkey perceives as belonging to it.

The strengthening and building up of the Turkish navy since World War II³

A special position, in the eyes of the US and NATO member states, was accorded to Turkey and its maritime strength when it joined NATO in 1952, as well as to its strategic location, both as a state adjacent to the USSR and as the one controlling the Bosphorus and Dardanelle straits, which comprise the main Russian passageway between the Black Sea and the Mediterranean Sea, which had special significance during the years of the Cold War.

This special position gave Turkey preference on the part of the western bloc and its navy was allowed to join the NATO fleet during joint exercises and was helped to build its strength, under relaxed conditions extended by the western countries and the US. The build-up of the Turkish maritime power during most of the second half of the 20th century was characterized by the clear majority of the vessels acquired by the Turkish navy (both vessels and submarines) being used vessels, previously owned by Western fleets, especially the US navy, as well as western European countries such as Britain, France, and the then-West Germany.

3 This section is based, among others, on selected Jane's Fighting Ships annuals, segmented by year, e.g., 73/74, 74/75, 86/87, 79/80, as well as a digital edition from 2019.

As will be discussed below, during the process of building up its navy in the closing years of the 20th century and in the past two decades, Turkey stressed independent building capabilities. Turkey's ability to build advanced submarines and surface vessels on its own is essentially the result of close and special contacts between it and Germany in the maritime field. This ability boosts Turkey's reputation, allows it to purchase knowledge and enables it to develop employment and training options for local human resources. Germany, on its part, sees Turkey as an equal member of NATO and, therefore, has no issues with sharing the best of its technology and knowledge to give Turkey independent ability.

During the last two decades, more exactly from 2007,⁴ the quantum leap in terms of the boost to Turkish maritime strength is particularly prominent. The Turkish government began investing resources, increasing expenses significantly in an effort to develop independent construction capabilities regarding various platforms for its navy. Ankara not only increased the number of its vessels and war ships, but also achieved the ability to build maritime platforms independently, such as some of its weapon systems and the weapons for them, basing their development on local R&D. The purpose here was to reduce their dependence on external purchasing sources.⁵

According to a survey conducted by one of the leading nongovernmental associations in the country's security industry, since 2007, R&D expenditures tripled and totaled more than 1.2 billion dollars in the 2019 financial year. This dramatic increase in capital investment created a number of projects intended mainly to increase the Turkish navy.⁶ In the following survey of the maritime build-up, we will focus on three components of strength: submarines, surface vessels and landing force systems, and to a certain extent, on the independent development of the range of armaments and aircraft for maritime missions.

4 It is interesting to note that the seeds of the "Blue Homeland" doctrine began developing in the philosophy of General Gerondiz, the father of the doctrine, in 2006, a year before resources were allocated for the new maritime strengthening program. It would appear that the close proximity time-wise is no coincidence, given that realization of the doctrine alongside aspirations to be a regional maritime power, means large investments in the navy's strengthening process are needed.

5 See the paper in the Turkish journal TRT. <https://www.trtworld.com/magazine/how-turkey-became-a-strong-naval-power-in-recent-years-32670>

6 See the paper by Prof. Ryan Gingeras, of the National Security Department of the Turkish Naval College, from 2019. <https://warontherocks.com/2019/04/the-turkish-navy-in-an-era-of-great-power-competition>; and the December 2019 paper by Asa Ophir, a Turkish analyst. <https://www.israeldefense.co.il/he/node/41305>

The submarine component

The first kernel of submarine strength in Turkey began to take shape with the help of the German Empire toward the end of the 19th century. Following World War I and the establishment of the new navy of the Republic of Turkey, old submarines, surplus from the German navy after the war, were acquired. Later, during the first half of the 1930s, submarines made in Italy, and in the second half of the same decade, submarines made in Nazi Germany, were acquired.

In the 1940s, at the end of World War II and afterwards, Turkey purchased 12 S⁷ class submarines from Britain, which were called Oruc Reis in Turkey. S type submarines were phased out a long ago—some in the 1950s and most by the beginning of the 1970s. In parallel with the purchase from Britain (but not simultaneously), about 20 used and surplus Balao class submarines were purchased from the US navy after World War II. The last ones of this class were purchased in the 1970s and taken out of service at the end of the 1990s. Other surplus US navy submarines were acquired at the beginning of the 1970s, and at the beginning of the 1980s, Tang and Tech class submarines were acquired. These submarines were phased out of the Turkish navy by the beginning of the 21st century.

After acquiring the US navy's used submarines, the used submarine era of the Turkish navy was over and it began purchasing and integrating new German made submarines (then West Germany). Its first six submarines were 209/1200 class (called Atilay class in the Turkish navy) boats, whose construction began in the mid-1970s and continued through the 1980s. Three of them were constructed in the HDW shipyards in Kiel, Germany, and the other three were constructed under German license in the Turkish navy shipyards at Golcuk.

Four more advanced T1 209/1400 class (called Prevez class in the Turkish navy) submarines were all constructed in the Turkish navy shipyards at Golcuk during the latter half of the 1990s.

To summarize, the process of strengthening the Turkish navy through submarines during the second half of the 20th century can be said to be characterized by a number of significant advances. In the beginning, used British and US surplus submarines from were acquired; following this, new submarines were built in Germany; and afterwards, in the last two decades of the 20th century, the navy advanced to constructing submarines on its own, under license from Germany.

7 The Israeli navy also purchased two submarines of this type from Britain at the end of the 1950s (the Rahav and Tanin submarines).

Until the end of the 20th century and the beginning of the 21st century, all the used submarines sold to the Turkish navy by the British and US navies were phased out. Accordingly, at the beginning of the new century, the Turkish navy was using newly constructed submarines that were manufactured either in Germany or in Turkey itself.

In the 21st century, we can point to another advance. In the first decade of the present century, four additional submarines were built in Turkey. These were more advanced than the earlier ones and were constructed on behalf of the ThyssenKrupp AG company of Germany. These were T2 209/1400 class boats (called Gur class in the Turkish navy).

The jewel in the crown in this area is happening and coming to fruition in the present decade, and this is the independent construction of six advanced type 214 submarines, which have an AIP type⁸ propulsion system. This new and advanced class is called the Reis class in Turkey. The first submarine in this series was launched in December 2019, with the rest of the group planned to be completed by 2027.

Up to the time this paper was being written, it seemed that the Turkish navy was slated to have a fleet of 10–12 209 class submarines (with all their assorted variations), and to this must be added the future addition of six 214 class (Reis class in Turkey) submarines. Thus, after the new submarines join the navy and in parallel with the phasing out of the outdated Atılay class submarines, it is expected that the Turkish navy will continue to have 12–14 advanced submarines at its disposal. This quantity gives the Turkish navy an advantage in the balance of power vis-à-vis submarines in the eastern Mediterranean compared to Greece, Egypt and Israel.

As noted above, the design of most of the existing and planned submarines is Turkish, but based on German knowledge and design, which necessitates an ability to develop and train professional human resources (engineers, marine architects and the like), both for the actual construction and for the ongoing basic maintenance. This ability to construct submarines independently is not something trivial, despite the German knowledge and design. For comparison purposes, we note that Israel and Egypt, which all have an important submarine component in their defense program, do not have this independent ability.

8 AIP – air-independent propulsion

Strengthening of front-line surface vessels⁹ since World War I

In this field also, the strengthening of the Turkish navy's surface vessels was, from the middle of the 20th century, based on acquiring surplus destroyers and frigates from the British and US navies, with a few surplus ships from the then-West German navy. These secondhand vessels were phased out of the Turkish navy by the end of the last century or the beginning of the present one. Some, as, for example, the Gearing destroyer manufactured in the US, were upgraded and armed with sea-to-sea Harpoon missiles.

Alongside purchase of the used vessels, it must be noted that at the beginning of the 1970s, the Turks began building Berk class frigates, based on an American model, at the navy shipyards at Golcuk. Likewise, in this same decade they began building 57 class missile boats at the Taskizak shipyards in Istanbul, based on knowledge from the Lurssen shipyards in West Germany. These ships were armed with, among others, Harpoon sea-to-sea missiles.

Independent construction of surface vessels in Turkey opened the way for more advanced models, this time also with close and special cooperation of the West Germans. During the last two decades of the 20th century, six German-licensed Meko 200 class missile frigates were built for Turkey (Yavuz and Barbaros classes in Turkey)—three in Germany and three at the Golcuk shipyards in Turkey, and all armed with, among others, Harpoon sea-to-sea missiles.

In the 1990s, the practice of purchasing surplus frigates and missile destroyers manufactured in the US reappeared. This time the Turkish navy acquired about 10 Knox class and eight OHP class ships, both armed with Harpoon sea-to-sea missiles. The latter class can also carry sea helicopters.¹⁰

To summarize the Turkish navy's various trends in strengthening its surface vessel fleet in the 20th century, we should also note that here too significant advances characterized the process. In the beginning, there was complete dependence on surplus from western navies, after which processes of independent manufacturing and construction in Turkish shipyards began, including the building of missile boats and missile frigates.

9 Armed surface vessels and the ability to engage in attack missions in the open water beyond the territorial waters, in contrast to surface vessels intended to protect the shore and ports within the territorial waters of a respective country.

10 It should be noted that the KNOX and OHP classes were also supplied in the 1990s, after the First Gulf War, to the Egyptian navy.

Different from the submarine component, where the Turkish navy stopped acquiring used boats, here at the end of the 20th century, the Turkish navy went back to acquiring surplus US surface vessels. Nevertheless, this time these were improved models that included being armed with advanced sea-to-sea and air-to-sea missiles.

Further, at the beginning of the 21st century, during 2001–2002, the Turkish navy acquired six A-69 class missile corvettes (also anti-submarine), which had been built back in the 1970s for the French navy. The corvettes were armed with Exocet sea-to-sea missiles, and still serve in the Turkish navy.

In 2008 in the Istanbul shipyards, construction of a set of 16 patrol boats began. These boats were about 57 meters long and armed with cannons and anti-submarine weaponry. In Turkey, they are called Tuzla class. These boats went into service in the Turkish navy between 2011–2015.

The jewel in the crown of independent Turkish surface vessel construction in the last decade was a set of missile frigates, built as part of the MILGEM project. Their construction began in 2007, which as will be recalled is the turning-point year in the process of strengthening the Turkish navy in the modern era. At this point, it is known that four of these frigates have been integrated into the Turkish navy (hull numbers F511–514), armed with Harpoon class sea-to-sea missiles.

It is noted that as part of a collaboration with the Pakistani navy, four MILGEM class frigates will be built for it—half will be built in Istanbul and half in Karachi, Pakistan, itself. The first frigate of this set will be handed over to Pakistan during 2023.¹¹

Landing forces and amphibious vessels

Turkey has always placed great importance on having the ability to land forces from the sea. The need for this capability, in Turkey's view, is rooted in the potential requirement to get involved in disputed areas. This capability was indeed tested in the middle of the 1970s when the Turkey invaded Northern Cyprus.

During the second half of the 20th century, a large number of assorted ships and boats were integrated into the Turkish navy. Some of these were surplus from the US navy and some were built by Turkey itself. Of these, we can count four large American tank landing ships (LSTs) that were handed over at the beginning of the 1970s. Later on, after the invasion of Cyprus and up until the end of the 20th century, five large landing ships, similar in size, were built in the navy shipyards at Taskizak.

11 Firat Tasdemir 25.10.2020.

<https://www.aa.com.tr/en/asia-pacific/turkish-naval-ship-to-be-sledged-in-pakistan/2018166>

Besides the large landing ships used by the Turkish navy, it also used tens of smaller landing boats (LCU, LCT and LCM types). Almost all of these were constructed in Turkey, beginning in the mid-1960s. One class that was built in Turkey was based on the French EDIC model.

In the present strengthening program, besides from the existing two large projects for building advanced 214 class submarines (the MILDEN project) and missile frigates (the MILGEM project), a flagship project has been pending since the middle of the present decade—the building of a light aircraft carrier that will have amphibious capabilities.

The construction of the first vessel of this class, called in Turkey the TCG Anadolu L-408, began in the Istanbul shipyards in the second half of the present decade as part of a joint consortium that included the Navantia shipyards in Spain. This vessel is defined as an amphibious assault ship, about 230 meters long, with a maximum displacement of about 27 thousand tons and maximum range of about 9,000 miles. This project is based on the Spanish "Juan Carlos" (L-61) model. The ship has a range of carrying configurations—airplanes, helicopters, UAVs and even LCM/LCAC landing crafts.

At present, it is unclear which type of airplane it will carry. Originally, it was planned to carry 12 US manufactured vertical take-off and landing F-35B aircraft, but because Turkey purchases anti-aircraft missiles from Russia, difficulties have arisen in the past year regarding the deal between the US and Turkey.

Last year, Turkey's intention to build an additional aircraft carrier of the same type was disclosed. This would be an identical sister ship to the one described above and to be called the TCG Trakya. It is now being designed by the Turkish navy. This aircraft carrier model has a very important place in the strengthening of the Turkish navy program, and it allows the Turkish state to finally join the aircraft carrier club.

Richard Parle, an American researcher who writes about and studies the military, estimates that the aircraft carrier Anadolu will enable the Turkish navy "unprecedented amphibious assault ability in the Black Sea and the eastern Mediterranean." As far as Turkey's amphibious abilities, we note the establishment of a marine brigade subordinate to the navy. This is in addition to the existence of the navy's SAT marine commando unit. It is estimated that the special units are highly trained and we point out that in the past they had a not small part in the 1974 summer invasion of Cyprus.

The marine invasion of Cyprus (Operation Atilla)

At the time of Turkey's invasion of Cyprus in the summer of 1974, its navy had not insignificant capabilities including a marine force, in order for it to integrate into the other army branches, in the planning and executing of the invasion. In the early hours of July 20, 1974, the Turkish marine landing on the Pentemili coast began, using about 22 ships and landing boats, and accompanied by seven aircraft carriers and gunboats.



Figure 1: Map of the landing and movement of the Turkish forces up to Nicosia, the capital



Figure 2: The landing strip on the Pentemili coast

The marine part of the invasion of Cyprus was, from the Turkish navy's perspective, the jewel in the crown of its actions, and a significant milestone in the operations of the Turkish navy as an important component of Turkey's security strategy, a component whose importance continues to grow in the 21st century, as will be explained below.

Independent development of naval weapon systems

As part of the new strengthening program, from 2007 emphasis has also been put on domestic development and production of naval systems, which area is led by the ROKETSAN company¹² in Turkey. The company developed a line of armaments, and in the naval field, the jewel in the crown is the ATMACA anti-ship cruise missile with a planned effective firing range of between 280 and 360 km.

In the middle of 2020, a successful trial of the missile launched from a ground silo was held and, according to developers, it hit its target, more than 200 km away, exactly. The missile is supposed to become operational this year; mass production of the missile is expected to begin and it will gradually replace the US manufactured Harpoon missile in the range of new surface vessels under construction such as the MILGEM model frigate, and the possibility that the new submarines will also be outfitted with this missile should not be dismissed.

Naval air force

According to up-to-date information for 2020, the Turkish navy has at its disposal about 40 aircraft designed for naval missions, of which about 15 are fixed-wing airplanes and the remainder are helicopters. The various aircraft, including UAVs, are used for patrolling and identifying naval targets. From the assault side, it seems that at this stage, the helicopters are armed with anti-submarine torpedoes, as well as anti-tank missiles manufactured locally that have been modified to hit maritime targets.

We can estimate that the over-the-sea assault threat from airborne platforms will increase the more light aircraft carriers are brought into operational service and the appropriate aircraft, able to launch cruise missiles against maritime targets (e.g., the locally manufactured ATMACA) are purchased for them.

Summary of the characteristics of the strengthening of the Turkish navy

As we saw, all the navy's power components were, at the beginning, based on the surplus platforms of western navies. Following this, a clear and consistent trend of developing the ability for independent construction and manufacturing of both sailing vessels including submarines and naval weapon systems developed. A small part of the independent abilities was acquired in the US and Spain; however, the central capabilities and the construction licenses were based on German knowledge,

12 A company equivalent to Rafael in Israel.

the result of close and special collaboration in the maritime area between the two countries.

The Turkish aspiration to be self-sufficient stems from a number of motives. First and foremost, there is the desire to attain the image and reputation befitting a state that sees itself as a regional maritime power. Moreover, there are considerations about reducing dependence on external supply sources, and of course, there is the economic consideration for creating jobs for local industry.

In a special way, and different than other navies that challenge the Turkish navy (e.g., the Greek, Egyptian and Israeli navies), we note the impressive ability, albeit based on foreign knowledge, to build advanced submarines, multipurpose frigates and light aircraft carriers. This is certainly a quantum leap characterizing the process of building up the strength of the Turkish navy in the last decade.

The operational doctrine of the Turkish navy

"The existence of a strong and capable navy is essential for the protection of Turkey. Our navy will strongly support our policies."

The above quote comes from a speech made by the founder of the modern Turkish republic, Mustafa Kemal Atatürk to officers on a patrol boat making its maiden voyage in the Black Sea in September 1924.¹³

During the time when Admiral Bülent Bostanoğlu served as the commander of the Turkish navy (2013–2017), he prepared and published, in 2016, the strategy of the Turkish navy. The opening words of the publication were: "The one who rules the seas, rules the world."¹⁴

In the introduction to the first edition of this paper, Admiral Bostanoğlu spoke of Turkey's significant geopolitical position and location as an Afro-Eurasian state, having many areas of interest in the maritime domain, and especially in the Mediterranean Sea, the Black Sea and the Aegean Sea. He emphasized the disputes still existing about the territorial water borders in the eastern Mediterranean, including the dispute related to Cyprus, and the imbalance in the Aegean Sea as decided upon in the Treaty of Lausanne. In the same introduction, he said that the maritime domain has become very important, especially in terms of energy exploitation as well as

13 From the official publication of the Turkish navy: Turkish Naval Forces Strategy, 2016, page 26, footnote 61. See the following link:

<https://www.dzkk.tsk.tr/data/icerik/392/Turkish%20Naval%20Forces%20Strategy.pdf>

14 Ibid., page 4.

natural resources, and he noted that this subject has been a cause for increasing competition between states seeking to generate benefits from these resources. The competition has exacerbated even more the arguments about territorial water borders.¹⁵

The Turkish navy strategy document indeed continues to espouse the Turkish commitment to international institutions such as the UN and NATO, for example, in everything related to securing international commercial shipping lanes, as well as the battle against sea pirates. Nevertheless, the strategy document emphasizes that: "it is imperative to maintain a strong navy to protect Turkey," in the spirit of Atatürk, while preserving the ability to act in the open sea and use deterrent force in the face of threats and dangers".¹⁶

And indeed, since the formulation of this strategic document, there has been a change in Turkey's maritime strategy. No longer is the Turkish navy only a part of the NATO navy; it is, rather, the navy of a regional power characterized by features that can be categorized as a "green-water" navy or at least as one that is advancing and aspiring to be a "green-water" navy. This would be a navy that, obviously, would have a clear presence in the Black Sea, the eastern Mediterranean Sea, and the Aegean Sea, and will have the potential to operate in additional areas such as in the Adriatic Sea, the Gulf of Sirte in Libya, the Persian Gulf and the southern Red Sea and the Horn of Africa.

The strategic document was made public in 2016, during the tenure of the present president, Erdogan, but it is not completely clear, however, that today he would have supported this document because in the spirit of Atatürk's philosophy, the document expresses and emphasizes the goals related to balance of power in the maritime domain and does not express motifs of return to the 'Ottoman Empire's former glory', and pan-Islamic motifs such as Erdogan champions today.

In contrast, the father of the "Blue Homeland" doctrine, Admiral Cem Gurdeniz, would certainly support the document and it may be that the document was inspired by him. Recently, he said that the "Blue Homeland" doctrine focuses on a "geopolitical struggle surrounding maritime interests with military, economic, technological, sociocultural and environmental aspects." According to his philosophy, the maritime domain is an inexhaustible source of wealth and power. The 21st century, in his opinion, will be the century of the sea for the entire globe. Humanity will be totally

15 Ibid., page 3.

16 Ibid., page 41.

dependent on the sea, in terms of transportation, energy and food, as it has never ever been.¹⁷

And from theory to practice

In March 2019, Turkey held one of its largest navel exercises ever, with the participation of over 100 sailing vessels. The exercise was held in the Black Sea, the Aegean Sea, and the eastern Mediterranean Sea, and was called, obviously, "Blue Homeland". Approximately two months after, in the second half of March 2019, another naval exercise, even bigger than before, was held under the command of the Turkish navy and in which over 130 warships and about 90 aircraft participated. This exercise was called "Sea-Wolf" and it also was held in the Black Sea, the Aegean Sea, and the eastern Mediterranean Sea.¹⁸



Figure 3: The Turkish navy on maneuvers (September 2014)¹⁹

- 17 The main points made by Gurdeniz were said in an interview on the Turkish television network, Ulusal Kanal, on December 22, 2019.
- 18 Based on a paper posted on TRT World. <https://www.trtworld.com/turkey/turkish-naval-strength-in-eastern-mediterranean-shifts-balance-of-power-37730/amp>
- 19 The photograph was taken from the website of the Nordic Monitor. <https://www.nordicmonitor.com/2020/02/erdogans-secret-keeper-says-lausanne-treaty-invalid-turkey-free-to-grab-resources>

A further real-life demonstration of the Turkish sea operations doctrine can be seen in the bilateral memorandum of understanding that was signed in November 2019 between Turkey and the government of Libya, which rules the western part of the divided country (the General National Congress – GNA), in the center of which sits Tripoli. According to the memorandum, a joint Turkish–Libyan exclusive economic zone (EEZ) was arbitrarily fixed. Understandably, this heightened tensions in the eastern basin of the Mediterranean Sea. Moreover, Turkey began getting involved in the Libyan civil war by giving support to the Libyan government in Tripoli, in opposition to the regime of Khalifa Haftar in eastern Libya, whose center is in the city of Benghazi. This involvement raised the tension between Turkey and Egypt because the latter country, together with the Emirates, supports Haftar’s regime.

In parallel with its involvement in Libya, in 2020 Turkey took steps to demonstrate its presence and conduct geological surveys and search for gas reserves in Greece’s and Cyprus’ recognized EEZs.

In Libya, especially in the western part of the Gulf of Sidra, in the traditional hotspots of the islands in the Aegean Sea and in the territorial water of Greece and Cyprus—in all of these places, the Turkish navy made sure its presence was noted, sometimes aggressively, among others by escorting and guarding using frigates, ships that undertook surveys and drilling in the sea domains of Cyprus and Crete. Likewise, the Turkish navy operated in the coastal region of Libya, in the western part of the Gulf of Sidra, using frigates and apparently also submarines.



Figure 4: Frigates belonging to the Turkish navy guarding the activities of the survey ship Oruç Reis²⁰

20 See the following link. <https://ahval.me/east-med/turkey-plans-new-drilling-coast-cyprus-report>

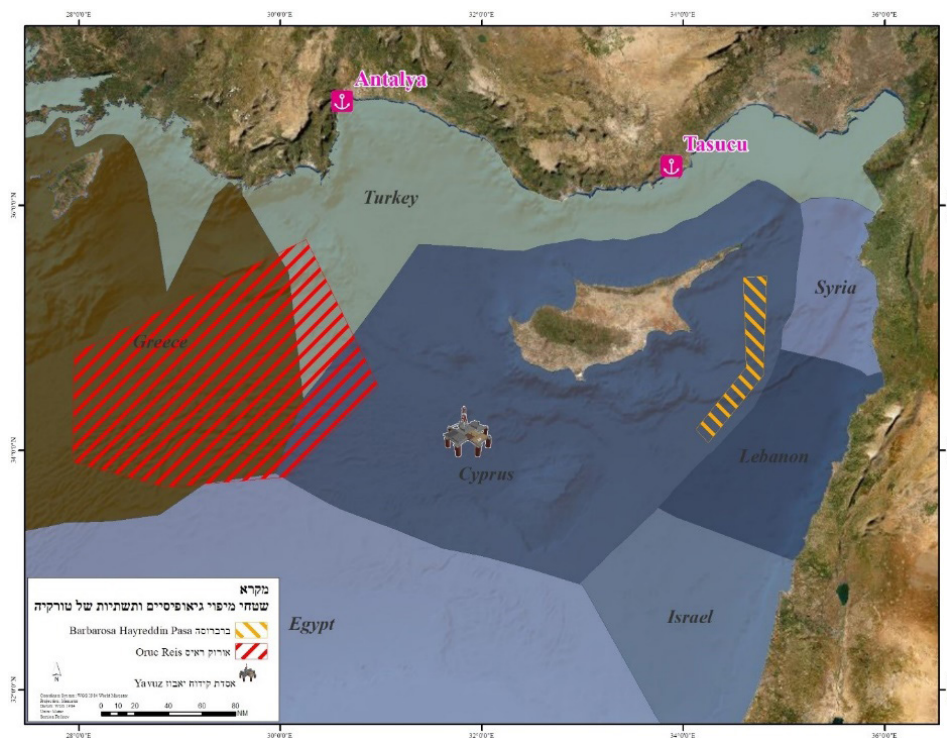


Figure 5: Seismic surveys conducted by Turkey in 2020 in the economic zones of Cyprus and Greece²¹

Summary

Over the past two decades, the Turkish navy changed how it looks and its strength. This change derives from the formulation of a maritime strategy intended to transform it from a navy that is part of the NATO fleet into a navy that exemplifies a regional maritime power. Turkey's maritime strategy in the present is influenced by both the vision of a return to the glory days of the Ottoman Empire and the adoption of the "Blue Homeland" doctrine, which sees in the maritime domain an economic resource, and in concrete terms, an inexhaustible source of natural gas reservoirs, which Turkey, similar to its neighbors, some of whom are also its competitors, desires for its economic security.

To these narratives, we must add geographic implications. Turkey controls two important sea straits, the Bosphorus and the Dardanelles, the only points of entry

21 See the paper by Semion Polinov and Shlomo Gueta.

<https://ch-strategy.hevra.haifa.ac.il/index.php/turkey-marine-geophysical-surveys>

and exit from the Black Sea into the Mediterranean and vice versa. From the end of World War II through the years of the Cold War, the two superpowers, the US and the USSR (which eventually became Russia), were keenly aware of this basic geographic fact.

The strength components as reviewed, during the last part of the 20th century and the early part of the 21st century, especially since the middle of the first decade of the 21st century, expressly convey Turkey's aspirations to transform its navy into a "green-water navy", i.e., a navy with the ability to operate far from its home ports while being supported by and based in friendly ports. In the opinion of the author of this paper, the Turkish navy, in its present form, and certainly as the program for strengthening it over the coming years is deployed, will be a navy that should be related to as a "green-water navy", and as belonging to a regional power.

In terms of becoming a maritime force to be reckoned with, we note the Turkish diligence and aspiration, since the middle of the past century and more intensely in the past two decades, to outfit itself with maritime platforms, and its domestic construction and assembly facilities in Turkish shipyards, including submarines, frigates and corvettes, and recently, light aircraft carriers. It is worth noting the fact that Turkey is today a source of new sailing vessels for the Pakistan navy. The Turkish ability to independently develop and manufacture can be seen in its equipping itself with naval weapons, the crowning jewel of which is the development and manufacturing of a new long-range anti-ship cruise missile, the ATMACA, which in the future will replace the Harpoon missile series made by the US.

The Turkish navy today is the strongest navy among all the navies in the eastern Mediterranean Sea. Obviously, this statement does not take into account the Russian navy and the US Sixth Fleet, which has in any event lately been reducing its presence in our region.

On the operational side, it seems that the Turkish navy still does not have proven operational experience. Nevertheless, it has accumulated thousands of hours of exercises with some of the NATO navies, and especially with the US navy. One can assume that the series of broad naval exercises conducted by the Turkish navy since 2019, as well as the many actions carried out by the navy in 2020 in the eastern Mediterranean (as part of protecting drilling ships and seismic survey ships), as well as the naval operations focusing on Libya—have certainly contributed to its operational capability.

We can say that Turkey's naval strength constitutes a challenge and a threat to its traditional adversaries in the area, and especially to Greece and Egypt following the rise of A-Sisi to the latter country's government. Alongside this, the assumption now is that also Israel must take into consideration the potential maritime threat that may arise from the Turkish navy. In this context, it is worth remembering the significant event that occurred at the end of May 2010—the thwarting of the flotilla to Gaza, which flotilla included, among others, the Mavi Marmara, as well as the more recent event, in December 2019, when Turkish navy ships forced the 'Bat Galim', an Israeli research ship, out of Cypriot waters. The ship, which belongs to the Israel Oceanographic and Limnological Research Institute, subordinate to the Ministry of Energy, was conducting research in the economic waters of Cyprus, with the permission of the government of Cyprus.



Figure 6: Turkish frigate on a joint exercise with the USS Harry Truman, an aircraft carrier²²

22 The photograph was taken from the following paper. <https://www.mako.co.il/pzm-magazine/Article-f4a618e41983231006.htm?Partner=interlink>

Turkey's economic interests in the eastern Mediterranean Sea, the 'megalomania' of the present government seeking to return to the glory of the Ottoman Empire, as well as its basic enmity toward Israel, and the unconditional preference and support of the Palestinian nation—all position Turkey and its naval component as potential threats to and future challenges for Israel.

The State of Israel, being a country that is unequivocally and crucially dependent on its maritime trade, cannot watch unconcernedly the potential threat of the Turkish navy, which may give a show of strength and bring to bear high quality multipurpose surface sailing ships, as well as the impressive power of advanced assault submarines.