

MARITIME STRATEGIC EVALUATION FOR ISRAEL 2021/22

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Section 2: The Maritime Domain – the regions close to Israel

The articles in this section focus on the Mediterranean Sea and the Red Sea and touch on the Arab Sea and the Persian Gulf. The articles discuss a variety of issues: the strengthening of Iran's naval branch; the Israel-Turkey relations between the recent era of confrontation and the present and future opportunities for cooperation; the Red Sea basin that experiences on its African side war and conflict while on its Asian side a mixture of war in Yemen and reconciliation among the Gulf States that impacts their attitude toward the Red Sea and East Africa; the role of the GCC members in the security of the Gulf of Aden and the Red Sea; and finally, an article dealing with military innovation that originates in the political echelon and not the military echelon, and demonstrates this on the Dolphin submarines that Germany supplied to Israel in the 1990s.

The Development of the Iranian Naval Branch in Recent Years and the Implications for Israel and the Middle Eastern Countries¹

Shlomo Guetta and Motti Elharar

Introduction

Iran under the Islamic Revolutionary regime has in recent years been asserting itself as a regional power in the Middle East alongside two other regional powers – Egypt and Turkey. Considering itself a regional power, Iran is developing its naval power, relying on three complementary components: The Islamic Republic of Iran Navy (IRIN), the naval force of the Islamic Revolutionary Guards (IRGCN), and a fleet of commercial ships of the Iranian Islamic Republic, which is led by two companies: one is the Islamic Republic of Iran Shipping Company (IRISL), and the second is the National Iranian Tanker Company (NITC).

In the *Maritime Strategic Evaluation for Israel 2019/20*, there was a paper dealing with Iran's maritime policy against the backdrop of the "tanker war" which was raging in 2019.² This article reviews the developments that have taken place in the past two or three years in the Iranian naval arm, both in terms of the continued building of the naval force and in terms of operating the naval force, which is characterized, in our view, by a step up compared with previous years. This has serious implications for Israel and the other countries in the region.

Since the Islamic revolution in Iran more than 40 years ago, Iran had regarded the State of Israel, and more than once the worldwide Jewish diaspora, legitimate targets for violent hostilities, whether perpetrated directly by Iran or by its client terror organizations, which are backed financially and militarily by the Quds Force.

Israel and Iran do not share a land border and are thousands of kilometers away from each other. But at the same time, Iran has developed tentacles which enable it to threaten Israel directly, in addition to its ballistic missiles and the potential future nuclear threat that it is developing vigorously.

¹ The topic of the article is very dynamic. It reflects the situation at the time of writing in November 2021.

² Shlomo Guetta, "Iran's Maritime Policy as Expressed in the 'Tankers War' of 2019", in Shaul Chorev and Ehud Gonen (eds.). *Maritime Strategic Evaluation for Israel 2019/20* (Haifa: Maritime Policy & Strategy Research Center, University of Haifa, 2020), pp 66–82.

Iran's ability to threaten and strike Israel today might materialize through its arsenal of long-range surface-to-surface missiles, through its range of UAV's and cruise missiles that can be launched from inside Iran's vast territory or from the territories of its proxy terrorist organizations, such as the Houthis in Yemen, Hezbollah in Lebanon, or from Iraqi or Syrian soil, through Shiite militias they have cultivated in recent years.

To these terrestrial/geographic territories, one must add the maritime arena, which enables Iran, through its naval arm, accessibility and coming closer to realizing its strategic goals in the Middle East, including against the State of Israel. Iran's maritime access to the Middle East allows it to provide logistic aid to countries and organizations it supports, and in the future, this could allow Iran to close the "ring of fire" around Israel: Lebanon and Syria in the north, Iraq and Iran in the east, Yemen and the Gaza Strip in the south, and the Mediterranean Sea in the west.

Iran's strategic ambitions as a regional power have expanded and intensified in recent years due to its concerns over its isolation, due to the stinging sanctions imposed on it, especially during the presidency of Donald Trump.

To address these challenges and threats against it, the Iranian regime regards the naval arm, with all its different components, meaning IRIN, IRGCN and the civilian shipping, as entities which on the one hand will have defensive capabilities and ability to respond to threats against the Islamic Republic and its proxies – and on the other hand, it will possess offensive capabilities in order to pose a counter-threat toward those trying to thwart it and whittle down its strategic ambitions. In addition, the naval branch allows Iran to bypass the isolation and the sanctions regime.

In other words, the Iranian regime considers its naval branch capable of pursuing both defensive and offensive goals. This is why Iran has in recent years been investing considerable resources both in building the force and in using the force of its naval branch. Besides this, it is evident that in recent years, Iran is using its navy to advance "naval diplomacy" in order to deepen its bilateral ties throughout the region and the world, particularly during this period of intensified sanctions against it on the part of the West, and first and foremost the United States.

Building the Iranian Naval Force

The Iranian naval branch includes two main military components: The Iranian Navy (IRIN) and the naval force of the Iranian Revolutionary Guard (IRGCN). The importance of both forces is recognized by the regime and complement each other in terms of

the designation and the missions, despite competition and occasionally even rivalry between them in the past. It appears that in recent years the two components have been joining forces and cooperating, apparently under the guidance of the Supreme Leader Khamenei.

Iran's security industry highly prioritizes procurement and arming of these two naval components. Local building of navy ships, conversion of civilian ships for military uses, development and manufacture of weapons in a broad range of types and configurations, with emphasis on the manufacture of seaborne missiles, UAVs, both for attacking and for intelligence gathering, naval weapon systems, armaments and weapons including for special forces such as Marine Commando and frogmen.

Iranian Navy (IRIN) Force Building

In the past four years (from November 2017 to August 2021), Admiral Hossein Khanzadi commanded the Iranian Navy, having replaced his predecessor Admiral Habibollah Sayyari, who served as Navy Commander for ten years. Khanzadi has now been promoted to the role of Associate Commander of the Iranian Army.



Figure 1: Admiral Hossein Khanzadi

Like his predecessor, Admiral Khanzadi has continued, over his four years in the office, to work intensively to advance the building of the naval force thanks to the strong support and considerable resources being allocated by the Supreme Leader

Ali Khamenei and the rest of the security elite. Khamenei sees extreme importance in the maritime medium. Khamenei values the maritime domain and regards it to be a space which can add to Iran's deterrent and augment its expansionist ambitions. In his view, Iran's naval capability has to include defensive and offensive dimensions. Khamenei and the rest of the political and military leadership in Iran regard the upgrading of the Iranian Navy's capabilities to be another important building block in the transformation of Iran into a regional power.³

In accordance with this strategy, as opposed to the past, where the navy operated in the shadow of the naval force of the Revolutionary Guard, it is becoming apparent that in recent years it is being prioritized and is also receiving resources and attention from the local military industry. In addition to the previous (mostly obsolete) naval order of battle at the disposal of the navy ever since the Shah's rule, the navy is now in the midst of an impressive feverish process of increasing its strength. This includes:

- A future plan to independently build multi-purpose missile destroyers, with a displacement of over 5,000 tons as part of a project codenamed Nagin (gemstone).⁴ At the moment it is unclear what the project status is and when the first destroyer will be handed over to the Iranian Navy
- Construction of a series of missile frigates, of the *Moudge* class,⁵ with a displacement of approximately 1,500 tons, based on the British frigate MAEK-5 (Vosper Shipyards), which was built and delivered to the Iranian Navy during the reign of the Shah. The first frigate of the new model is named *Jamaran*. So far four frigates of this model⁶ have been completed and three additional frigates of the same class are expected to be built, where their main armament is going to be sea-to-sea missiles, apparently with a range in excess of 300 km and with the ability to carry a Naval helicopter

³ Omer Dostri, *The Iranian Naval Threat: Meanings and implications for Israeli and regional security*, Jerusalem Institute for Strategy and Security, June 17, 2019 [Hebrew].

⁴ Interview with Admiral Khanzadi, "Navy plans to build destroyer with over 5,000 tons", *Tehran Times*, November 24, 2019.

⁵ In early December 2021, one of the frigates of this model that was constructed at Bandar Abbas turned on its side and was damaged. One person was reported dead in the incident. About the construction of frigates of the MOWJ class, see a review by H. I. Sutton, "Iran's latest Mowj Class warship: IRIS Dena", *Covert Shores*, January 1, 2021.

⁶ One of the frigates from this series, the *Damavand*, was damaged in an accident in the Caspian Sea, underwent repairs and was returned to service.



Figure 2: The Frigate Jamaran, of the Moudge class

- **Submarines:** The Iranian Navy has three strike submarines of the *KILLO* class (displacement of approximately 3,000 tons), made in Russia and supplied at the end of the 1980s and early 1990s. Their current technical and operational serviceability is unknown. At least one of them, the *Taregh*, was upgraded in recent years to be able to launch sea-to-sea missiles, manufactured in Iran. In the first half of November a major naval exercise (Zulfiqar-1400) took place and this submarine participated and even launched a naval missile.
- Meanwhile Iran has developed, apparently with North Korean assistance, several midget submarines – mainly of the *Ghadir* class (with a displacement of approximately 125 tons)

During the second half of the 2010s, Iran began building a *Fateh* class submarine (600 tons displacement), which has been completed and has been commissioned for operational service in 2019. It is unclear just how successful this project has been and to what extent this serves as an opening for Iran to independently continue to develop and build submarines in the order of 600 tons and above. An analyst specializing in the Iranian naval component estimates that the building of the *Fateh* class is a first step toward self-building of larger submarines.⁷



Figure 3: Fateh-class coastal submarine

⁷ H. I. Sutton, "Iranian Navy's Fateh Class Submarine Explained", *Covert Shores*, September 16, 2020.

- In October 2021, the Iranian Chief of Staff General Bakri paid a visit to Russia, during which he was also hosted by the Russian Navy in St. Petersburg. It has been reported that the main purpose of the visit was to conclude a large naval procurement deal between Russia and Iran, which would include ships and weapon systems. In this report the possibility was raised – though, this could not be verified – that this new deal will include the purchase of submarines and missile ships. China, too, has good potential to provide Iran with naval ships and weapons. In the past it has even done so, when it granted Iran a license to produce marine missiles of various kinds.
- The Iranian Navy's order of battle includes additional kinds of weaponry, including missile boats (not all of the classes and models of vessels currently in service in the Iranian Navy will be listed here). These include French-made missile boats, which were supplied during the Shah's rule, however they have been upgraded and equipped with Iranian Nur sea-to-sea missiles. Additionally, the Iranians are building missile boats of the *Sina* class (with a 275 displacement). They, too, are armed with sea-to-sea missiles of the Nur series
- H. I. Sutton, an analyst who specializes in Iran's naval buildup, updated on November 11, 2021, on a project to build a new model of a missile corvette 80-meters long that he assessed was being built for the Iranian navy. No further reports were provided about the status of the project or where and how many corvettes are built.⁸
- The Iranian Navy has many other auxiliary, logistics and supply ships. The highlight of the past year has been the commissioning of a large ship named *Makran*. This is a tanker, which has been converted/retooled and is intended to serve as a floating port or base. It is capable of carrying helicopters, UAV's, missile boats and a large arsenal of naval weapons. It is likely that it is also capable of transporting submarine means of transport for use by frogmen.
- Beyond these ship platforms, the advanced weapon systems manufactured by the local industry is worth noting. These include for example sea-to-sea missiles whose ranges have been increased to 180 and up to 300 km (of the improved Nur series and Gadir). It is also possible that part of the new ships are going to be armed with long-range cruise missiles, which will be launched from vertical launchers. Also noteworthy is the existence of a large number of UAVs in Iran and long-range armed UAV's which can easily be stored and launched from the various ships

⁸ H. I. Sutton, "New Iranian Warship Design with VLS", *Covert Shores*, November 11, 2021.



Figure 4: The Makran

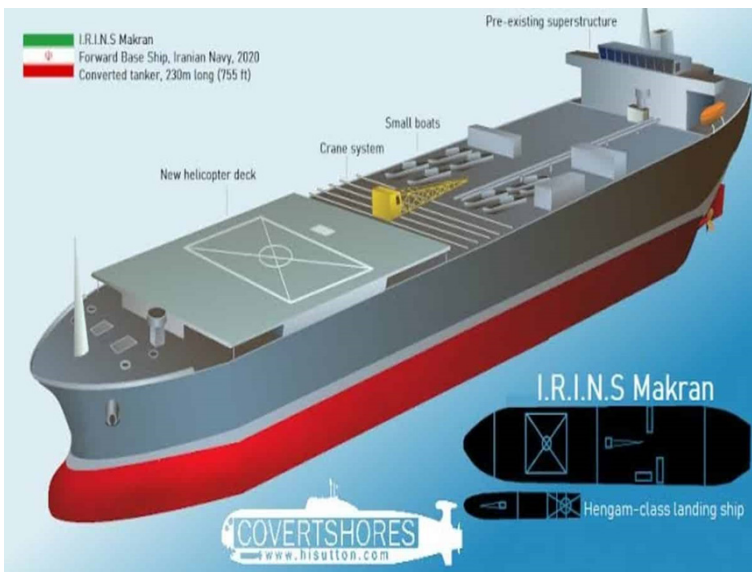


Figure 5: The Makran mother ship - diagram from a paper on Iran's rapidly-developing naval power⁹

Besides Admiral Khanzadi's achievements in building the naval force, the fact that three Iranian Navy ships were damaged in various accidents during his time in office must also be mentioned. The frigate *Damavand*, which was built in a shipyard in the Caspian Sea was damaged in early 2018 apparently in stormy weather after having hit a sandbank near its home port. A logistics support ship named *Konarak* of the *Hendijan* class, which is also used for carrying and laying naval mines was damaged in May 2020 when it was hit by a Nut sea-to-sea missile that was accidentally launched

⁹ Raza Khan, "Rapidly emerging naval power of Iran", *The Siasat Daily*, July 15, 2021.

at it by the frigate *Jamaran* during a firing drill that was underway in the Gulf of Oman. A large (207 meters long) support ship named *Kharg*, had been ordered and built in Britain back in the days of the Shah and which had been in the service of the Iranian Navy since 1984 for special logistical missions. It had taken part in a large number of long-range voyages with the Navy's strike forces. In early June 2021, in the Gulf of Oman near the port of Jask, caught fire for reasons which remain unclear, and which ultimately led to its sinking.

Admiral Khazari's successor as Commander of the Iranian Navy since August 2021 is Admiral Shahram Irani. This is the first time a Sunni Muslim is ascending to such a senior post in the Islamic Republic. He is a graduate of the Imam Khomeini University of Marine Sciences and has fulfilled senior roles in the Navy since 1987, including as Chief of Operations of the 1st Naval Zone (Bandar Abbas), Chief of Staff and Deputy Commander in the Bandar Abbas Region, Deputy Chief of Naval Training and Deputy Chief of Military Training. He has also commanded over important naval missions, including the sailing of Iranian warships through the Suez Canal to the Mediterranean Sea in 2011 and a number of naval rescue operations in the Persian Gulf. It can be assumed that Admiral Shahram Irani will continue the Navy's force-building momentum, as had his predecessors.



Figure 6: Admiral Shahram Irani, Commander of the Iranian Navy since August 2021

The Naval Force Building of the Iranian Revolutionary Guards (IRGCN)

The Revolutionary Guard's naval force is also been strengthened. This applies both to its naval units and to the naval elements of its proxies, which the Revolutionary Guard, led by the Quds Force, is tasked by the Islamic Republic to outfit and equip with a variety of weapons. Among them are naval means, including advanced weapons, top of the line of Iranian manufacture such as sea-to-sea missiles, armed UAVs, suicide boats, naval mines and miniature underwater means of transport. The

operations and coordination of all those proxy organizations by the Revolutionary Guard – such as Hezbollah in Lebanon, the Houthis in Yemen, Hamas and Islamic Jihad in the Gaza Strip – will be reviewed in length later on, in the section dealing with the operation of the Revolutionary Guard's naval force.

The close contact with the proxy organizations is done mainly under the leadership of the Quds Force – the name of the special forces of the Iranian Revolutionary Guard, which are responsible for all of the covert operations outside Iranian borders. It focuses on supporting and assisting Islamic (especially Shiite) terrorist organizations, Palestinian terrorist organizations and radical Islamic organizations. The Revolutionary Guard's naval force serves, in effect, as an "operations contractor" of the Quds Force in carrying out the support in the naval field to the proxy organizations such as professional guidance, supply of weapons and ammunition, and the provision of training.

Beyond that, the main mission of the Revolutionary Guard's naval force is to defend the Persian Gulf region, including the coastline and nearby islands controlled by Iran.¹⁰ The operational characteristics and defensive or offensive methods are those of asymmetric warfare, meaning taking on external challenges and threats with superior forces through the use of fast, lethal means even against large military targets.

Between 1997 and 2018 (over two decades) Ali Fadavi served as Deputy Commander and Commander of the Revolutionary Guard's naval force. Nowadays he continues to be influential in the Revolutionary Guard since he has been appointed to serve as deputy supreme commander of the Revolutionary Guard, Hossein Salami. The command of the Revolutionary Guard's naval force was assigned to Alireza Tang-Siri in August 2018.

The naval force of the Revolutionary Guard (IRGCN), like its counterpart in the Republic's Navy, enjoys priority from the leadership of the regime and from the local military industry. Following is a rundown of several developments pertaining to the naval force building of the Iranian Revolutionary Guard in recent years:

- More than one hundred small and fast boats, of the *Taregh* and *Ashura* classes were delivered to the Revolutionary Guard's Navy in mid-2020 at the port of

¹⁰ See later on in the "Exercising the force" section, on the possibility of extending the operations of the Revolutionary Guards Navy also to the Caspian Sea area in view of the tensions with neighboring Azerbaijan.

Bandar Abbas. These boats are armed with a machine gun and a multi barrel 107 mm rocket launcher



Figure 7: Armed speedboat in the service of the IRGCN



Figure 8: Armed speedboats model Taregh and Ashura at their handover ceremony in Bandar Abbas

- These boats are added to other speedboats named *Zolfaghar* in Iran, 17 meters in length and armed with a pair of sea-to-sea missiles of the Nasser series with a range of approximately 35 km or, alternatively, an installation of torpedo tubes. A model of this boat was built in Iran based on a North Korean model named *Peykaap*. It should be noted, that a number of boats of this model are also in service in the Iranian Navy¹¹



Figure 9: Zolfaghar class missile boat in the service of the Revolutionary Guards Navy

- It became known in 2020 that the naval force of the Revolutionary Guard is developing a large ship for itself, in the order of a corvette (approximately 65

¹¹ A similar model of this missile boat is named *TIR*, and is also built in Iran on a North Korean basis. Iran supplied six such boats, armed with sea-to-sea missiles of the c-802 series (named NUR in Iran), to the Syrian Navy in the early 2010's.

meters long), which will be named after the shaheed Qasem Soleimani, the commander of the Quds Force who was killed in early January 2020 in an attack launched by the United States. This is a vessel with a catamaran hull which, according to the commander of the naval force Tang-Siri, will be armed with sea-to-sea missiles and anti-aircraft missiles and will have a helipad.¹² Additional information about this project reveals that the Iranian military industry is building three corvettes of this class for the Revolutionary Guard's Navy and, as of early November 2021, the first one is about to begin undergoing sea trials. The new corvette, which will have a capacity of up to eight sea-to-sea missiles, is being built on the basis of a Chinese missile boat – *TYPE-22*.¹³

- In view of the up-to-date information about the beginning of sea trials of the new model, one can suppose that this vessel will be commissioned into operations in the Iranian Revolutionary Guard's Navy service in the course of 2022. When this vessel becomes operational, this will signify a substantial improvement of the asymmetric concept of the Revolutionary Guard's Navy. We assume that this new development is the initiative of the Quds Force and that it is intended to enable a longer reach for its "asymmetry", and operations at greater ranges beyond the Persian Gulf and Iran's territorial waters in the Gulf of Oman.



Figure 10: Illustration of the new model of corvette named after Qasem Soleimani, being developed for the Revolutionary Guards Navy



Figure 11: Chinese missile boat TYPE-22, on which the new Iranian corvette Shaheed Soleimani is based

- Another interesting development, which might indicate a change in the concept of method of employment of the Revolutionary Guard's Navy, is the commissioning of a mother ship named *Shaheed Roudaki* into active service

¹² Further preliminary details about this class, named after Qasem Soleimani, are included in H. I. Sutton, "Iran's New Missile Corvette Could Reshape IRGC Naval Doctrine", *USNI News*, March 29, 2021.

¹³ "Iranian Navy's Shahid Soleimani class frigate reportedly begins sea trials", *Navy Recognition*, November 3, 2021.

– similar to the class delivered to the Navy. . It has also been converted and adapted by the local military industry to serve as a floating port/storehouse to enable the IRGCN to increase its operational range far from Iran. It is worth mentioning that in addition to this ship, the Revolutionary Guard's Navy now has a support ship named *Sioashi* (originally a tugboat), which has been adapted to carry anti-aircraft missiles apparently in order to provide air cover for a naval strike force that would be operating on the high seas

- The building of the Revolutionary Guard's naval force, which has come to include large ships, is intended to enable this organ to operate independently as an attack naval force far from the Persian Gulf, in the Gulf of Aden, the Red Sea and perhaps even the eastern Mediterranean. Apparently, this development is inspired by the Revolutionary Guard's Quds Force, whose role is to export the Islamic revolution, including the support for its proxies in the Middle East



Figure 12: The *Roudaki* - front view



Figure 13: The *Roudaki* – top view with its various equipment and naval armaments. It carries an assortment of weapons on board (speed boats, sea-to-sea missiles, a helicopter, UAV's, a vehicle carrying anti-aircraft missiles)



Figure 14: the *Sioashi* tugboat armed with anti-aircraft missiles (the ship is flying the Quds flag)

- Due to its asymmetrical characteristics, the Revolutionary Guard's Navy uses naval weapons which are intended for special forces, commandos and frogmen, including suicide boats, naval mines including advanced, sophisticated types, small, armed UAVs, mini-submarines and various means of underwater transportation, both manned and unmanned devices.
- Part of the abovementioned weapons find their way, via the Revolutionary Guard's Navy and with the stewardship of the Quds Force, into the hands of its proxies in Lebanon, Yemen and even in the Gaza Strip. Whether through physical transfer of the equipment or by transferring parts, raw materials and technical training as to the method of manufacturing and assembling them in their destination countries

Use of the Iranian Naval Force in Recent Years

Over the past two or three years there has been a significant increase in the use of the Iranian naval force and all of its components – the Navy and the Revolutionary Guard's Navy. It is directly related to the degree of threat Iran has been perceiving in recent years since the United States' withdrawal in 2018 from the nuclear deal under the Trump administration, and in particular since mid-2019, when the one-year transitional period Trump allowed for installing severe sanctions that would prevent the export of Iranian oil had passed. In response, the Iranian rulers and the military command, including the Commander of the Navy and the commanders of the Revolutionary Guard, threatened that they would block the Straits of Hormuz, preventing passage of oil to the international markets.

Thus, in mid-2019, began a "tanker war" in the form of detention by the Iranians of tankers in the Persian Gulf and in the vicinity of the Straits of Hormuz. The tensions over the tanker traffic were exacerbated in other locations as well, outside the vicinity of the Straits of Hormuz – for example in the Straits of Gibraltar and in the

central Red Sea, this time targeting tankers in the service of Iran. As for the Iranian fear of harm to their tankers in the Red Sea, an incident from October 11, 2019, should be kept in mind, when the Iranian tanker *Sabiti*, which was sailing in the Red Sea west of the Saudi port of Jeddah, was hit twice by a weapon of some sort. At the time, the identity of the attackers was unknown, however in late November 2019 Deputy Commander of Operations in the Iranian Navy, Mohammed Mussawi, announced that Iran would retaliate for the terrorist attack against the oil tanker, which took place in October. One could deduce that the identity of the attackers had been uncovered.¹⁴

Over the past few years, the Iranian Navy has conducted several long-range forays into the Arabian Sea, to the Gulf of Aden and even to the Red Sea and the Suez Canal. Such voyages were in form of a "task force", consisting of 2 to 3 ships, which were assigned a numerical codename. In November 2019, Admiral Khanzadi updated that over 60 such task forces were carried out. One of their assignments was to provide protection along the Iranian shipping routes. The timing of his announcement shows that they were said against the backdrop of the attack against the tanker *Sabiti*, in early October 2019.

In early December 2019, in a launching ceremony for two new frigates, the Navy Commander, Khanzadi, made an announcement which at the time sounded rather pretentious, according to which the Iranian Navy was prepared to patrol in the Atlantic Ocean.¹⁵ Nevertheless, in 2021 the Iranian Navy actually carried out this mission of a long-range voyage into the Atlantic Ocean. This was the highlight of its activity that year.

The task force, named "The 75th Flotilla", consisting of two ships – the mothership *Makran*, which was accompanied by the frigate *Sahand*, carried out a prolonged voyage during the spring and summer months of 2021, crossing the Indian Ocean and the Atlantic Ocean. The participation of the frigate in this long voyage is more than symbolic, since this is a ship of Iranian make, which is indicative of its technical prowess.

At the start of the voyage, it was unclear what the destination was – whether to Venezuela or to Syria (via Gibraltar). Eventually the destination was the Baltic Sea via the English Channel en route to participating in the Russian Navy Day ceremonies.

¹⁴ Guetta, "Iran's Maritime Policy as Expressed in the 'Tankers War' of 2019".

¹⁵ [Looking west: Iran is prepared to patrol the Atlantic Ocean](#), The Jerusalem Center for Public Affairs, December 5, 2019 [Hebrew].

It is unclear whether the arrival in Russia had been planned from the outset, but in any case, one way or the other, the vision of a task force sailing operationally and crossing the Atlantic Ocean was realized.



Figure 15: "75th Flotilla" during its long-range voyage



Figure 16: The frigate *Sahand* (Iranian-built) which accompanies the voyage in the Atlantic Ocean

It is possible that this voyage was actually intended to be a kind of show the of flag exercise. However, one must not ignore the message the Iranians sought to send, according to which the Iranian Navy has a long arm, as is typical of a "green water" fleet – meaning that it can operate independently far from its home ports.

Upon the return of "The 75th Flotilla" to its home port in Iran, in early September 2021, following a voyage which lasted over 130 days and covered a distance of approximately 145,000 km, it received warm greetings from Iranian leader Khamenei and of the Commander-in-Chief of the Islamic Republic of Iran Army General Mousavi for accomplishing the important mission in the Atlantic Ocean, which was carried out for the first time in Iranian naval history. The new Commander of the Navy,

Admiral Shahram Irani, flew out in a helicopter to greet them when they approached their home port.¹⁶

We assess that the day is not far that another Iranian Naval task force will arrive in the eastern Mediterranean via Gibraltar having circumnavigated Africa or via the Suez Canal. In such a case, it is likely that their presence in the eastern Mediterranean will be a long one. They will not be in a hurry to return to their home port in Iran. They will stay near the Syrian/Lebanese coast for weeks until another force will arrive to replace them. Should the Iranians realize their permanent naval presence in the eastern Mediterranean, this will have an effect on the naval balance of power in our region.

Furthermore, as has been the case in the past, the possibility of the arrival of a similar "task force", consisting of 2 to 3 ships, in the Straits of Bab el-Mandeb and the Red Sea under to pretext of securing the Iranian shipping routes in this region against attacks – should not be ruled out. In this context it should be noted that since 2016, an Iranian special operations ship (espionage/logistics) named *Saviz* had operated opposite the coast of Yemen/Eritrea. This ship belongs to, and apparently was operated by, the Iranian Navy however due to the support provided through this ship to the Houthis in their war with Saudi Arabia, it is likely that also the Revolutionary Guard's Naval Force was involved, or at least coordinated with its operation. In early April 2021 this ship was hit, according to various sources by Israel. In July 2021 an identical "sister" ship, the *Behsad*, took up its position in the region.

Beyond operating the Iranian Navy in various operational missions of patrolling, securing shipping routes, and showing presence in various hotspots in the maritime arena, another approach should be mentioned, which has been emphasized over the years of Admiral Khanzadi. While the Revolutionary Guard's Navy is perceived and characterized by international entities as a terroristic, threatening element, the Iranian Navy has in recent years attempted to harness itself in the service of diplomacy and relations with other countries. This was evident in the conducting of joint exercises with the Chinese, Russian and Pakistani navies in the Gulf of Aden and in the Indian Ocean, as well as the (apparent) harnessing of the Iranian Navy for dealing with piracy in the Arabian Sea and the Gulf of Aden.

¹⁶ For a summary of the task force's journey, see: "Iran's 75th Formation: 1 ship of more than 1,000 tons, 1 ship of 100,000 tons, sailing for 123 days and returning to construction", *iNEWS Military*, March 20, 2022; "Iran Plans to Build Another Long-Range Mobile Forward Base, Conduct New Trans-Oceanic Missions", *sputniknews* September 14, 2021; Sam LaGrone, "Iranian Navy Flotilla Wraps up Four-Month Atlantic Deployment, Pledges More International Operations", *UNSI News*, September 10, 2021.

The voyage of the "75th Flotilla" and the presence of the Iranian Navy in the Russian Navy Day ceremony in St. Petersburg in the Baltic Sea can also be viewed in this context of Naval Diplomacy. Moreover, Khanzadi made the effort to be present at the Indian Ocean Naval symposium (IONS), which took place in June 2021 on the Island of Reunion. On the sidelines of this conference, he held a highly-publicized meeting with French Admiral Pierre Vandier.¹⁷



Figure 17: The meeting between an Iranian admiral and a French admiral on the sidelines of the Indian Ocean Symposium

The Operation of the Revolutionary Guard's Navy (IRGCN)

Iran's second naval arm, which is no less significant than the first, is the naval force of the "Islamic Revolutionary Guard". As for its use and operations, its main mission is usually to defend the Persian Gulf region including the coastline and nearby islands controlled by Iran.

At the time this article was written, the escalating tension between Iran and Azerbaijan has been making headlines, partly due to the Iranian claim that the Azeri territory is being used as a staging ground for Israel's operations against it. The two countries share a border in the Caspian Sea. During the very days when the tensions

¹⁷ "Iran, France navy commanders meet, confer on bilateral issues", *Islamic Republic News Agency*, June 30, 2021.

were high and maneuvers were being carried out on both sides of the border, it was reported that Iran had sent a large number of small, fast, armed boats to the Caspian Sea – apparently these are the *Taregh* and *Asura* boats which are usually operated by the IRGCN. That way, should armed hostilities break out between the two countries, this might also be played out in the Caspian Sea arena, since on the Iranian side, both Iranian Navy ships will be operating as well as boats and weapons of the Revolutionary Guard. This is a possible example of a joining of forces as has been mentioned earlier. In the event that the IRGCN takes part in hostilities against the Azeri Navy in the Caspian Sea, this will be done using asymmetric warfare tactics, which the IRGCN has specialized in over the past years in the Persian Gulf (the "swarm" tactic – storming an enemy naval force with fast armed boats).

In the past, there has been a rivalry and competition between the Iranian Navy and the IRGCN. However as already mentioned, it appears that relations between these two forces have warmed in recent years and it is evident that they are joining forces to protect and advance Iran's interests in the naval arena. Besides the fact that it is certainly the desire of the Iranian leadership that the two forces cooperate with one another, it can be assumed that this is also an outcome of the personalities and working relations of the commanders – in the Navy this was until recently Admiral Hossein Khanzadi and now his replacement, Admiral Shahram Irani. At the pinnacle of the IRGCN pyramid is Ali-Reza Tangsiri. For example, the latter arrived in mid-May 2020 at Khanzadi's office to offer his condolences for the loss of lives of the crew of the ship accidentally hit by a missile fired at it in the Gulf of Oman. On this occasion, Khanzadi said that nowadays the cooperative atmosphere between the Army and the Revolutionary Guard is strong and effective. Tang-Siri on his part reinforced Khanzadi, saying that Iran's defensive force and its deterrent force are an outcome of the unity and integrity of the armed forces under the guidance of the Supreme Leader Ayatullah Ali Khamenei.¹⁸

In a lengthy interview given by Tang-Siri to the Al-Alam media channel (broadcasting in Arabic) in late September 2021, he highlighted the good relations he had with both the outgoing Navy commander Khanzadi and the incoming commander Shahram Irani. He emphasized that the Islamic Republic has two navies, "which operate under the flag of a single commander, the dear commander [...] who is our Imam and our leader."¹⁹

¹⁸ "Khanzadi: Naval forces' willpower will foil plots", *Tehran Times*, May 17, 2020

¹⁹ Interview with Ali-Reza Tang-Siri, *This is what Brigadier General Tang-Siri revealed about the underground missile cities, Al-Alam Channel*, September 29, 2021 [Arabic].



Figure 18: The condolence visit between the two commanders

The working assumption today, as opposed to the past, is that there is cooperation between Iran's two naval branches at multiple levels – personal, technological, operational, intelligence, logistical and so forth. This cooperation between the two Iranian naval components means an increased naval threat to Israel and also toward the Sunni states in the Persian Gulf and the Red Sea. This is particularly significant in view of IRGCN's current and future force building, which enables it to operate at longer ranges beyond the Persian Gulf. As we saw earlier, using ships like the *Shahid Rudaki* and the armed tug *Sayoshi*, and certainly in case the Revolutionary Guard's plan to build a missile corvette named *Shahid Qasem Soleimani* would be fulfilled.

The IRGCN Activity and Maritime Engagement in the Various Flashpoints

During 2019–2021, the ISGCN was operating in the following flashpoints:

- The Persian Gulf and the islands under Iran's sovereignty in response to the threatening presence of the US Navy in the Strait of Hormuz and the Persian Gulf, including the entry of an aircraft carrier and a nuclear submarine into the Gulf. In several instances, IRGCN armed and fast ships came dangerously close to the US Navy's vessels.
- In Yemen, the Revolutionary Guard is heavily involved in providing aid to the Houthis during the ongoing civil war. Thus far, Saudi Arabia was the main victim of the Houthi naval threat. Every once in a while, Saudi vessels are attacked in this region by either rockets or explosive boats, or naval mines, or UAV's. The Houthis are extensively using naval mines provided by Iran. They are dropped near Saudi islands and close to the Strait of Bab el-Mandeb. The Arab coalition operating in Yemen, led by Saudi Arabia, reported a surge in terrorist activities

by the Houthis, dropping mines in the southern end of the Red Sea and in the Strait of Bab el-Mandeb. The coalition reported destroying 175 such mines that were randomly dropped by the Houthis in the Red Sea. Due to this threat, the Fifth Fleet sent two minesweepers to the Red Sea, *USS Gladiator* (MCM 11) and *USS Sentry* (MCM 3) that crossed the Strait of Bab el Mandeb on October 18, 2021.



Figure 19: The US Navy minesweeper that entered the Red Sea

- Lebanon is the IRGCN's and the Quds Force's traditional naval support area – assisting Hezbollah, Iran's primary proxy in Lebanon and Syria. Since the First Lebanon War in the early 1980s, this Shiite organization has been the beneficiary of preferential treatment from Iran, such that Hezbollah can truly be regarded as an "Iranian column" in the Levant (Syria/Lebanon). As part of Hezbollah's military buildup, prior to the Second Lebanon War, their naval arm was also endowed with substantial momentum with the receipt of custom-made naval weapon assemblies including guided ground-to-sea missiles, one of which – a C-802 (the Iranian version named NUR) was launched and hit the Israeli missile boat *Hanit* in July 2016 during the first days of the Second Lebanon War. It is worth mentioning that Qasem Soleimani (the Quds Force commander) was present with senior Hezbollah officials at the time the missile was fired at the Israeli ship that was operating offshore Beirut²⁰
- The Gaza Strip: In the past (March 2011), there was an unsuccessful attempt to smuggle Nasser sea-to-sea missiles into the Gaza Strip (the Iranian name for the C-704 missile). The working assumption is that Iran will take advantage of

²⁰ Raphael Ofek and Pesach Malovany, *Iran Behind the Scenes During the Second Israel-Lebanon War*, Mideast Security and Policy Studies Paper 182, BESA Center, Bar Ilan University, November 3, 2020, p. 22.

any opportunity to improve the operational capabilities of the organizations in the Gaza Strip, and in particular the Islamic Jihad. This includes manned or unmanned underwater means of transport

Beside all of the activity in these flashpoints, it seems that the ISGCN's greatest highlight is their involvement, apparently together with other branches of the Revolutionary Guard, in attacks against shipping with links to Israel in the Persian Gulf and in the Gulf of Oman. Judging from the characteristics of the damage sustained by the ships, one can unquestionably say that these were perpetrated by the IRGCN. No official justification was given for these operations, such as the attacks being in retaliation for Israeli offensive operations against Iranian targets, including maritime targets, such as tankers and cargo ships, that were en route to Syrian ports. According to media reports, almost all the attacks were carried out using UAVs and Israel officially blamed the Revolutionary Guard's Air Force. The use of UAV's, mostly manufactured in Iran, including those launched from sea, constitutes a significant, dangerous threat both to littoral targets and to shipping.

The most recent attack (at the time this article was written) in this series of attacks was against the *Mercer Street* at the end of July 2021, which cost the lives of one British and one Romanian crewmember. This is a significant escalation – not only in Israeli eyes but also by global perceptions.

In the abovementioned interview on the Al-Alam channel, the commander of the IRGCN hinted to those attacks which are attributed to Iran and said regarding the Israeli naval threat against Iranian targets: "[...] **However, if the Zionists should threaten us one day, they will certainly feel our clout and will sense it, because for us they're nothing. The proverb says, those living in glass houses should not be throwing stones on other people's houses, since a glass house is no protection for its owner.**"²¹

To summarize the characteristics of the use of naval force by the Revolutionary Guard, one must emphasize their asymmetric operations, in the form of guerilla warfare of a marine commando. Already nowadays, even without the future developments, this is a force with advanced capabilities and weaponry that are usually in the use of navies. This refers, for example, to sea-to-sea missiles, torpedoes and manned and unmanned aerial vehicles. All this is intended to carry out its defensive and offensive missions, primarily in the Persian Gulf, as well as in more remote flashpoints in the Middle East.

²¹ Interview with Tang-Siri, see footnote 19.

As a "subcontractor" of the Quds Force, the IRGCN assists the proxy organizations under Iranian control, such as in Yemen, Lebanon, Syria and to an extent the Gaza Strip. In the context of the battlespace currently unfolding in the Yemeni civil war, of note are the naval mining activities, the firing of sea-to-sea missiles and cruise missiles, the use of suicide boats – all these having been supplied and trained by the IRGCN personnel.

So far, we have discussed the use of the Revolutionary Guard's Navy (IRGCN) force as we have known it in the past. However in the past two years there has been a marked trend toward force building (such as the *Shahid Rudaki* or the future corvette *Soleimani* or the armed tugboat *Sioashi*), which will enable the Revolutionary Guard to operate autonomously in remote areas such as the Arabian Gulf and in the southern Red Sea, including a presence in the Straits of Bab-el-Mandeb (not only with an espionage ship) and perhaps even a more audacious presence and arrival at the Syrian coastal region, for example to set up a base or settle in one of the northern Syrian ports – Latakia or Minet el-Beida.

The Islamic Republic's commercial shipping infrastructure

As mentioned in the introduction, the Iranian commercial shipping infrastructure consists of two main government corporations. One is the Islamic Republic of Iran Shipping Line Group (IRISL) and the other is the National Iranian Tanker Company (NITC). The two commercial companies, along with the Iranian Navy and the IRGCN, are not only economic assets for the Iranian treasury, but also constitute an addition to the Iranian maritime power since they complement and are integrated in missions from the security realm, wherever Iran has an interest.

IRISL's ships or its network of shipping collaborators have been involved in the transportation of equipment and weapons for state or terrorist organization customers over the past twenty years. Part of the shipments have been done directly on Iranian merchant marine ships while others have used merchant marine ships belonging to assisting entities.

In the past several years, the activities of the National Iranian Tanker Company (NITC) have been gaining prominence. NITC is considered to be one of the largest tanker companies in the Middle East. This company's activity has recently come into the fore due to the Iranians' attempts to circumvent the sanctions by transferring equipment and fuel cargos to Venezuela and Syria, and recently it has also enlisted – at Hezbollah leader Nasrallah's behest – to transfer fuel products to Lebanon supposedly for humanitarian reasons. At the time this article is being written, since

September 2021, several Iranian tankers have docked at the port of Baniyas in Syria. From there, the fuel products are transported to Lebanon on trucks.

Regarding this traffic of fuel transfers for Lebanon from Iran via the Suez Canal and from there to the dock in Syrian Baniyas, Iran's new navy commander recently declared that this traffic received a security escort from "Naval Task Force No. 78".²² Insofar as those tankers were indeed given a security escort by the Iranian Navy, at most this was done as far as the Red Sea and did not include passage through the Suez Canal. It is unclear whether this line (of fuel for Syria/Lebanon) will continue to consolidate in the future. In any case it bears the potential for an additional Iranian maritime presence in the eastern Mediterranean. The possibility that in future full-scale escorts of commercial tankers by Iranian Navy ships cannot be ruled out.

Regarding the potential consolidation of the Iranian maritime presence along the Levantine shores, it is worth mentioning Hassan Nasrallah's idea that an Iranian energy company would arrive in Lebanon's waters to discover and extract natural gas within the South Lebanon Exclusive Economic Zone, inside an area still in dispute with Israel. According to Nasrallah, Israel would not dare harass Iranian energy-related activities in the region. This idea must not be overlooked, even if it is half-baked at the moment.

Summary and Conclusions

Iran under the Islamic Republic regime is gradually emerging as a regional power in the Middle East, without taking into consideration yet the existence of nuclear capability, if indeed it will exist. The Iranian leadership recognizes that as a regional power, it is compelled to project its power in the maritime arena. Thus, considerable resources are currently being invested to create this maritime power, primarily through reliance on the local industry and technological capabilities. Even if there still are remaining technological knowledge gaps in Iran, they can easily acquire this knowledge, as they can also procure spare parts and critical components from countries like China, North Korea and even Russia. In this area of weapons trade, the name of the game nowadays is **worthwhileness and financial gain**. In this context it is worth following up on the possibility that in October 2021, during the Iranian Chief of Staff's visit in Russia, a large military procurement deal was signed, which will include weapon systems, including naval systems and weapons.

²² "Lebanon-Bound Fuel Tankers Escorted by Iranian Navy: Commander", *Tasnim News Agency*, October 11, 2021.

The Iranian naval power, which is an outcome of all the maritime components at its disposal which have been reviewed here, poses quite a few challenges to Israel, to the powers operating in the region (primarily the United States) and to other countries such as Saudi Arabia, the United Arab Emirates, Oman and Bahrain. Egypt, which has distinct interests in the southern Red Sea and Suez Canal, is also probably taking note of the naval power of Iran and its proxies because they could potentially disrupt freedom of navigation in the Straits of Bab el-Mandeb – a disruption which would directly impact Egypt's revenues from the Suez Canal.

Recently, Iran's naval strength has been posing challenges and risks also toward a neighboring country in the Caspian Sea – Azerbaijan, due to tensions which have exacerbated in the last quarter of 2021. Should this flashpoint in the Caspian Sea indeed erupt in armed conflict, Israel is bound also to be inserted in this regard, since the Iranians allege that there is an Israeli intelligence presence in the Caspian Sea, plus they allege that Azerbaijan's military capabilities (including the naval capabilities) are based on procurement and assistance from Israel.

As for Israel, despite the fact that there is no land border between it and Iran, it must bear in mind that in the maritime domain there are no borders and a hostile force might pose a threat within the maritime domain even without there being a common maritime or land frontier. It is impossible legally to prevent the arrival of a naval force in the Red Sea or in the eastern Mediterranean, so Iran's geographic remoteness should not detract from the severity of the threat it poses. Its geographic remoteness, or the remoteness of its proxies, could diminish the potential threat of missile and UAV launches aimed at Israel, since these weapons are not affected by a barrier in the form of a land border of any kind.

Beyond attacks within the State of Israel's territory, in its ports or territorial and economic waters, one has to take into consideration Iran's naval capability to harm shipping targets or shipping routes to and from Israel at various points in the Middle East, as was the case in the four attacks launched against merchant ships since spring 2021.

In any case, it is a fact that the maritime threat potential on the part of Iran has increased significantly over the past several years. Part of this increase is due to reasons unrelated to Israel, rather they are related to the perceived threat which the US administration under Trump posed against Iran, especially since 2019. This sense of unease has accelerated force building processes and has also stimulated the exercising of power, including among the proxy organizations under Iran's control.

However, not only the tensions with the United States have increased the Iranian ambitions. It seems imperative to add various opinions of analysts who believe the possibility that Israel has been operating in recent years against Iranian maritime targets has stoked the fire and aroused the "sleeping demon from its den". This article does not intend to take a stand on this issue, however it appears that the statement made by the Commander of the IRGCN, regarding that "owner of a glass house", speaks for itself and merits attention.

The maritime domain is a significant pillar of the Iranian strategic vision. It allows Iran on the one hand to threaten and operate defensively and offensively in order to consolidate its capabilities and influence as a regional power. On the other hand, the maritime domain allows it to maintain commercial ties which are vital to its economy, for oil and goods exports, in particular while the sanctions regime is still in place. In addition, this domain enables it to transact "maritime diplomacy" as part of its foreign policy.

To conclude, from everything that has been said so far, even though we do not have substantiated information regarding the existence of a maritime strategy, (officially or unofficially) the maritime component is at the center of the general strategy at the Iranian national level. Assuming this is the case, the processes of force building and exercising the Iranian naval force will continue to feature high in the priorities of this country.

Israel–Turkey Relations – An Ocean of Opportunities

Omri Eilat

Followingr Joe Biden and the Democratic Party winning the 2020 elections in the United States, 2021 has been marked by the re-evaluation of positions in the East Mediterranean basin. As part of this trend, Turkey has reassessed its relations with the countries in the region and has taken special diplomatic measures to advance its relations with Egypt, Israel, and the United Arab Emirates. The phone call between Turkish President Recep Tayyip Erdogan and his Israeli counterpart Isaac Herzog this summer aroused considerable interest but also many questions on the Israeli side.¹ On the one hand, Israel and Turkey have many shared interests and an impressive track record of cooperation, including during the Erdogan years. On the other hand, the Israeli confidence in the success of yet another move toward warming relations is very low, primarily due to Erdogan's anti-Israel stance and the formation of profound Turkish commitment toward the Palestinian issue. Although Turkey's multifaceted positions in the Mediterranean and the Middle East are not dependent on its relations with Israel, Israel's opening up to the sea in the past decade has added an extra layer to the relations between the two countries. This layer includes new dilemmas and challenges but these are accompanied by new opportunities. To understand their origins, it is critically important to understand Turkey's fundamental positions concerning the Mediterranean Sea. Only a small proportion of these are a consequence of Erdogan's reign. Most of them are much deeper-rooted, going back to the Ottoman period.

This article analyzes and presents to the readers and particularly to the decision-makers, the Turkish perspective on developments in the eastern Mediterranean basin, given the current state of affairs. This is not to say there are no profound structural problems in Turkey's relations with Israel or to argue that the criticism toward Turkey's conduct in the region is not at least partially justified. My main goal is to shed light on the many points of convergence of interests of the two countries, their complicated shared history, and this history's role as part of a regional tapestry, concerning which the Israeli comprehension is found lacking. As a rule, Israel's acquaintance with its neighbors is sparse, sometimes embarrassingly so. Moreover, the Israeli side is first to recognize a threat but the last, to sense an opportunity. I believe that, especially when Israel is reevaluating and rebuilding its web of foreign relations, these things have to be clearly stated.

¹ Rina Bassist, "Erdogan, Herzog share rare phone call," *Al-Monitor*, 13 July 2021.

The desire for a just international order

At the root of Erdogan's policy, going back to his early days as Prime Minister stands the desire to install a new world order in which Muslim countries will gain an improved positioning.² Turkey's leading role in promoting these efforts and claims, like speaking out against the status of the five permanent members of the UN Security Council, is, in the minds of the Turkish policy-makers, intended to provide Turkey a leadership role in the Islamic world. The Erdogan administration's deep nostalgia for the Ottoman past and its reinstatement as a Turkish "birthright", as opposed to the Kemalist approach which regarded the establishment of the republic, is the most dominant factor in the formation of Turkey's policy.³ Moreover, suspicion and defensiveness against international arrangements and institutions have always existed in Turkey. The sense of alienation toward the international order, which is discriminatory toward Turkey, has roots going back as far as the late nineteenth century, when its western allies, Britain and France, effectively relinquished their efforts to preserve the integrity of the Ottoman Empire.⁴

At the time, the positioning of the Ottoman Empire as the protector of Muslims was a consequence of the loss of territory through wars and the displacement and massacre of Muslim communities, first and foremost by Czarist Russia, but also in the Balkans, where new nation states were asserting themselves and were gaining their independence from the Ottoman Empire with West European backing. This memory reflects substantially, directly on the Cyprus issue, which has made its way back into headlines this year. The status of the Turkish minority in Cyprus is one of a string of issues that remained festering sores in Turkish public opinion even before the foundation of the Republic. The concern of Cyprus joining forces with Greece is justified and is based on the move Crete did at the turn of the twentieth century when it won west European support despite the agreements with the Ottoman Empire, which involved the deportation of the Muslim minority from the island. The loss of the Dodecanese Islands to Italy following the latter's aggression in 1911 in Libya left the Empire and following that, the Republic was devoid of control of the

² Henri Barkey, "How Erdogan Muscled Turkey to the Center of the World Stage," *World Politics Review*, October 30, 2020.

³ Yağmur Karakaya, "The Conquest of Hearts: the Central Role of Ottoman Nostalgia within Contemporary Turkish Populism," *American Journal of Culture and Sociology* Vol. 8 (2020): 125–157.

⁴ Sean Mcmeekin, *Berlin–Baghdad Express* (Cambridge, MA: The Belknap Press of Harvard University Press, 2010), 35–52.

Mediterranean islands.⁵ The vulnerability of the Turkish minority in Cyprus following its independence from Britain and the fragility of the dual-nationality agreement between the Greeks and the Turks on the island led to the Turkish invasion and underpins Turkish demands from the European Union till today.

The vulnerability of Turkish minorities outside Turkey, including the Palestinians, the loss of the Province of Mosul to the British Mandate in Iraq in the Treaty of Lausanne, which ended the Turkish war of independence in 1923, and the status of the Bosphorus and Dardanelles Straits are scars, lingered in Turkish memory due to the Ottoman demise. 2019, the year in which Turkey embarked on some of its most aggressive moves, was the centenary of the humiliating Treaty of Sèvres, which dismantled the Ottoman Empire. The Turkish objections to this treaty brought upon it, among other things, the war of independence, out of which came the Turkish Republic. If the first decade of Erdogan's rule could be characterized with domestic neo-Ottomanism while treading cautiously in the international arena, the second decade has strengthened neo-Ottomanist tendencies in Turkey's foreign policy. The collapse of Syria and Iraq has made the Turkmen and Kurdish minority regions relevant once again to Turkish influence.⁶ Besides the involvement of Turkish military forces as peacekeeping forces or as NATO forces in places like Iraq and Kosovo, Turkey has extended its military footprint into other areas, which do not fit this description, such as in Syria, Libya, Sudan, and Somalia - which has brought Turkish military involvement to 13 countries.⁷

From Aggressiveness to Assertiveness

The Turkish expansionist tendencies peaked in 2019 with the implementation of the "Blue Homeland" doctrine by the Turkish Navy. This doctrine was first introduced in 2006 by Admiral Cem Gürdeniz in a symposium held at Navy headquarters as an academic-strategic exercise. It became Turkey's official program. According to Blue Homeland, Turkey has rights to a vast offshore expanse – 462 thousand sq. km – in the Mediterranean, the Aegean, and Black Seas. This area includes territories which according to international conventions are recognized as belonging to Greece and Cyprus. Turning the doctrine into official doctrine came with extensive naval

⁵ Mustafa Aksakal, *The Ottoman Road to War in 1914: The Ottoman Empire and the First World War* (New York: Cambridge University Press, 2008), 4–7.

⁶ Nick Danforth, "Turkey's New Maps Are Reclaiming the Ottoman Empire," *Foreign Policy*, October 23, 2016.

⁷ Selcan Hacaoglu, "Mapping the Turkish Military's Expanding Footprint," *The Washington Post*, August 31, 2020.

exercises, seismic research work in the Exclusive Economic Zones of neighboring countries, and expulsion of ships, including Israel's *Bat Galim*, from Economic Waters claimed by Turkey as part of the doctrine.⁸

Although The Blue Homeland doctrine encountered substantial difficulties given the French intervention in the summer of 2020 and the change of government in the United States in January 2021, Turkey's claims in the eastern Mediterranean basin continue to challenge the international system. The Turkish aggressiveness has been substantially tempered but the claims and aspirations for dominance in the Middle East have remained valid, have not diminished and are not expected to be taken off the table. The stationing of squadrons of UAVs at the Geçitkale airport in northern Cyprus and Erdogan's demanding statements directed at the European Union regarding the status of the unrecognized Turkish republic on the island on the 47th anniversary of the Turkish invasion are indicative of the Turkish belligerent position.⁹ This position is being rewritten into various doctrines, which have been replaced several times during the second half of Erdogan's time in power. It represents the attitude of a party that feels excluded from the international system, or which in the least, is underrepresented. According to the Convention on the Law of the Sea, the inherent discrimination against Turkey in the Economic Waters of the East Mediterranean basin renders it unacceptable for Turkey, which prefers to reach a political resolution of the issue.

In the regional rivalry, aerial force building is intricately intertwined in the developments within the maritime space. The development of Turkey's aircraft carrier, the *Anadolu*, was originally intended to carry F-35 aircraft, which are capable of vertical take-off and landing. The removal of Turkey from the aircraft's development project and the cancellation of the sale by the US Congress during the Trump presidency was a consequence of the crisis over the S400 air defense system, which drove a massive Russian wedge into NATO. Despite Turkey's desire to resolve this crisis and repair its relations with the US administration, this dramatic snafu cannot be solved without severe strategic harm to NATO or through massive indemnification by the US administration in return for disabling the system. The meaning of the second course of action will be an entry into conflict with Russia,

⁸ Omri Eilat and Ayal Hayut-Mann, "The Turkish Maritime Doctrine - The 'Blue Homeland' (Mavi Vatan)," in Shaul Chorev and Ehud Gonen (eds.), *Maritime Strategic Evaluation for Israel 2020/21* (Haifa: Haifa Research Center for Maritime Policy & Strategy, University of Haifa, 2021), pp. 187–195.

⁹ Günter Seufert, "Erdogan the Builder in Northern Cyprus," *Stiftung Wissenschaft und Politik Comments*, 47.

which might be detrimental to the construction of the nuclear plant Turkey has set its sights on. The way Turkish diplomacy functions in this area is a complicating factor in itself. Erdogan's statements regarding the purchase of an additional S-400 battery as a warning to the American side are severely harmful to the renewed attempts at rapprochement between Turkey and the United States.¹⁰

Besides this, Turkey's independence in terms of aircraft has seen a dramatic development in recent years, with the Bayraktar TB2 UAV becoming operational, and the success of its sale to the Ukrainian and Polish armies has turned a corner in Turkey's strategic status. Turkey's alienation from the United States and Israel in the past decade has been accompanied by the development of a more independent aircraft industry, where the development of the Bayraktar is its most outstanding achievement. This development actually offers potential for reducing Turkish aggressiveness due to its growing self-assurance of its regional status. It goes hand-in-hand with the general shift toward moderation to the extent of assertiveness and retention of its long-term demands.¹¹

Turkey and Israel: From Crises to Opportunities

As part of Turkey's attempts to improve relations with the United States, it has been trying this past year to improve its relations with its leading allies in the region: Israel, the United Arab Emirates, Egypt, and Saudi Arabia. The Turkish-Israeli relations had begun deteriorating since Operation Cast Lead in late 2008, wherein response, Erdogan began publicly criticizing Israel. At a meeting of the World Economic Forum in Davos in the winter of 2009, Erdogan left the stage in anger when during a session that discussed the fighting in Gaza, the then-President Shimon Peres defended Israel's position. The flotilla which set off from Turkey in May 2010 toward the Gaza Strip and the incident onboard the Mavi Marmara in the summer of 2010 brought relations between the two countries to an all-time low, which downgraded diplomatic ties to their lowest level. Despite an attempt to resume the relations in 2016, assisted by President Barak Obama through a series of measures which included the restoration of ambassadors, the ethical differences between the countries trumped their shared interests with the advent of the Marches of Return in the Gaza Strip in summer 2018, which received Turkish backing, and which touched off violent confrontations along the border fence. Turkey began openly supporting Hamas and directly confronted

¹⁰ Henri Barkey, "Resolving the S-400 Crisis Could Revive the Turkish-American Alliance," *The National Interest*, May 25, 2021.

¹¹ Burak Bekdil, "The Rise and Rise of Turkish Drone Technology," *BESA Center Perspectives Paper*, No. 1,992, April 11, 2021.

Israel on matters unrelated to the Palestinians. In a memorable incident in November 2019, Turkish Navy ships expelled the Israeli research vessel the *Bat Galim*, which belongs to the Israel Oceanographic and Limnological Research (IOLR) Institute, from the Cyprus Exclusive Economic Zone. This incident was yet another example of the deterioration of the relationship between Israel and Turkey, albeit the causes were a dispute between Turkey, Greece, and Cyprus over control of the offshore gas deposits in the Mediterranean.¹²

In spite of all these, the countries' economic interests remained out of sight. Despite the diplomatic rift, trade between the countries kept on growing and crossed the \$6 billion per year mark. Of course, the potential for trade growth was much larger, and Israeli exports to Turkey are highly undiversified (based primarily on oil products from the Israel Oil Refineries).¹³ Besides the tensions, there was the question of gas exports from the Leviathan Deposit and the plans for a gas pipeline that was supposed to transport gas from this deposit to Cyprus, Greece, Bulgaria, and Italy. Furthermore, the Israeli decision-makers are continuing with the plan to export gas to Europe, ignoring the fact that the profound maritime dispute between Turkey and its neighbors, Greece and Cyprus, will preclude the passage of the pipeline, which is already very expensive and complicated, via the planned route. Even if the Israeli, Greek, and Cypriot positions are legally iron-clad in accordance with the Convention on the Law of the Sea, the multinational energy companies are not going to take the risk that their huge investments will be destroyed due to a maritime dispute which has already produced Turkish-Israeli and Turkish-Greek conflicts in international waters.¹⁴

Although Turkey is experiencing difficulties nailing down a consistent foreign policy, it does not restrain itself from making aggressive statements and moves against its neighbors. It is a key country for the establishment of effective regional cooperation, not only because of its strength but also due to the many points at which its interests dovetail with Israel's interests. The gas discoveries in the eastern Mediterranean and the Black Sea, the increased need to safeguard environmental security, and Iran's footprint in Syria and Lebanon serve as leverage for expanding the collaboration.

¹² Gallia Lindenstrauss and Remi Daniel, "The Ships that Scuttled Turkey-Israel Relations: A Decade since the Flotilla Incident", *INSS Insight* no. 1323, INSS (May 25, 2020), 1

¹³ "Turkey's Exports to Israel," in *Trading Economics*; "Israel's Exports to Turkey," in *Trading Economics*.

¹⁴ "Report: Turkish Navy Intervenes in EastMed Pipeline Survey," in *The Maritime Executive*, September 29, 2021; "Turkish ships said to force Israeli research vessel out of Cypriot waters," in *The Times of Israel*, December 14, 2019.

Such a move can take place in two ways: using the convergence of the economic and geopolitical interests to bypass the existing problems, assuming that these remain unresolvable for the time being; or using the convergence of interests to settle the deep-seated problems in such a way that will facilitate the creation of a long-term, sustainable partnership.

The issues of energy and the Economic Waters figure high on the Turkish agenda. The economic crisis Turkey is currently enduring in an age of vulnerable global trade makes the issue of long-term stabilization of prices and supply chains ever-more critical for it. Turkey's demands to substantially extend its Exclusive Economic Zone and the desire for more energy independence are not dependent on Erdogan's desires. They enjoy wall-to-wall support among the Turkish public. Moreover, the gas discoveries in the Black Sea basin and the desire to reach extraction agreements with energy companies Chevron and Exxon-Mobil brings Turkey even closer to Israel following Chevron's acquisition of Noble Energy's holdings in the Leviathan and Tamar fields. If in the past the tensions between Israel and Turkey due to the Israel-Palestinian relations overshadowed the maritime tensions, the needs and opportunities in the maritime-energy fields are now the root cause of Turkey's overtures toward Israel despite the situation between Israel and the Palestinians.¹⁵

The Turkish overtures toward Israel are a signal that they are serious, and they merit attention on the Israeli side. Of course, the Turks must realize that it will not be possible to bypass Israeli Prime Minister Naftali Bennett's office, and no Israeli official should create the impression that this is possible. Moreover, Israel has got to make it clear that any progress made in the relations with Turkey cannot come at the expense of its ties with Greece, Egypt, and the United Arab Emirates. Israel made a mistake in the 1960s when it adopted an excessively pro-Turkish position. David Ben Gurion's efforts to forge the "Periphery Alliance" (with Turkey, Iran, and Ethiopia) were manifested in unequivocal public support for the Turkish side to the extent that it motivated several countries to support Turkey's interests in Cyprus' affairs. These efforts led to several years of good, albeit hesitant relations on the Turkish side until the Six-Day War and to a long-standing rift with Greece and Cyprus, which lingered until the Oslo accords. Therefore, for Israel, it is advisable to support a political settlement (and not in accordance with the rules of the Convention on the Law of the Sea), concerning Turkey's dispute with Greece over the delineation of the Exclusive Economic Zone between them. However, we must not be tempted by Turkish initiatives directed at Israel to agree between them in this area at the expense

¹⁵ Murat Temizer, "East Med energy could be key to improving Turkey-Israel relations," in *Anadolu Agency*, July 13, 2021.

of Greek Cyprus, without a comprehensive settlement of the island's partitioning, a settlement which for the time being is not in the offing.

Turkey's cooperation with Israel can be built around the activities of the energy companies in the region. The distinct Turkish interest in enlarging the local energy market presents an opportunity for improving relations. One possible solution might be the liquefaction of the gas and exporting it. The cost of liquefaction is indeed very high but it will bypass the question of maritime boundaries. Besides that, the need on the part of the European and Turkish markets to diversify their energy sources due to Russia's aggressive actions might incentivize future support for various solutions which will enable exports of gas from the Israeli, Lebanese and Cypriot deposits to Europe. Another important channel for advancing the relations can be around the development by Chevron of the new gas deposits in the Black Sea. This way, Chevron would benefit by increasing its activities in the region. This way, the US administration could advance an effective economic partnership, which will increase stability in the region such that it would demand less direct US involvement and would counterbalance the Chinese activity in the region without detrimental impacts on diplomatic and security assets. Due to these added values, the US administration might be attentive to the development efforts despite its intention to limit the development of fossil fuel deposits around the world.

Besides, the increase in maritime activity in the region creates significant shared interests between the relevant countries in the security and environmental areas. Against the backdrop of these interests, there is potential for broader collaboration, which requires stability and a lengthy maturation process in regional settlement of the maritime boundaries in the eastern Mediterranean basin. This is an extremely difficult process but the Israeli decision-makers need to realize that despite the strategic alliance with Greece and the deep understanding with Egypt, Israel will not be able to export gas to Europe without close coordination with Turkey, which forms one of the important energy corridors to Europe. Ironically, Israel and Turkey, two countries that have not signed up to the Convention on the Law of the Sea and which are known for their preference of agreed political solutions rather than involvement of international factors, could be the ones to advance it. Turkey is on the path toward renewed warming of ties with Egypt, Saudi Arabia, and the UAE in what seems to be a possible beginning of stabilization in the region. Moreover, the entrenchment of Iran on the Mediterranean shores as part of Lebanon's implosion is a wake-up call to all countries in the region, and first and foremost to Israel, and this is supposed to motivate them to cooperate.

With all of these opportunities and challenges, Israel needs to internalize the change that has occurred in its strategic position in the Middle East following the change of administrations in the United States. The commonality between Israel and Turkey is that they both were given the green light to pursue a regional policy free of outside pressures with the blessing of President Trump. Nowadays, Turkey will no longer be able to conduct itself in the Mediterranean the way it had in the two final years of the Trump presidency, and Israel will not be able to rebuild its political-strategic relations with the Democratic administration in the United States without any movement on the Palestinian issue. This reality ought to increase the cooperation between the two countries. They both have much to gain from this.

Changes and Transformations in the Red Sea Basin – and the Implications for Israel

Moshe Terdiman

Introduction

2021 has been a year of changes and transformations in the Red Sea Basin due to several developments which took place almost simultaneously. In November 2020, the Horn of Africa instantaneously transformed from an area which had enjoyed two and a half years of peace, prosperity and development into a region rife with conflicts following the outbreak of the civil war in Ethiopia, the border war between Sudan and Ethiopia and the rising tensions in the region between Egypt, Sudan and Ethiopia following the completion of the second filling of the Renaissance Dam in July 2021. In parallel, in early January 2021, a trans-Gulf reconciliation agreement was signed between Qatar and Saudi Arabia, the United Arab Emirates, Bahrain and Egypt, which brought to an end the disconnect and power struggles between these countries, which had been ongoing for three and a half years.

At the same time, 2021 has also seen the growing importance of the Red Sea to Israel. The Red Sea has become part of the arena in which Israel and Iran are playing out their conflict – an arena spanning the entire Middle East and beyond. As a result, and due to the civil war in Yemen, the threats to Israeli shipping have only intensified. The blocking of the Suez Canal in March 2021 was another incident that highlighted the fact that the threats to shipping in the Red Sea are not limited to the military-security aspect, but to economic aspects as well. Iran's activities in the Horn of Africa against its rivals has also raised the risk bar to Israel in the region.

These and other developments that have taken place in the region, which I will mention later on, and the radical reshuffling of the situation in the region impact Israel as well and the way it should adjust to the rapidly-changing conditions. In this article, I will review the developments and changes that have taken place this past year in the Red Sea basin and their implications for Israel.

Threats to Shipping in the Red Sea

2021 was characterized by a relative relaxation of threats to the freedom of navigation in the Red Sea. Although the civil war in Yemen continues to threaten the

freedom of navigation in the Red Sea and the western Indian Ocean¹ and in this past year the Houthis even attacked strategic targets in Saudi Arabia from the sea, such as the Port of Jeddah and the Port of Yanbu, the levels of threat to the freedom of navigation in the Red Sea and Gulf of Aden on the part of Somali pirates has been reduced significantly. Therefore, as of September 1, the world's leading shipping organizations – BIMCO, ICS, INTERCARGO, INTERTANKO and OCIMF – agreed to scale down the boundaries of the region designated as being at an increased risk by the Somali pirates in the Indian Ocean – to the southern and eastern portions of the Yemeni and Somalian territorial waters and economic waters.

Another threat to international shipping in general and Israeli shipping in particular has arisen from the covert war between Israel and Iran, which has been playing out in the past two years in the maritime arena and which has made headlines only after the attack on the Iranian spy ship *Saviz* in the Red Sea opposite the Eritrean coast on April 6, 2021. In this battle, Israel attacked commercial ships, which were transporting Iranian oil and weapons to Lebanon and Syria, in the Red Sea and Eastern Mediterranean using naval mines and torpedo missiles. Israel however avoided sinking the vessels. This was done in an effort to thwart Iran's attempts to circumvent the American sanctions on its oil industry and to foil the transfer of armaments from Iran to Hezbollah. In response, and also as revenge for the killing of the commander of the Quds Force, Qasem Soleimani, and the head of the Iranian nuclear program Mohsen Fakhrazade, the Iranians attacked several Israeli-owned commercial vessels, including vessels which are not Israeli-owned but which are carrying cargoes intended for Israel, in the Red Sea, the western Indian Ocean and the Persian Gulf. Thus, for example, the Iranians attacked the Israeli-owned ship *Helios Ray* in the Gulf of Oman on February 25, the container ship *Lori*, which is owned by Israeli businessman Udi Angel also in the Gulf of Oman on March 25, and the Israeli-owned *Hyperion* near the Emirate of al Fujairah on April 13. These attacks were carried out mainly through the use of naval mines and torpedo missiles. However, on July 30th this battle escalated when the Iranians attacked the Israeli-owned *Mercer Street* near Oman using UAVs, which hit the ship and for the first time, cost lives – of two crew members – one British and one Romanian.

¹ For more information on the threat posed by the Houthis to the freedom of navigation in the Red Sea, see Benni Ben Ari and Moshe Terdiman, "Geography and Strategy in the Red Sea – The Current Situation", in Shaul Chorev and Ehud Gonen (eds.), *Maritime Strategic Assessment for Israel 2020/21* (Haifa: Maritime Policy and Strategy Research Center, University of Haifa, 2021) pp. 99–124.

In this context, one should note that there is also a potential future strategic threat, which was expressed in the blocking of the Suez Canal to shipping for six days by the *Ever Given*, which is one of the world's largest container ships at 400 meters in length and carrying some 18,300 containers. It got wedged diagonally across the Suez Canal on March 23 and blocked the waterway completely. This blockage emphasized the vital role the Red Sea plays as a main shipping lane through which approximately 12% of all global trade passes on a daily basis. This also emphasized the severe economic harm this causes. Therefore, already during the incident itself and for fear that it would be days or weeks until the container ship would be freed, container ships and oil and natural gas tankers abruptly decided to change course and sail around the African continent via the Cape of Good Hope, as they had done before the Suez Canal was opened. Data from the Lloyds Insurance Company showed that the stricken ship delayed approximately 9.6 billion dollars of trade each and every day, which is equivalent to 3.3 million tons of cargo per hour or 6.7 million dollars per minute. This only emphasized the severe economic harm caused by the canal blockage.² The canal blockage also disrupted the supply chains, which lasted for several months and brought down oil prices.

The canal blocking and the heavy economic damage wrought as a result exposed the various alternatives to the Suez Canal and the Red Sea. Iran is advancing an overland transport corridor from the Pakistani ports or directly from China via Syria or Turkey, which will pass through its territory. Russia is advancing the northeastern route from China to Europe via the Arctic Ocean. China is advancing an overland and overseas silk road from its territory to Europe. Israel, too, is advancing a plan to connect the Persian Gulf countries to the Mediterranean via a network of railways which will fan out from Haifa to the Gulf States and pass via Jordan, and the train line between Ashdod and the Port of Eilat. Both these projects require tremendous investments and have not yet been carried out. The fear of a future recurrence of such an incident in the Suez Canal might lead to investments in implementation of alternative plans to the Suez Canal.

Regional conflicts in the Horn of Africa

At the same time, the past year also saw a destabilization of the Horn of Africa, which virtually overnight was transformed from a peaceful, developing, prosperous region into a land rife with conflict, particularly as a result of the civil war in Ethiopia and its regional consequences. The Ethiopian civil war broke out on November 4, 2020

² Mary-Ann Russon, *The Cost of the Suez Canal Blockage*, *BBC*, March 29, 2021.

following a rise in tensions between Abiy Ahmed, the Ethiopian Prime Minister, and the Tigray People's Liberation Front, which had ruled Ethiopia between 1991 and 2018, his non-recognition of the regional elections which were held in the Tigray National Regional State in September 2020 and his intention to enforce the Ethiopian government's centralized rule on Tigray as well. Initially, this war was limited to the Tigray region alone, but beginning in July 2021, it morphed into a total civil war involving all of the Ethiopian regions. This civil war is also a regional conflict in which the Ethiopian government is supported by its neighbors, Eritrea, Somalia and Djibouti. Sudan, on the other hand, took advantage of the civil war to take over the region of Fashaga in November 2020, control over which has been in dispute between it and Ethiopia. As a result, sporadic border skirmishes have been ongoing in 2021 between the Sudanese army and militias from Amhara State in Ethiopia, which claims sovereignty over this region.

The civil war in Ethiopia highlighted the extent to which Ethiopia is dependent on Djibouti and how desperately Ethiopia needs alternatives to the Port in Djibouti. Following the fighting which broke out between the Somalis and the Afars in the east of the country and following the protests against the inaction on the part of the Ethiopian government and the government of the Somali province, the Somalis blocked the railway line and main road linking Djibouti and Addis Ababa, a vital link through which some 80% of all Ethiopian exports and imports pass.

Besides these conflicts, the negotiations between Egypt, Sudan and Ethiopia regarding the Renaissance Dam is still in a stalemate and 2021 even saw a sharp rise in the tensions between the countries following the declaration of the Ethiopian Minister of Water, Irrigation and Energy, Seleshi Bekele, on July 19, that the second filling of the Renaissance Dam had been completed and following his announcement on September 10 that electricity generation from the dam would begin one month later. While calling on Ethiopia to return to the negotiating table and settle the dispute over the dam through diplomatic means, Egypt created a network of alliances with Nile Basin, Horn of Africa and East African states, in an effort to consolidate its influence in these regions and to exert diplomatic pressure on Ethiopia to come back to the negotiating table. As part of this effort, Egypt's President held a first official visit since 1977 to Djibouti on May 27, where he met his counterpart, Omar Gouelleh, and during which the two Presidents agreed to set up an Egyptian logistic zone in Djibouti and to increase Egyptian investments in the country. In addition, Egypt attempted to enlist mutual allies of its own and of Ethiopia to mediate on the Renaissance Dam and to apply pressure on the Ethiopian government to sign an agreement. As part of these efforts, Egypt tried to draw Israel into the fray despite its refusal to mediate between Ethiopia and Egypt on this matter. In the first public

visit of an Israeli Prime Minister in Egypt in 11 years, a-Sisi and Israeli Prime Minister Naftali Bennett met in Sharm el Sheikh on September 13 and a-Sisi said that “there is a common understanding between ourselves and Israel regarding the Renaissance Dam. We agreed that this issue should be resolved as part of a lively negotiation and dialog. This is an issue we consider to be a matter of life and death”.³

Moreover, tensions between Somalia and Kenya have also escalated to a boiling point in 2021 due to a claim Somalia lodged in 2014 with the International Tribunal in The Hague regarding an area of 30,000 square nautical miles in the Indian Ocean where there is potential for large oil and gas deposits, and which is a source of livelihood for the Kenyan fishermen. This is due to the issuing of a ruling at the International Court on October 12, which redrew the maritime border between the two countries assigning most of the territory Kenya claimed as its own to Somalia. Kenya rejected this ruling even before it was issued as well as afterwards.

The Gulf Reconciliation Agreement

In contrast, a reverse process unfolded in the Arabian Peninsula and northern Red Sea in 2021 – a process of reconciliation and forging of cooperation. The process began on January 5 when the leaders of the Gulf States met for a summit in Al-Ula in Saudi Arabia and signed a reconciliation agreement to end the crisis and disconnection between Qatar and Saudi Arabia, the United Arab Emirates, Bahrain and Egypt, which had lasted three and a half years from June 5, 2017. Turkey, Qatar's ally, also maintained contacts with Egypt, the United Arab Emirates and Saudi Arabia.

At the same time, during the past year there has been rapid progress in the political, security and economic relations between Greece and Cyprus and the United Arab Emirates, Saudi Arabia, Israel, Egypt, France, and India following the discovery of the natural gas deposits in the eastern Mediterranean and their desire to check Turkey's assertive policies in the Mediterranean Sea and the Red Sea. It is possible that this progress is a harbinger of the creation of a new space ranging from India through the Persian Gulf and the northern Red Sea to the Eastern Mediterranean and France.

Behavior patterns of the regional powers in the Red Sea Basin

2021 also saw some substantial changes in the way the regional powers operated in the Horn of Africa. First, following the Gulf reconciliation agreement and the

³ Asaf Gabor, A-Sisi Met with Bennett to Enlist Israel in the Water War, *Makor Rishon*, 14 September 2021 [Hebrew]; Jacky Hugi, Consoling itself from afar with the troubles of others? The reason why Israel does not intervene in regional disputes, *Maariv*, 16 July, 2021 [Hebrew].

warming of relations between Qatar and Turkey on the one hand, and Saudi Arabia, the United Arab Emirates and Egypt on the other, the regional powers are once again working in concert in the Horn of Africa countries, the way it was pre-Gulf crisis, during which each country was operating to advance its own interests. For example, Turkey and Qatar have resumed working in Sudan alongside Saudi Arabia, the United Arab Emirates and Egypt. Qatar began operating in Somaliland alongside the United Arab Emirates and Saudi Arabia renewed its relations with Somalia, a Qatari and Turkish stronghold.

Second, the regional powers have toned down their involvement in regional conflicts. One reason for this was their attempt to avoid criticism and punitive measures from the Biden administration, to improve their image in his eyes and to show him that they are also capable of playing a constructive role in advancing the American interests in the region. Thus, for example, Saudi Arabia suggested a new peace plan in March 2021 to end the war in Yemen, which has yet to come to pass and the United Arab Emirates withdrew its forces from the Assab Base in Eritrea, after the Biden administration in January suspended a weapons deal that had been signed between the UAE and the Trump administration due to its involvement in the war in Yemen. The second reason was their unwillingness to harm their bilateral relationship with Egypt, Sudan and Ethiopia. As a result, Saudi Arabia and the United Arab Emirates did not mediate in the Renaissance Dam dispute and they are avoiding any involvement in the civil war in Ethiopia. Turkey, too, is avoiding getting involved in the Ethiopian civil war since it is concerned that this might be perceived as support for the Ethiopian government regarding the Renaissance Dam, and might therefore put an end to contacts underway between Turkey and Egypt.

Third, even though the two security-economic frameworks that were set up in the Red Sea basin in 2020 continued to exist this past year as well, they have remained inactive. These are: the Council of Arab and African Countries Bordering the Red Sea and Gulf of Aden, headed by Saudi Arabia, and the Intergovernmental Development Authority, which includes eight countries from east Africa and the Horn of Africa.

The Saudi Arabian behavior pattern in the region has also changed in 2021. Saudi Arabia has done everything possible to retain its leading position among the Gulf states in the context of the Red Sea security, particularly due to the fact that it had played a minimal role in preventing the struggle over the dam, which might destabilize the entire region. Therefore, on July 6 it announced its support for Egypt's and Sudan's water rights and for a solution to the Renaissance Dam issue which would involve the Arab League and the African Union. This announcement, along with the repatriation of 40,000 Ethiopian foreign workers a month earlier exacerbated

tensions between Saudi Arabia and Ethiopia. Saudi Arabia also consolidated its presence and influence in Sudan through investments in the country in various sectors which, according to the Chairman of the Saudi-Sudanese Business Council Hussein Saeed Bahri, totaled \$4 billion,⁴ and through development of the Sudanese Red Sea Province, which is located along the Red Sea shores, including construction of a new port or development of the existing port at Port Sudan. Interestingly, the United Arab Emirates also expressed interest in investing in the development of Port Sudan, however, the Sudanese government rejected this suggestion.

The United Arab Emirates, in contrast to Saudi Arabia, followed a strategy of enlarging its military bases in southern Yemen and strengthening its ties with Somaliland. In May 2021 it completed the construction of a new air force base on the island of Mayyun in the Straits of Bab el-Mandeb, an island belonging to the Yemeni government with a 1.85 km long airstrip suited for attack, spy and carrier aircraft, and transferred weapons, equipment and soldiers to the base. This base allows the United Arab Emirates to monitor all of the shipping passing through the Straits of Bab el-Mandeb and consolidate its sphere of influence around the Straits of Bab el-Mandeb through its presence in Socotra, Aden and Mayyun Island. At the same time, it has consolidated its presence in Somaliland. On March 17, Abdullah Muhammad Al Naqbi presented his credentials as Director of the UAE Trade office in Somaliland and he vowed to strengthen the ties between the two countries. The Emirati company DP World invested \$442 million in enlarging the Port of Berbera in order to transform it into a first-class world port and center. As part of that, in June, it inaugurated the tanker terminal in the Port of Berbera and the new Berbera economic zone. In May, the company signed an MOU with the Ethiopian Ministry of Transport according to which it will invest \$1 billion over ten years to build a logistic and commercial corridor connecting the Port of Berbera with Ethiopia.

Turkey, for its part, has continued to cement its naval presence and commercial ties with the countries in the region. It has extended the Turkish Navy's mission to the Gulf of Aden, to the Arabian Sea and to Somalia's territorial waters by an extra year beginning in February 10, 2021. At the same time, in order to tighten and increase its maritime trading ties and volume with the Horn of Africa countries, the Djibouti shipping company opened a new trading route in October 2020, operating exclusively between Turkey and Djibouti and Somalia, shortening the sailing time from the former 35 to 50 days down to only nine or ten days. Container ships will be operating along this route with a capacity of 11,000 and 20,000 tons.

⁴ Saudi Arabia talking to Khartoum about boosting infrastructure and more, *Global Times*, September 13, 2021.

The superpower rivalry over consolidating influence and presence in the Red Sea

2021 saw the shift of the balance of power throughout the Red Sea basin to local leaders who have played an important role in the power struggles between the superpowers, maneuvering them in order to achieve their aims. Therefore, countries on both sides of the Red Sea have strengthened their ties with Russia in order to apply pressure on the Biden administration to change its policy toward them or in order to counterbalance him. On the other hand, Russia has taken advantage of the situation in order to cement its status and influence in the Red Sea basin. For example, Abiy Ahmed strengthened his ties with Russia due to the European Union and United States applying pressure on his government and that of Eritrea to put an end to the fighting, to negotiate an end to the conflict and to enable the passage of humanitarian aid to the province of Tigray. In order to do so, they suspended aid budgets, suspended the military cooperation between France and Ethiopia, which should have established an Ethiopian navy, and imposed sanctions. In June, the Russian Foreign Minister Sergey Lavrov, met with his Ethiopian counterpart Demeka Mekonnen, who announced Ethiopia's readiness to host the Africa-Russia forum in Addis Ababa in 2022. In July, Ethiopia and Russia signed a military cooperation agreement focusing on the transfer of knowledge and technology. Russia even deployed observers for the Ethiopian general elections, while the European Union withdrew its observers. Russia provided strategic weapons to protect the Renaissance Dam and to help the Ethiopian army in its war in Tigray. Saudi Arabia, which normally relies on the West for military support, and Egypt, also signed bilateral military cooperation agreements with Russia in August 2021.

However, Russia's buildup of its presence in Sudan has been halted for the time being. In November 2020 Russia announced it had reached a 25-year agreement with Sudan to lease land for the construction of a logistics facility in Port Sudan to host up to four Russian Navy ships and 300 soldiers in exchange for weapons and military equipment it would have been sending to Sudan. Yet, Sudan asked to renegotiate the agreement before its ratification in parliament. According to the terms of the new agreement, it would enable Russia to build a naval base which will function only for five years with an extension option on the lease for a period of up to 25 years only on condition that Russia would provide it with economic assistance. Russia has not yet responded to this officially. There are reports that the United States was involved in this through offering Sudan an aid package worth millions of dollars in exchange for cancelling the agreement it had signed with Russia.⁵

⁵ Nikola Mikovoc, [Sudan Tries to Strongarm Russia. It May Backfire](#), *The Arab Weekly*, September 16, 2021.

In addition to these events, Pakistan and India penetrated the Red Sea Basin in 2021. In February, a Pakistani Navy boat visited Djibouti and Sudan as part of a deployment in Africa. Another Pakistani Navy boat visited Djibouti in June. Additionally, representatives from the land, sea and air forces of Pakistan participated for the first time since 2009 in the multinational exercise codenamed Shining Star, which took place in the Mohamed Najib Army Base in Egypt. India too has recently begun penetrating the Red Sea Basin. In April 2021, India and Eritrea agreed to increase the cooperation between them in civilian areas. On September 10, a frigate from the Indian Navy took part in a joint training exercise together with two Sudanese warships near Port Sudan. In September, Indian and Egyptian Navy forces held joint maneuvers in the Mediterranean.

Renewed Iranian activity in the Horn of Africa

And finally, it appears that Iran, too, has returned to the Horn of Africa and has opened there a new front in its battle against its adversaries. In February, the Ethiopian Intelligence Agency uncovered an active terrorist cell consisting of 15 personnel along with a large cache of explosives, and claimed that it had foiled a potentially large-scale terrorist attack in Addis Ababa against the United Arab Emirates embassy. The Ethiopian National Security and Intelligence Service claimed that another group of terrorists had planned to attack the United Arab Emirates embassy in Sudan. American and Israeli sources claimed that this operation had been orchestrated by Iran, whose intelligence services had in the autumn of 2020 activated a sleeper cell in Addis Ababa in order to collect intelligence about the embassies of the United States, Israel and the United Arab Emirates in the city, as part of an effort to locate targets for attacks in African countries, through which Iran would be able to avenge the deaths of Mohsen Fakhrizade, the Iranian nuclear scientist, and of Qasem Soleimani, commander of the Quds Force. A spokeswoman of the Iranian Embassy in Addis Ababa denied the allegations.⁶ Apparently, Iran had also been involved in the civil war in Ethiopia. According to unsubstantiated reports from August, Iran had signed an agreement to send several UAVs model Mohajer 6, which had been observed in the Samara Airport in Afar Province.⁷

Conclusion – Implications for Israel

Israel's strategic goals in the Red Sea are directly and closely related to economic and security goals, primarily preventing the blocking of the Straits of Bab el-Mandeb,

⁶ Ethiopia Foils Iranian Plot to Target UAE Embassy in Addis Ababa – Report, *The Times of Israel*, February 15, 2021.

⁷ Wim Zwijnenburg, *Is Ethiopia Flying Iranian-Made Armed Drones?*, *Bellingcat*, August 17, 2021.

preventing the transfer of Iranian oil and weapons to the Houthis in Yemen, to Hezbollah and to Syria. The maritime fight against Iran in the Red Sea, in the western Indian Ocean, in the Persian Gulf and in the Mediterranean presents a threat to these Israeli interests.

The changes and transformations in the Red Sea in the past year show just how dynamic and highly explosive this region is, on the one hand, and how much the area is in the midst of a period of uncertainty, on the other hand. As a consequence, most of the regional powers are reassessing their activities in the Red Sea basin. Israel, too, needs to recognize the increasing importance of the Red Sea basin for its interests, due to the increase in the volume of Israeli shipping passing through this maritime lane and due to its being re-cast into the regional battlefield between itself and Iran. Based on this realization, Israel needs to shape its policy toward this region through paying close attention to all of the changes taking place within it and by monitoring the web of interests of the superpowers, the regional powers and the region's countries, while taking extra care to avoid being embroiled in regional conflicts or in the interests of the various players in the region.

As part of its policy making, Israel needs to realize that it cannot find its place within the Red Sea Basin via the existing frameworks of the two regional alliances, and that its status in the Horn of Africa is declining. This is evidenced in Eritrea's objection to Israel's joining the African Union as an observer, and the lack of progress in the normalization process with Sudan. Therefore, as the rest of the regional powers have been doing at this point in time, so should Israel reevaluate its policy and for the time being it should focus its efforts on strengthening its bilateral relations with the countries in the Horn of Africa while making a special effort in the coastal countries, Sudan and Eritrea. The admittance of Israel to the African Union as an observer could be very helpful in achieving this goal. Besides that, Israel can also make use of the Emirati military deployment in the southern Red Sea and in the Gulf of Aden in order to monitor the maritime traffic in the region. In this context, it should be noted that the Houthis have claimed that Israel has a presence in the Hanish Islands in the southern Red Sea, on Mayyun Island in the Straits of Bab el-Mandeb and on the Island of Socotra.

Maritime Security in the Gulf of Aden and Red Sea: The Role of the Gulf Cooperation Council (GCC)

Stephen Blackwell

Piracy and other interdictions of shipping remain a serious concern in the strategically vital shipping lanes in the Gulf of Aden and the Red Sea. In response to this threat, members of the Gulf Cooperation Council (GCC) have expanded and deepened their cooperation with regional littoral states in recent years. In the Horn of Africa, these countries include Djibouti, Eritrea, Ethiopia, Somalia, and the self-declared but internationally unrecognized state of Somaliland. Although pirate activity originating in Somali territory has abated in recent years, the danger to regional maritime security from the ongoing conflict in Yemen must also be considered.

This article first outlines the nature of the threats to maritime activity in the Gulf of Aden and the Red Sea from littoral states. It then examines the policies pursued by Saudi Arabia and the United Arab Emirates (UAE) as the two most active Arabian Gulf states in the area. The article will conclude with a discussion of how interregional cooperation between key GCC nations and regional states might help to stabilize the Arabian Peninsula's and the Horn of Africa's adjacent seas in the future.

Local Maritime Security Priorities

Protecting maritime traffic in the Gulf of Aden and the Red Sea is an issue of growing importance, given that shipping routed from the south to the Suez Canal must transit the Gulf of Aden and the critical chokepoint of the Bab el-Mandab Strait. The strait consists of a waterway that is only eighteen miles wide at its narrowest point between Yemen and Djibouti, with the route being further narrowed into two navigable channels separated by Perim Island. In 2018, a total of 6.2 million b/d of crude oil shipments passed through the strait according to the US Energy Administration.¹

The security of the waters in this region is tied to the broader global and strategic importance of the Indian Ocean and east-west and north-south trading links. Within this broader regional context, the political and economic instability that has affected the states on both sides of the Gulf of Aden and the Red Sea presents an ongoing threat that requires concerted international and regional countermeasures.

¹ "The Bab el-Mandeb Strait Is a Strategic Route for Oil and Natural Gas Shipments", *US EIA*, August 27, 2019.

This is particularly the case with Somalia, which has lacked an effective central government since 1991. The fragmentation of local authority, absence of security governance, and persistent economic deprivation have created the circumstances whereby piracy has increasingly threatened shipping. The onset of an insurgency against the Transitional Federal Government (TFG) and subsequently the Federal Government of Somalia since 2006 led to increased attacks on shipping, which in turn provoked the creation of the Combined Task Force 150 anti-piracy coalition tasked with the mission to protect commercial shipping in the Gulf of Aden.²

There remains concern that international shipping in the Gulf of Aden is at risk of terrorist attacks stemming from the ongoing conflicts and instability in Yemen. On 3 March 2020, it was reported that three skiffs, one of which might have been an unmanned water-borne improvised explosive device (WBIED), attempted to attack a Saudi-flagged vessel sailing ninety nautical miles off the Yemeni port of Nishtun. On May 17, in a similar incident, two skiffs fired on a British-flagged chemical tanker en route from Al Jubail to the Red Sea. Security forces on the tanker responded by destroying one of the skiffs, which was suspected to be carrying explosive substances.³

The location of the attack ruled out activity by Houthi rebels, though the Houthis have also previously used WBIEDs in the Bab-El-Mandeb strait to specifically target Saudi vessels. Nevertheless, there are doubts over the presence of local terrorists with the capabilities to launch attacks such as those allegedly recorded in March and May 2020. Al Qaeda in the Arab Peninsula (AQAP) is notorious for its attack on the USS Cole in 2000 and two attacks near the port of Mukalah on the Southern Yemen coast in 2016. However, AQAP was effectively neutralized and broken up by UAE- and US-led counterterrorism operations when the port of Mukalah was pacified in 2016. Whether the Gulf of Aden skiff attacks were launched by residual terrorist cells or organized by an external power remains a matter of speculation at present.

Although instances of piracy have declined markedly in recent years, potential threats remain from both opportunistic raiders and terrorist and insurgent groups. Piracy has been largely suppressed by international initiatives such as the US-led Combined Task Forces and the EU's Operation Atalanta. Nevertheless, the United

² Robert M. Shelala II, "Maritime Security in the Middle East and North Africa: A Strategic Assessment", *Burke Chair in Strategy, Center for Strategic and International Studies (CSIS)*, February 6, 2014.

³ "A Gulf Between Narratives: Maritime Security in the Gulf of Aden in 2020", *Hellenic Shipping News*, June 26, 2020.

States Maritime Administration (MARAD) has continued to warn of the risk of pirate activity in the Red Sea and the Gulf of Aden. In the first eight months of 2021, seven instances of attempted or suspected piracy against shipping were recorded in the international recommended transit corridor (IRTC) in the region. MARAD also warned that merchant shipping remained vulnerable to unmanned aerial vehicle (UAV), limpet mine, and small boat attacks as well as military activity that might spill over from the ongoing civil conflict in Yemen.⁴

GCC Intervention

As well as protecting vital interests, increased involvement of Saudi Arabia and the UAE in the region adjacent to the Gulf of Aden and the Red Sea indicates a new assertiveness spurred by intensified geopolitical rivalries in the wider Middle East and North Africa (MENA) region. In addition, the growing involvement of both countries in the region is a reactive response to Iranian support for the Houthi rebels in Yemen.⁵ In this context, Riyadh and Abu Dhabi are seeking to balance their traditional security and military relationship with the United States with growing energy and commercial links with China. The UAE in particular is seeking to position its expanding global logistics and shipping industry as an important link within China's Belt and Road project and the increased trade volumes anticipated between East Asia, Europe, and Africa.

In recent years, the expanding influence of Saudi Arabia and the UAE in the Horn of Africa has been manifested through a range of political initiatives, diplomacy, aid, and investment. In its bilateral relations with regional governments, the UAE in particular has sought political and security partnerships to build on traditional commercial ties symbolized by the Dubai-based DP World's development of the Doraleh port in Djibouti after 2006. In addition, Emirati diplomats mediated in the 2018 agreement that ended a twenty-year conflict between Eritrea and Ethiopia. Saudi and UAE aid was offered as an inducement for both sides to reach an accord.

⁴ "MSCI Advisory 2021-009-Persian Gulf, Strait of Hormuz, Gulf of Oman, Arabian Sea, Gulf of Aden, Bab al Mandeb Strait, Red Sea, and Western Indian Ocean-Threats to Commercial Vessels", *US Department of Transportation, Marine Administration (MARAD)*, September 9, 2021.

⁵ Shady Ahmed Mansour and Yara Yehia Ahmed, "Saudi Arabia and UAE in the Horn of Africa: Containing Security Threats from Regional Rivals", *Contemporary Arab Affairs* 12, no. 3 (2019): 99–118.

Both Riyadh and Abu Dhabi have also intervened to ease tensions between Egypt and Ethiopia.⁶

However, relations between the Arabian Gulf states and the Somali government have been affected by rivalries between Saudi Arabia and the UAE on the one hand and Qatar on the other. The Somali government led by acting president Mohamed Abdullahi Mohamed ("Farmaajo") has been seen as being too dependent on Qatari investment and influence, with the result that the Saudis and Emiratis have instead sought to build security and trading relations directly with local authorities in Somalia's federal states. Following a contested election in Somalia in December 2020, there is a risk that renewed tensions could lead to further fragmentation of the state.

Prospects for Increased Interstate Cooperation

Given ongoing concerns over piracy, terrorism, and maritime security, there have been a number of initiatives to address these interrelated issues through regional cooperation. In particular, there have been calls for regional mechanisms to take the lead in neutralizing the threats posed by sub-state groups in the Gulf of Aden and the Red Sea. The challenge now is for those states concerned to facilitate the security of their adjacent seas as a key requirement for their economic development.

One important development for regional security has been the recent move to create a "Red Sea Forum" that has the potential to mediate disputes and address ongoing and emerging threats. However, a key question is the extent to which external powers should be permitted to shape a regime at the expense of the interests of the littoral states of the Gulf of Aden and the Red Sea. While the EU and China have suggested their support for a forum, there is skepticism over the extent to which the United States might become involved, a significant factor that indicates Washington's waning interest in acting as a security guarantor in sub-regions such as the Horn.⁷

Such a multilateral framework could offer a means of managing a range of issues including security, conflict management, trade flows, and migration. It could also provide a mechanism to enable African states to engage with Arabian Gulf actors to their mutual advantage. However, the efforts made to date suggest there are

⁶ International Crisis Group, "The United Arab Emirates in the Horn of Africa", *Crisis Group Middle East Briefing*, No. 65, Abu Dhabi/Washington/Brussels, November 6, 2018.

⁷ Zach Vertin, "Toward a Red Sea Forum: The Gulf, the Horn of Africa, & Architecture for a New Regional Order", Brookings Doha Center Analysis Paper, No. 27, November 2019.

clear conflicts of interest between some of the potential main players in a projected regional forum. A joint Saudi Arabian-Egyptian initiative launched in 2017 led to a series of high-level meetings and ongoing engagement, though differences between the two governments also soon became apparent. By virtue of its geographic location, Egypt naturally sees itself as a pivotal regional actor through its links with both the Arab and African worlds and custodianship of the Suez Canal.

However, Egypt's move to create a regional forum reflects a defensive mindset in terms of safeguarding the country's position. Although the Sisi regime has cultivated a close relationship with and received significant funding from Saudi Arabia and the UAE, Egyptian policy suggests that Cairo is jealous about protecting its regional prerogatives from its Gulf allies. To this end, Egyptian diplomats have stressed that a Red Sea Forum's members should only include those states bordering the sea itself.⁸

In a fluid strategic context, multilateral security structures could secure shipping lanes from piracy and other threats. But it is arguable that the principle of "subsidiary" should be followed as much as possible in empowering local governments, institutions, and militaries to take responsibility for the region's security.⁹ Given these concerns, key GCC actors such as Saudi Arabia and the UAE must tread a fine line in terms of encouraging regional cooperation without taking an overtly interventionist approach that might negate the progress already made.

Conclusion

Given the ongoing instability and economic dislocation in the Gulf of Aden and the Red Sea, there is a growing imperative for improved multilateral governance mechanisms to manage the full spectrum of risks that persist in the region.

The Gulf states' engagement in the Horn of Africa and its adjacent seas therefore derives from evident security, political, and economic imperatives. While a supranational "regime" could emerge given initiatives such as the Saudi-Egyptian Red Sea Forum, the precise shape of security governance in the region is still in a state of flux. Through measures to build multilateral cooperation on local maritime issues, the Arabian Gulf states could play an enhanced role in underpinning the security of the maritime routes through these strategically vital waters. The mediation with

⁸ Gerald M. Feierstein, "The Impact of Middle East Regional Competition on Security and Stability in the Horn of Africa", Policy Paper, Middle East Institute, August 2020.

⁹ Demessie Fantaye, "Regional Approaches to Maritime Security in the Horn of Africa", *Friedrich-Ebert-Stiftung*, 2014.

Egypt, Ethiopia, and Eritrea has demonstrated the potential of Gulf involvement in this respect.

As a partial rapprochement between Saudi Arabia, the UAE, and Qatar is now in place, there is potential for the Gulf states to adopt a more coordinated approach to a range of regional security issues, including a resolution of the Yemen conflict, maintenance of the Ethiopia-Eritrea peace, and strengthening the authority of the Somali government as essential elements in securing the Gulf of Aden and the Red Sea.

Military Innovation on the Part of the Political Echelon – the Dolphin Submarines

Itsik Bilia

Introduction

Examination of the process which led to the delivery by Germany of the *Dolphin* submarines to Israel shows that Israeli politicians, and in particular prime ministers and ministers of defense, led to an innovative military concept of maintaining a set of submarines which would provide a continuous at sea deterrent. Those politicians realized that the need for submarines as a strategic system was vital for Israel, despite vociferous objections from the army chiefs, who preferred to invest resources elsewhere. This situation of disagreement between the political and military echelons, which led to military innovation is a familiar occurrence and the research literature has dealt with it. In this article, I shall present the theoretical model, alongside outstanding examples from world military history. Besides these, I shall analyze the Israeli case of the *Dolphin* submarines and the influence the political echelon had on their supply. Finally, I will briefly present another Israeli case, the Iron Dome project, which also demonstrates this kind of occurrence.¹

What is military innovation?

The research discipline called military innovation is relatively new. What is military innovation? Adam Grissom distinguishes three components of military innovation: first, military innovation alters the way military frameworks function in the field. In other words, the military innovation has to find its expression in practical military activity, not merely as a bureaucratic improvement that has no effect on the battlefield. Second, military innovation has to be significant in its scope and impact. Minor changes cannot be regarded as innovation. Third, military innovation will inevitably lead to greater military effectiveness, where this is measured in the results on the battlefield. In other words, effectiveness which is expressed in battlefield performance at the tactical and operative level in terms of objectives accomplished, action time, casualties incurred to the forces in operation and to the enemy forces, etc. At the strategic level, one has to add the ability to retain deterrence vis-à-vis the

¹ There are other examples of strategic projects in the State of Israel which were the subject of considerable objections from the senior military command but which, through intervention of the political echelon, were carried out eventually – for example, the development of military satellites.

enemy over time. Grissom also introduces the different schools of thought which have emerged in an attempt to explain military innovation. The first focuses on the relations between the political echelon and the military echelon; the second focuses on inter-organizational politics, the third on intra-organizational politics, and the fourth on the organizational culture.² In this article, I will focus on the first model of military innovation – relations between the political and military echelons.

School of Political-military echelon relations-based military innovation

The school of thought on military innovation which is based on the relations between the political echelon and the military echelon was developed by Barry Posen. This school of thought claims that the relations between the political echelon and the military echelon are the significant factor in the formation of an innovative military concept. Posen bases his theory on study cases from the period between the two world wars, which include the doctrinaire changes which the armies of Britain, France, and Germany underwent. The British leaders were fearful of the German Luftwaffe attacks and pressured the military echelon to be innovative. As a result, the Royal Air Command set up an integrated, interlinked network of radars, Command & Control centers, and fighter squadrons which proved themselves in their counteracting the German aerial attacks on the British isle. The French political leadership, on the other hand, had failed in its attempts to press the French military toward innovation, which led to disastrous results when the German army invaded France and the French military was left with no countermeasure. On the other side, the German leaders were interested in a strategy of rapid conquest and pressed their military accordingly. The result was the Blitzkrieg – the famous combat doctrine which proved itself in their subduing of large swathes of Europe. According to Posen, the key to military innovation is through intervention of the political echelon in forming the military doctrines. This is usually done with help from officers within the military. Only thus can the military organizations be prodded into action, since they tend normally toward fixation in their positions.³

Grissom assembles additional examples of this model from other researchers. Edmund Beard's research, which deals with the development of the intercontinental ballistic missile system in the US Air Force, supports this model. Beard describes how a political appointment within the Air Force Secretariat, along with pressure

² Adam Grissom (2006) The future of military innovation studies, *Journal of Strategic Studies*, 29:5, 905–934.

³ Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars* (Ithaca, NY: Cornell University Press, 1984).

from the Eisenhower administration to appoint certain officials, led to the historic shift in the US Air Force's concept and its preference of strategic bombers. Had it not been for the intervention of politicians, the US Air Force had planned to continue developing new generations of strategic bombers and would not have transitioned to develop strategic ballistic missiles. All this happened despite the doubts which arose as to the ability of the bombers to survive against the Soviet anti-aircraft systems in comparison with ballistic missiles, which exhibited better performance.⁴

There were also politicians in the Soviet Union who led to a change in military concepts during the Cold War. Senior politicians and officials pressed the military elite to design the appropriate Soviet response to NATO's new plans, such as the Flexible Response.⁵ They did this by creating informal alliances with the military elite in order to drive the military forward and to advance their policy. Generally speaking, the standing of politicians in their debates with the military elite prevailed and had a great influence on the Soviet planning at the tail-end of the Cold War.⁶ This model finds its expression also in the battle against non-government organizations and guerilla groups. A study which compared between the United States' inability to cope successfully with the counter-uprising in Vietnam, and the relative success of the British in their Boer Wars in South Africa, concludes that due to structural differences in the political systems in the two countries, British Prime Minister Lord Salisbury was given the flexibility and freedom of action to replace senior commanders in waging the war. On the other hand, US Presidents Kennedy and Johnson had to resort to micromanaging the fighting in Vietnam, and this prevented innovation. This means that the relations between the political echelon and the military echelon affected military innovation.⁷ Grissom concludes that there are many examples in which intervention by the political echelon is what led to military innovation, and that had the political echelon not have intervened, the military would have been left trapped in its original concept.

⁴ Edmund Beard, *Developing the ICBM: A Study in Bureaucratic Politics* (New York: Columbia University Press, 1976).

⁵ Flexible Response is a nuclear strategy in which tactical nuclear weapons are used, allowing limited damage and avoiding total destruction of the enemy. This strategy was adopted by NATO as a way of dealing with the quantitative advantage of the Warsaw Pact armies.

⁶ Kimberly M. Zisk, *Engaging the Enemy: Organization Theory and Soviet Military Innovation 1955–1991* (Princeton University Press, 1993).

⁷ Deborah D. Avant, *Political Institutions and Military Change: Lessons from Peripheral Wars* (Ithaca, NY: Cornell University Press, 1994).

The First Dolphin Submarines

Already in the 1960s, the Israeli Navy had active submarines, but these were old models dating back to the Second World War, which had been renovated for the Israeli Navy. Beginning in the mid-1970s, the Israeli Navy operated a small fleet of submarines, consisting of three German-designed submarines built for Israel in shipyards in England. The new *Gal* Series submarines gained operational successes during the First Lebanon War, successes which increased the submarines' prestige in the minds of the military and political echelons. In the mid-1980s a task force was set up to plan the requirements for the next generation of submarines. Initially, attempts were made to build them in the United States and, after this failed, German shipyards were approached in an effort to harness the American aid money for this purpose. In the summer of 1989, Minister of Defense Yitzhak Rabin approved the project with the shipyards in Germany in the face of objections from the General Staff and the contract was signed in February 1990. The rise of the threat from the East, in the form of Saddam Hussein and his large army led the then-Deputy Chief of Staff Ehud Barak and others in the IDF elite to suspend the submarine project and prioritize force building which in their mind was more appropriate to cope with the Iraqi army. Barak preferred to invest the American aid money in the procurement of fighter jet squadrons and other means, and persuaded the then-Minister of Defense Moshe Arens to stop the submarine project while the penalties for project cancellation were still low. Thus, the decision remained until the expiry of the deadline agreed with the Germans and the contract was canceled in November 1990.

The preparations for the war in the Gulf diverted attention toward acquisition of other military capabilities and suspended the option of purchasing the expensive submarines. Following the outbreak of the Gulf War and the striking of Israeli population centers by Iraqi Scud missiles in January 1991, German Foreign Minister Hans-Dietrich Genscher arrived in Israel for a visit and met with Minister of Defense Moshe Arens.⁸ He offered Arens German assistance in rebuilding the wreckage and in compensating those affected, but Arens rejected the offer and asked for real support for Israel's security, saying "We need two German submarines". Genscher, who was shocked by the string of tragic events in Israel, replied that he had no authority on this matter and promised to get back with an answer as soon as possible. A few days later, the German Military Attaché invited an Israeli delegation to Bonn

⁸ The following descriptions are based on an interview I held with Hanan Alon on June 21, 2021. Alon was in charge of foreign relations in the Ministry of Defense between 1986 and 1992 and was head of the Ministry of Defense delegation in Germany between 1992 and 1997. The interview was held as part of my final research project.

to present Israel's requirements for military assistance. A delegation was formed in the Ministry of Defense, headed by Hanan Alon, Head of the Foreign Relations Division. Arens instructs Alon that the submarine issue was the most important and Israel was prepared to purchase the two submarines if Germany would agree to spread the payments over many years with favorable credit terms. In addition to the submarines, Israel requested Fox chemical warfare agent detection vehicles, lending of Patriot Missile batteries to reinforce the aerial defense system, a powerful radar, medicines, etc. Ahead of their departure, Haim Israeli, who had been the assistant Minister of Defense from back in David Ben-Gurion's days, showed the head of the delegation Alon the draft Israeli request which appeared in the protocol of the famous New York meeting in 1960 between Prime Minister Ben-Gurion and German Chancellor Konrad Adenauer, which included the original request for three German submarines. The delegation arrived in Germany and they were led straight to the office of Chancellor Helmut Kohl. The head of the Israeli delegation Hanan Alon with Israel's ambassador Binyamin Navon beside him, described the hard feelings in Israel when it transpired that German companies were involved in developing weapons for Saddam Hussein's army. How embarrassing was it for Germany that Jews, survivors of the German gas chambers, were sitting in airtight rooms wearing gas masks against missiles which German companies helped to build. Eventually, despite initial objections to the supply of submarines on the grounds that they were not related to anti-missile defense, the Chancellor became convinced that this was the hour the German commitment to Israel's security was being put to the test and he agreed to supply two submarines for Israel, to be fully paid for by the German government. The surprise in Israel was great and Arens couldn't believe his ears when Alon reported the German consent and the financing that went along with it.

The Dolphin II Submarines

In 2002, Prime Minister Ariel Sharon and Minister of Defense Shaul Mofaz decided to enlarge the submarine fleet from three to five vessels. This decision is of the utmost importance in all matters related to maintaining a continuous at sea deterrent capability, in other words, the ability to keep at least one operational submarine at sea at all times. This decision of the political echelon was met with resistance from Chief of Staff Dan Halutz. In an interview with Ehud Olmert, who was a minister and Deputy Prime Minister in the Sharon Government, he said that Sharon and Mofaz understood the importance of the submarines from the strategic standpoint and approved ordering two additional submarines from Germany in order to reach a fleet of five submarines. Chief of Staff Halutz, on the other hand, objected and claimed that a fourth submarine would be sufficient. When Sharon became incapacitated

and Olmert took over as acting Prime Minister, Halutz requested another discussion. Olmert believed the information had not changed and in view of Sharon's and Mofaz's vast military experience when compared with the IDF elite at the time, which was in his mind less experienced, he decided to approve the order for the two additional submarines, thereby completing the fleet of five submarines.⁹ In addition, the first *Dolphin* submarines were only capable of remaining under water for a limited length of time since they were forced to come up for snorkeling,¹⁰ which could potentially expose the submarine. The next generation of Israeli submarines included a combination of an advanced *AIP-Air Independent Propulsion* system, freeing it from the dependency on outside air and enabling the submarines to remain submerged for longer periods of time. This is a system comprised of fuel cells made by the German Siemens Company, which enable electricity to be generated silently by converting chemical energy into electric energy. This system is combined with the conventional Diesel-electric power, thereby prolonging the time the submarine is able to remain submerged. Such a capability of the submarine flotilla increases the submarine's stealth and resilience.¹¹

Advantage of the political echelon in identifying a paradigm shift

In the case of the Israeli *Dolphin* submarines from Germany, the innovative concept of Israeli politicians, mainly Prime Ministers, came to the fore, having realized that the need for submarines as a strategic system was vital for Israel, despite vociferous objections from the army chiefs, who preferred to invest resources elsewhere. The case of the *Dolphin* submarines is an example of innovation in the military concept originating in the political echelon, rather than in the military echelon. Here too, one can suppose that the submarine fleet would have looked very different had it been up to the IDF alone. Former Navy commander, Admiral Ami Ayalon suggests an explanation for this: "The army is charged with preparing for war and is therefore occupied with aspects of an operative and tactical nature – it's all about winning naval battles and achieving superiority in the naval arena. When the submarine medium gained strategic importance and the potential for coping with an existential threat, this was a paradigm shift to which the army, being a large organization, had difficulty adjusting."

⁹ Interview with former Prime Minister Ehud Olmert dated May 23, 2021. The interview was held as part of my final research project.

¹⁰ Snorkeling is the function of a submarine when it rises close to the surface or uses a pipe as a sort of snorkel to capture oxygen with which to operate the Diesel engines and charge the batteries which will be powering it when diving deeper.

¹¹ For more information on this propulsion method: [Air Independent Propulsion](#).

The ability to maintain a military response when the entire area of the State of Israel is under severe missile and rocket threat, and bearing in mind Israel's relatively small dimensions and the limited number of air fields, the naval branch becomes the leading option for response and deterrence. The optimal possibility for preserving the retaliatory capability is in the sea. In this context, there is a conflict between the army's operational considerations, which are focused on winning the next war's battles, and strategic considerations of the political echelon, which is occupied with the question of the security and continued existence of the State of Israel. The *Dolphin* submarines rate differently in the priorities of the political echelon than in the priorities of the military echelon.¹²

Iron Dome as another example

Dr. Uzi Rubin, who was head of the "Homa" ("Wall") administration, which deals with the ballistic threat and is today a researcher in the Jerusalem Institute for Strategy and Security, examined the events which led to the development of the Iron Dome system in his doctoral thesis. He describes how the threat from rockets being fired from the Gaza Strip and Lebanon, and the results of the Second Lebanon War, affected the Israeli politicians' awareness of the threat rockets posed to the Israeli home front.¹³ The then Minister of Defense Amir Peretz, asked the Directorate of Defense Research and Development (DDR&D) in the Ministry of Defense to evaluate various options for coping with the rocket threat. There were several options on the table: the Iron Dome system from Rafael, which is based on launching interceptor missiles; the Skyguard system from Northrop-Grumman, which is based on a chemical laser; and a system of rapid-fire, radar-guided cannons from Raytheon and Lockheed Martin. The minister of defense formed a committee, headed by the scientific deputy head of the DDR&D to examine the various options. The committee selected Iron Dome as the most suitable solution. There were many opponents to the Iron Dome system. Some had links to the alternative solutions, mainly Skyguard, and some were senior members of the military echelon who thought that active defense was a mistake. There are several reasons for the objections from the military echelon. Some considered this system to be an expensive, unnecessary system since the rocket threat was considered a tactical, not strategic threat to the State

¹² Interview with former Navy commander Admiral Ami Ayalon from April 25, 2021. The interview was held as part of the research report I wrote.

¹³ "The Israeli security forces' ability to adapt to revolutionary changes in the strategic environment: Active defense as a case study", Bar-Ilan 2018. This study was published as part of his book *From Star Wars to Iron Dome: The Battle over Active Defense in Israel*, published by Efi Melzer, 2019 [Hebrew].

of Israel and therefore there was no reason to invest so many resources to solve a tactical problem. They believed it was preferable to dedicate these resources to the operational and strategic levels. Minister of Defense Amir Peretz, who is himself a resident of Sderot – a front-line community – disagreed with this opinion and regarded this threat, both from the Gaza Strip and from Lebanon, to be a strategic threat for which Israel had to prepare with all its existing means. Another source of resistance was a military concept of the IDF senior command, that active defense would result in a situation where the offense value, which is an overriding value in the IDF, would be degraded due to the diversion of the precedence to defense. Senior commanders were worried about the implications of using such a system on the desire to directly confront the rocket problem. Senior officers spoke out against the Iron Dome system even after it had exhibited impressive performance during Operation Protective Edge. They claimed that Iron Dome was "the new Maginot Line" since it had the same disadvantages: astronomical cost at the expense of assault resources, creating a false sense of security and atrophy for the military's offensive thinking.¹⁴ Of course budgetary considerations were also on the minds of the objectors since this meant lengthy development requiring hundreds of millions of Shekels in investment spanning development through to procurement and maintenance. There were also senior Air Force officers who considered this an impractical solution and even one which would endanger the activities of the Air Force aircraft. The political echelon disputed the military's position and insisted on pushing forward with developing an active defensive solution. A good example that demonstrates the disparity between the political echelon's point of view and that of the military echelon's, can be seen in Ehud Barak's activity. While he was serving as Chief of Staff, he objected to a solution that would be based on active defense as a matter of principle. After he succeeded Amir Peretz as minister of defense, Barak became a supporter of the development and procurement of the Iron Dome system. Barak even found a way to harness the United States to take part in financing the Iron Dome project, thereby reducing the tensions with the IDF heads over the issue of budgeting this system.

Conclusion

The procurement of advanced submarines, which operate in secret, and which are capable of lengthy underwater stays, provides Israel with strategic depth. It seems that Israeli politicians noticed the importance of this system, which directly

¹⁴ Brigadier-General (Res.) Dr. Meir Finkel, Iron Dome – The New Maginot Line? *Ma'arachot*, 461, June 2015 [Hebrew].

influences the battlefield and provides a continuous at sea deterrent. The IDF senior command, on the other hand, objected to this system. they considered it to be superfluous, with no direct influence on military victory in the next war and a waste of considerable resources, which should be directed toward systems of higher operational importance. This innovativeness in the military concept came from the ministers of defense and prime ministers who had to face off the IDF senior commanders and insist on having this system. Had this matter been left to the army chiefs alone, it is doubtful whether the State of Israel would have had a sufficient number of submarines to enable continuous at sea deterrent. Likewise, regarding an aerial active defense system, the likes of Iron Dome, which provides protection for the home front with its high percentage of rocket interceptions. I have no intention in this article to reach a decision in the dispute, which is still simmering, over the negative effects of using the Iron Dome system, however there is no doubt as to the military innovation it brings to bear both technologically and conceptually. These two innovative military concepts, continuous at sea deterrent and active defense are the outcome of the political echelon's intervention despite objections from the military echelon to these concepts. The two concepts represent military innovation since each one alters the way military frameworks function in the field. They are both significant in their scope and lead to increased military efficiency, which is measured in the results on the battlefield. Both the above cases add on to other examples cited in the research literature, which represent the model of political-military echelon relations and its effect on military innovation.

