MARITIME STRATEGIC EVALUATION FOR ISRAEL 2022/23

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The Naval Campaign in the Russia-Ukraine War: A Roundtable Discussion

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On October 23, 2022, researchers from the Maritime Policy & Strategy Research Center at the University of Haifa held a roundtable discussion on the naval campaign in the Russia-Ukraine war, which began on February 24, 2022. Presented here is a summary of the main topics discussed and the participants' comments.

An appendix to this discussion is a table of (general and naval) notable milestones during the Russia-Ukraine war so far, prepared by Ido Gilad.

Opening Remarks

Prof. Shaul Chorev, head of the Maritime Policy & Strategy Research Center, began by stating that the purpose of the roundtable is to analyze trends in the maritime campaign between Russia and Ukraine and discuss possible lessons regarding the nature of warfare in this context. Prof. Chorev noted that the maritime military operations carried out up to that point during the Russia-Ukraine war included amphibious operations, power projection from the sea using submarines, the closing of straits, UN-sponsored agreements regarding the supply of grains, Anti Access / Area Denial through mining, and more. The purpose of this discussion was brainstorming – not in order to determine right from wrong but to share various assessments and discuss them, to better understand the significance of these naval operations. In addition to the operations themselves, Prof. Chorev suggested discussing the large gap between doctrine and reality and its consequences. He offered the example of the publication of Russia's new naval doctrine in late July 2022, as combat was ongoing.¹ Prof. Chorev pointed out that such gaps between doctrines and reality on the battlefield can be observed when it comes to other navy doctrines as well. He mentioned the Israel Navy doctrine, which discusses its role as a force of a regional power, even though the Israel Navy is not ranked among the thirtyfour leading naval forces in the world – as opposed, for example, to Egypt and Turkey which are included in this ranking.²

¹ Russia's new naval doctrine is discussed at length in Tzevy Mirkin's article in this volume.

² Eli Sharvit and Dov Raz, "From 'Maritime Service' to Strategic Force: Some Thoughts on Naval Forces in 2048", *Ma'arachot*, 477 (2018), pp. 18-25 [Hebrew]. "Another aspect of the strategic context that must be taken into account is the use of naval forces as a fundamental factor in the State of Israel's concept of security, by projecting regional power", ibid., p. 23.

Tzevy Mirkin described the sinking of the "*Moskva*", emphasizing the broad implications of this event. According to Mirkin, the sinking of the "*Moskva*", the Black Sea Fleet's flagship vessel, is probably the most significant blow Russia has suffered in its campaign in Ukraine, even compared to defeats on land, and especially given its symbolic significance. From its very first day, the "*Moskva*" became a symbol of the campaign and Russian military power, symbolizing a period that was perceived by many as the golden age of Russia's naval force. This defeat was even more humiliating given that Russia still does not perceive Ukraine as an equal military rival or even an independent state, which is the reason that Russia describes the war against Ukraine as a war against NATO.

According to Mirkin, the sinking of the "*Moskva*" is expected to affect the status of the Russian Navy, which has dealt with the sinking of smaller ships in the past, but never on this scale. As a result of this event, the navy's image was greatly damaged – a fact that is expected to affect internal power relations within the Russian army. This may also affect budget distribution. Mirkin noted that it is easy to write a doctrine stating the importance of building large ships, but when it comes to the actual distribution of funds, given the failure of the Russian Navy to defend this ship, the question as to why build more ships may arise.

Mirkin explained that although it is not the main reason, the sinking of the "*Moskva*" is one of the reasons Russia has been avoiding amphibious operations. The main reason is that it became clear very early on that Russia does not have enough troops to carry out such operations. Russia's entire marine force is made up of four brigades that do not have enough soldiers to capture Odesa. Furthermore, Russia tends to make use of marine forces to reinforce infantry forces; this was the case in Afghanistan, where paratroopers were widely utilized, as well as in Chechnya, where both paratroopers and marines were deployed. Similar actions were taken in the current campaign; when it became clear that Russia did not have enough trained forces on the ground, high-reputation units, such as paratroopers and marines, were used in infantry roles, contrary to their original purpose. The result was a great loss of personnel among marine forces, and of most of the experienced officers, especially in lower and middle ranks. According to Mirkin, this led to a situation in which there was no one to train new officers and as a result, Russia does not have enough men for amphibious operations, which became a lower priority – and now, after the sinking of the "*Moskva*", they are no longer technically possible.

At the same time, the Russian navy's involvement in the campaign was affected by the relationship between the ground forces and the naval forces' commanders. The ground

forces' unwillingness to allow naval admirals to take credit for success in combat led to the subordination of the marine forces to the ground forces.

According to Mirkin, it seems that there is no real connection between the new naval doctrine approved by President Putin on July 31 of this year,³ and what is happening on the ground. As he noted, approval of a doctrine is a process that takes months, and it appears that the new naval doctrine was prepared before the war began. The doctrine itself does not mention the war, even in terms of the discussion of competence levels and so it seems that the publication of the naval doctrine was intended first and foremost to raise morale, but that its ties to reality are strictly coincidental, and not for the first time.

Ido Gilad presented key milestones in the naval campaign between Russia and Ukraine. Following Mirkin, Gilad noted that the state of the navy reflects the state of the Russian army in general: at the beginning, the Russian navy enjoyed objective advantages, emphasizing the order of forces and means, certainly compared to the Ukrainian navy, which received only about a fifth of the former Soviet Union's navy forces.⁴ Significant Russian control of the Black Sea shores, including the Ukrainian shores, is evident in the Sea of Azov, Crimea, and Sevastopol, and consequently, on the western part of the coast – in the Gulf of Odesa (Figure 1), could be noted. Such physical and military data suggests that one could have assumed that Russia would gain a complete naval victory in the westernmost part of the Ukrainian coast. This is a relatively remote area, and the expectation from the Russian navy was that it would deepen Russia's grip on it; especially due to its deployment in Sevastopol as a forward outpost on the Crimean Peninsula. But in practice, the Russian blitz on February 24, 2022, failed, the attempt at a "knock out" did not bear fruit, and the use of "General Winter" (i.e., winter 2022) using oil and natural gas as weapons against the West, did not lead to significant outcomes. On the contrary, the Russian announcements, full of expectation, have not come to fruition, and all of the Russian forces, including the navy, are now digging in or even retreating.

As Gilad noted, in terms of the geophysical characteristics of the arena, Ukraine's coastline is 2,700 km long and makes up about half of its borders. The Ukrainian coastline can be divided into three main sub-regions – the Sea of Azov, the Crimean Peninsula, and the Gulf of Odesa – or into eight coastal strips. The estuaries of the rivers along the coast are used for maritime transport, and their control affects the entire Ukrainian trade and economy. The straits and Snake Island serve as a strategic stronghold that the Russian

³ "<u>The Russian Federation Naval Doctrine</u>", was approved on July 31, 2022, and published on the Russian President's official website.

⁴ <u>Black Sea Fleet (BSF) – Post Soviet Division</u>, *GlobalSecurity.org*, Retrieved December 2022.

navy tried to take over at the beginning of the campaign, which it led on the (relatively distant) western front, but without success.



Figure 1: The Ukrainian coast, emphasis on the Odesa Basin, west of the Crimean Peninsula

When considering the specific timeline, other actors who joined the maritime activity should be noted: on the one hand, Turkey blocked the straits to Russian military vessels (in accordance with the Montreux Convention of 1936), but on the other hand, since July it has mediated the rescue of grain ships from the maritime blockade on shipping traffic to and from Ukrainian ports, which lasted for the preceding four months, a move which was named the "Grain Route". Iran also appeared on the scene by supplying explosive and unmanned aircraft, and probably also precision-guided missiles. Part of this supply is managed through the Caspian Sea.

According to Gilad, it seemed at the time that the Russian navy was withdrawing in face of the Ukrainian army, whose forces, mainly those on the ground, were diverting resources towards the Crimean Peninsula and represented a threat to the port of Sevastopol, which was attacked on October 29 by vessels and unmanned aerial vehicles operated by Ukraine. The Russian Navy's insecurity in Crimea and in particular in the port of Sevastopol led it to remain in more protected areas to the east of the Crimean Peninsula near and toward the port of Novorossiysk.

Shlomo Guetta added some general remarks. He noted that a few months after the war began on February 2022, it was still hard to see the forest for the trees, which made it difficult to form systemic insights. As he explained, perhaps only in a few years, after the dust settles, issues that are currently unclear will become clear – especially with publications by Western intelligence services or studies by analysts, based on intelligence data. As for the expectations from the Russian Navy, Guetta noted that it is not possible to know what had been written in the General Russian Command regarding its purpose and

tasks, but that impressions so far, lead to an estimation that the greater the expectations, the greater the disappointment.

As for the characteristics of the naval arena, Guetta noted the asymmetric characteristics of this war, in which the Russian navy holds great power in the Black Sea, compared to a rather inferior Ukrainian navy. This position led to hubris among Russian Black Sea Fleet commanders, which in turn led Russia to suffer significant losses – the most notable among these was the sinking of the "*Moskva*" cruiser. According to Guetta, this situation may remind us of other examples in which the inferior side gains unexpected advantages – such as the case of Israel in the Second Lebanon War, which did not consider some of the weapons that were in the possession of Hezbollah, a situation which led to overconfidence, as a result of which the INS *Hanit* was hit (fortunately there were only four casualties among the staff members).

Guetta added that western intelligence officials' and researchers' predictions, such as the prediction of an amphibious landing in the eastern sector (Mariupol) and the western sector (Odesa) of the Black Sea, did not come to be.⁵ The option of a naval blockade from the Black Sea was also unfulfilled during the course of the war, due to diplomatic pressure. As Guetta explained, a blockade of this type, which threatens the world trade of food and other products, cannot remain confined to Russia and Ukraine, a fact that is important to remember.

Furthermore, Guetta noted the increasing use of unmanned airplanes and unmanned aerial vehicles. In the first months of the campaign, Turkish unmanned aircraft were the Ukrainian weapon of choice and in recent months, more and more Iranian unmanned aircraft have been spotted, raising the question of why a powerful country such as Russia needs the help of a smaller regional power in this area. There is even information according to which Iran will provide Russia with precision long-range surface-to-surface missiles of various types. Without underestimating Iran's capability, which should worry Israel, this seems to mean that Russia itself does not have significant capabilities when it comes to unmanned aircraft. As he noted, Iran's production capacity in this field also deserves attention and recently, it has come to light that Russia intends to locally produce hundreds of Iranian UAVs.⁶

For example: H. I. Sutton, "<u>6 Russian Warships And Submarine Now Entering Black Sea Towards Ukraine</u>", *Naval News*, February 8, 2022; as well as: Walker Mills and Timothy Heck, "<u>What Can We Learn about Amphibious Warfare from a Conflict that Has Had Very Little of it? A lot</u>", *Modern War Institute at West Point*, April 22, 2022.

⁶ News agencies, "<u>Report: Iran and Russia Agreed on the Joint Production of Iranian Drones on Russian Territory</u>", Maariv, November 19, 2022.

As Guetta explained, in the future, in response to damage to surface vessels, the Russian navy may prioritize the submarine component – not only in terms of nuclear or nucleararmed submarines but also on the conventional level, including improving the accuracy of cruise missiles and integrating the use of drones in submarines launchings. Furthermore, another aspect that has surfaced in recent weeks is a destructive weapon operated by the Ukrainians – an unmanned surface vessel. These were activated and caused damage to several Russian vessels in their own ports.⁷



Figure 2: An unmanned surface vehicle used by the Ukrainians against Russian navy vessels on November 2022⁸

In conclusion, Guetta predicted that historians or military researchers who will analyze the naval arena in this war will probably come to the conclusion that the Russian navy had no contribution whatsoever to the strategic aspect of the current campaign.

Ido Gilad added that, in his opinion, there is no need to guess the Russian Navy's objective since clearly, its role was to lead the southern front. Shlomo Guetta agreed but said that if this was the case, the navy did not meet this objective. Tzevy Mirkin pointed out that the main attack on the southern front was carried out through the ground forces from Crimea – an attack that was successful because of Ukrainian authorities' betrayal, and not due to the superiority of the Russian army. As he explained, the problem is that Russia itself did not understand what the navy's role was in this campaign and the ground forces generals did not want the navy to get the credit for their achievements.

Mark Shipton discussed the following question: Has the Russian navy gone through a process of adaptation regarding the continuously changing operational reality during

 ⁷ "<u>Funds Raised for the Second Surface Drone for Ukraine in Lithuani</u>", *Мілітарний*, November 19, 2022.

⁸ Ibid.

combat? As he noted, within this context, it is necessary to differentiate between the nature of war, which has remained unchanged throughout history and is an act of violence derived from political needs and human nature, and the characteristics of warfare, which are constantly changing as a result of technological and cultural development.⁹ Shipton recalled Michael Howard's claim that history proves that, in most cases, military organizations do not accurately predict the characteristics of future warfare. 10 In this context, great military thinkers, such as Sun Tzu and Carl von Clausewitz, have emphasized the importance of adaptation as an essential attribute of military forces during combat.¹¹ This is also true in modern times. As Shipton explained, Murray and Farrell argue that war educates armies by forcing them to improve and sometimes even change their tactical and operational concepts; one of the most important traits of military organizations is the ability to quickly adapt to the tactical, strategic, and political conditions of war.¹² Shipton added that when discussing the question of whether the Russian navy underwent an adaptation process given the change in operational reality, several levels must be distinguished: a strategic level, a doctrinal level, and a tactical level. On a tactical level, adaptation did in fact take place; a key example of this is the confrontation with remotely manned aircraft (UAVs) and Ukrainian drones, especially the TB2, which proved to be a distinct threat to the Russian navy's ability to achieve its goals.¹³ In this context, Shipton noted that the air defense systems on board Russian vessels operating in the Black Sea were unable to provide an adequate response to this threat. The solution, in this case, was the installation of a short- and medium-term air defense system – the TOR M2KM, which proved to be somewhat effective in dealing with this specified threat.¹⁴

Prof. Chorev pointed out that whenever there is a hit, it is explained as a technological problem, but one must ask if it is not also an operational problem; as he noted, it is important to understand that large vessels in asymmetric coastal warfare are at a disadvantage. **Mark Shipton** agreed but pointed out that if more modern vessels such as the *Admiral Gorshkov* or the *Steregushchy* class frigates with more advanced air defense

⁹ Carl Von Clausewitz, *On War*, London: Routledge (1968).

¹⁰ Michael Howard, "<u>Military Science in an Age of Peace</u>", *The RUSI Journal*, 119, no. 1 (1974): 3–11.

¹¹ Sun Tzu, *The Art of War*, Translated by Thomas Cleary (1991).

¹² Williamson Murray, *Military Adaptation in War: With Fear of Change* (Cambridge: Cambridge University Press, 1991); Theo Farrell, "Improving in War: Military Adaptation and the British in Helmand Province, Afghanistan, 2006–2009," *Journal of Strategic Studies*, 33, no. 4 (2009): 567–594.

¹³ Tayfun Özberk, "<u>Ukrainian TB2 Attacks on Russian Vessels May Mark a First in Naval Warfare</u>", *Sheperd Media*, May 6, 2022; Kateryna Panasiuk and Mykyta Vorobiov, "<u>The Drone That Won</u> <u>Ukrainian Hearts</u>", *CEPA*, August 29, 2022.

¹⁴ Howard Altman and Tyler Rogoway, "<u>Ground-Based Tor SAM System Seen Strapped To Russian</u> <u>Black Sea Warship</u>", *The Drive*, June 7, 2022.

systems such as the 9K96 Poliment-Redut were used in theater,¹⁵ then the results might be different.



Figure 3: A Vasily Bykov-class corvette with a TOR M2KM battery

Shipton offered another example of tactical adaptation – the growing shortage of naval standoff missiles against land targets, such as the 3M14 Kalibr cruise missile. This hampers the ability of the Russian navy to maintain a continuity of land strikes. The solution was to convert coastal missiles that exist in large quantities for attacks against land targets, in this case, P 800 Oniks missiles – Yakhont in the export version – powered by Bastion P batteries.¹⁶ As Shipton explained, it is important to note that these missiles are not designed to operate effectively in a continental domain – the relatively small warhead and the lack of navigation and homing capabilities like those of TERCOM (Terrain contour matching – navigation based on topographic maps) makes these missiles particularly vulnerable to electronic warfare (EW).

A third example offered by Shipton was the ongoing attacks of Ukrainian forces against relatively small Russian navy patrol boats – mainly the Raptor class patrol boats, by unmanned aircraft and anti-tank missiles used by infantry. These attacks led to the loss of more than half of the patrol boats' order of battle forces in the Black Sea area,¹⁷ and damaged the ability to defend port entrances and the Russian navy in general. The answer,

¹⁵ Matteo Natalucci, "<u>Russia Wraps up Trials of Poliment-Redut SAM System on Project 22350 Frigates</u>", Janes Defense News, February 20, 2019.

Ashish Dangwal, "<u>After Hypersonic Weapons, Russia Uses Bastion-P Missiles To Break Ukraine's</u> <u>Resistance, Destroy Its Morale</u>", *The Eurasian Times*, March 24, 2022.

¹⁷ David Axe, "<u>Russia's Black Sea Fleet Started the War with Eight 'Raptor' Patrol Boats. It Might Have Three Left</u>", *Forbes*, May 9, 2022.

in this case, was the use of captured Ukrainian patrol boats,¹⁸ such as the Gyurza-M. Meanwhile, the question of the operational effectiveness of such a move arises in view of the inadequate command and control systems, communication, and the ability to logistically support the technical operation of these vessels.



Figure 4: Bastion-P coastal missile batteries



Figure 5: Ukrainian Gyurza-M patrol boat captured by the Russian army. It is evident here that the Ukrainian patrol boat is now flying the Russian navy flag

¹⁸ Matthew Moss, "<u>Russia Presses Captured Ukrainian Gunboats into Service</u>", *Overtdefense*, May 26, 2022.

Shipton concluded by saying that the Russian navy showed limited adaptation during the war and that this adaptation was confined to the tactical level, without any systemic, doctrinal thinking, or aspects of integrated multi-domain operations. In Shipton's estimation, this adaptation process is purely reactive instead of proactive; additionally, this process is most likely managed through a "bottom-up" process, by applying military hardware that does not fit the operational needs. The Russian army, and thereby also the navy, failed to quickly recognize the characteristics of warfare that included the extensive use of the Anti-Access-Area Denial (A2AD) strategy by the Ukrainian army, based on unmanned drones and anti-ship coastal missiles. Throughout the fighting, the Russian navy was unable to adapt its strategic thinking or the patterns of its operational activity to the type of war actually taking place.

Alex Grinberg added a few comments regarding the discussion on the sinking of the "*Moskva*". He noted that it was sunk by a Ukrainian "Neptune" anti-ship missile, a fact that the Russians are trying to conceal. He added that it is important to remember that even if this is asymmetric warfare, Ukraine still has marines, missiles, vessels, unmanned aerial vehicles, and air defense. As he explained, Ukraine was the center of the Soviet Union's air defense, and these capabilities were maintained, leading to a lack of activity by the Russian Air Force in Ukrainian skies. Furthermore, the Ukrainians instigated deep reforms in their army, navy, and intelligence forces, the results of which are evident on the ground. The methods of command and warfare adopted by Ukraine are completely Western and quite different from the Russian methods. Although the Russians regard this campaign as a war against NATO forces, this does not 'translate' and will not translate into drawing conclusions in the maritime domain.

Grinberg added that it should be understood that the lack of coordination and integration between forces is deeply rooted in the Russian army; even in the Red Army, there was no real doctrinal discussion, only "manifesto" documents that praised the army's capabilities. As a result, a field commander who wishes to remain alive can improvise on a tactical level, but it cannot go further than this. The concept of coordination between different army forces was not developed or studied at any stage. After the sinking of the "*Moskva*", efforts were made to cover up what had happened but there was no attempt to learn lessons. Additionally, concerning the unmanned aerial vehicles obtained from Iran, Grinberg noted that it seems that such a capability has simply not been established in Russia, and it is difficult to suppose that this will change in light of the current organizational culture. Even if Russian leaders would have theoretically decided to carry out army reforms, it would be impossible to do so without fixing the entire Russian system, which is plagued by widespread corruption and lack of accountability. As opposed to the command in NATO armies and in Israel which is based on the autonomy and responsibility of soldiers and junior officers, which largely reflects the character of Western and Israeli societies; it would be impossible to instill values of independence and personal responsibility in soldiers without considering the issues relevant to the rest of society.

As he explained, as oftoday, it can be determined that Russia's Black Sea fleet has completely lost its former capabilities, and it is clear that even nine months after the beginning of the war, the Russian navy is not involved in combat in Ukraine. Since September 2022, the Russian navy in the Black Sea has suffered further losses following a Ukrainian attack on the strategic Russian naval base of Sevastopol. Furthermore, according to Grinberg, the Ukrainian attack deserves special consideration since it is an attack carried out entirely by a large number of unmanned vessels.

Discussion

Prof. Chorev pointed out that another issue that has not yet been discussed is the diplomatic-signaling role, such as in the case of withdrawing the submarine fleet and raising the level of nuclear alert – an issue that is under the authority of the highest political officials in Russia, although in the Russian navy – as in other countries – the operation of the submarines is the navy's responsibility. Tzevy Mirkin noted that it was too early for any final conclusions, but an interim conclusion may be that Russia relied significantly on the nuclear threat to prevent aid to Ukraine, but this did not bear fruit, as aid to Ukraine increased significantly over time.

Another topic that Prof. Chorev brought up was what naval warfare means in a world of information networks. As he noted, Russia managed to conceal the sinking of the "*Moskva*" for several days, something that would certainly not have been possible on land. This raises the question, what can be learned here about the ability to hide information in a marine domain?

Tzevy Mirkin added that all the discussions on the campaign between Russia and Ukraine return to a fundamental problem: a perception of admiration for the ability, cunning, resources, and Russian military capability. In a country that is in general crisis, every area is affected. As he explained, all of the famous Russian weapon systems were developed in the 1980s and early 1990s and no new weapon system was developed after 1992. Furthermore, it is not clear how the new submarines built by Russia in recent years differ from 1980s submarines. Russia needs Iran's assistance because it does not have electronic capabilities. Certain scientific fields were eliminated in the USSR in the late 1940s, during the struggle against "bourgeois science", and the Soviet Union (and later Russia) was never able to bridge the gap created as a result. Additionally, Russia has suffered from a brain drain since the 1970s; and problems of corruption and inefficient administration

must also be considered. As Mirkin explained, the main result of the war could be damage to the idea of Russian power – leading to the understanding that Russia holds power in terms of territory and length of its borders alone.

Prof. Chorev pointed out that despite these problems, in the 2014 campaign, Russia achieved distinct success. Mirkin replied that this success was due to the fact that no one was fighting Russia and that Ukraine did not receive any outside support. Russia assumed that this would be the case this time as well, which testifies to its intelligence capabilities – that is to say, Russia does not understand any of its neighboring countries, and still sees them as semi-colonies. Additionally, in 2014 Russia was also defeated in Mariupol by volunteer battalions; and when encountering real opposition, its level of success was significantly lower. Furthermore, in 2008, a whole Russian field army needed four days to push the Georgian army from positions in South Ossetia, and their communication and reporting systems did not work properly – this could not be considered a success. Even in the current campaign, the high percentage of losses among battalion and division commanders is due to the fact that they have to physically reach the front to understand what is happening there.

Mark Shipton pointed out that it is necessary to distinguish between military power in terms of numerical and qualitative aspects and how military power is used. In his opinion, following the war, future studies of military power will focus more significantly on the way in which military power is used during combat (doctrine, the degree of multi-armed integration, command and control capabilities, and tactics), as dramatically affecting the ability to achieve operational goals and objectives.

In response to Mirkin, **Ido Gilad** said that there are several levels that need to be distinguished: strategic, operative, and tactical. Furthermore, Israel's power is certainly not comparable to Russia; for this reason, when Israel looks at Russia; its perspective is different and is mainly influenced by regional considerations, such as the importance it attaches to Russia's actions on nearby fronts like Syria and Iran. At the strategic level, it is also impossible to ignore Putin's "achievements" which led, for example, to global inflation and the way he managed to use the energy threat.

Mirkin said in response that the energy threat did not lead to the prevention of aid to Ukraine as it was intended. Gilad replied that this is apparent in hindsight but that it is important to understand what Putin's Russia originally wanted to achieve. Mirkin replied that the question is not what Russia wanted to achieve, but how successful it was in achieving its goals. As he explained, the Russian media has been reporting on European citizens freezing to death in the winter, and there are people in Moscow who believe this. Gilad noted that Russia apparently managed to sabotage the Nord-Stream pipelines and

succeeded in blocking Ukraine's ports, although it must be said that this was done with the help of Ukraine itself, which mined its ports and the sea routes to them for defensive purposes.

At this point, **Prof. Chorev** wished to focus the discussion on the military-naval aspect, which also holds open questions. As he noted, specifically, one must ask: in the current combat route – an asymmetric campaign on the coast and an attempt to occupy territory – is the navy's role limited from the outset, and should expectations be correspondingly low?

Tzevy Mirkin replied that before the war began, Russia concentrated forces from three fleets in the Black Sea: the marine forces that were positioned in the Black Sea were brought over from the Baltic Sea and the Pacific Ocean; This was done due to local conflict, and even with this concentration of forces, the level of success in the naval arena was very limited. Russia was unable to carry out any amphibious operations and lost its skilled marine order of forces. Furthermore, after the sinking of the "*Moskva*," the navy retreated to a defensive position. This is expected to affect the distribution of resources and budget later on because the Russian navy became a de facto coast guard.

Ziv Rubinovitz noted that the sea was ultimately a secondary arena in the current campaign. **Prof. Chorev** said that this is an important issue to address when it comes not to a remote island like the Falklands, but to coastal combat that is mainly decided on land. This is also relevant in the context of the Israeli Navy, which is currently discussing the question of landing.

Alex Grinberg agreed with most of the points made by Prof. Chorev but added that Russian conduct has failed on all of these levels. He added that historically, Russian intelligence has always failed to assess strategic situations because it is required to provide a picture that matches the positions of Russian leadership.¹⁹ Russia intended to conquer Ukraine and was not preparing for war but planned to install a puppet regime. In this sense, Russia is a country with no strategic planning, which is now trying to improvise to get out of the situation in which it found itself. Grinberg added that the Russian sabotage of Nord Stream was tactically successful but strengthened the conclusion in the West that it is necessary to find a substitute for Russian gas.²⁰ Regarding the involvement of foreign navies, he said that it is important to set boundaries for Russian operations in other arenas, such as the

¹⁹ Christopher Andrew ,"<u>Intelligence Analysis Needs to Look Backwards Before Looking Forward</u>", *History and Policy*, June 1, 2004.

²⁰ Sergey Vakulenko, "<u>Shutting Down Nord Stream Marks The Point Of No Return For Russian Gas</u>", *Seeking Alpha*, September 8, 2022.

Mediterranean Sea because the lack of boundaries will encourage Russia to take more aggressive actions.

In view of the damage to the two gas pipelines in the Baltic Sea, **Prof. Chorev** brought up the vulnerability of the underwater communication cables and wondered if there is not a weakness here for Israel that should be examined.

Shlomo Guetta said that if it is possible to speak in terms of a tactical, operative, or strategic achievement, then the Russian naval forces apparently failed and did not achieve their goals on all three levels. He explained that it is not yet possible to determine what conclusions can be drawn from this for the future, but from past experience recommended basing conclusions on future insights to be analyzed and presented by Western intelligence services, and the British and German intelligence services in particular.

Regarding the specific issue of an Israeli landing option, Guetta said that we should stop basking in the operational success of the Awali landing in Operation Peace for Galilee (the 1982 Lebanon War), which was carried out on an unthreatened coast. In his opinion, in a case of a landing on the Lebanese or Syrian coasts today, there is no assurance that threats against vessels will be completely eliminated. Such a threat could, of course, manifest with the use of dedicated coastal missiles, as well as rockets and surface-tosurface missiles with accurate warheads, unmanned and armed aircraft, and vessels. Additionally, the use of naval mines on potential landing coasts should not be ruled out. Guetta added that a hit to a landing craft with hundreds of soldiers and armored vehicles would be disastrous and would offer the enemy an opportunity for a "victory image". Furthermore, he suggested that in regard to the possibility of hitting underwater communication lines, we need to observe and analyze the capabilities of the concrete naval enemies Israel is facing – that is to say, Hezbollah and Iran – in this regard, including threats to the infrastructure of Underwater gas pipelines. He also noted that in addition to this, regarding gas drilling production facilities in the middle of the sea, there is no doubt that the naval enemy has the capability.

In response to Mirkin and Grinberg, **Ido Gilad** stated that Russia has proven maritime operational capabilities, and while it is important not to exaggerate them, it is also important not to ignore them, but to assess each case independently.

Prof. Chorev emphasized that this document should discuss lessons learned, and allows not only for conclusive statements but also for questions, requiring us to follow the developments in combat from doctrinal, technological, and organizational aspects and allowing for continuous discussion.

Appendix: Table of Prominent (Naval and General) Milestones in the Russia-Ukraine War

Ido Gilad

Date	General Event/Naval Event
Mid-March 2021	The Black Sea: an extensive naval maneuver (6 submarines, the <i>Moskva</i> frigate – Slava model, other vessels and aircraft).
The end of October 2021	Extensive vessel maneuver.
Late 2021	Reinforcement of 6 landing ships (from the Northern and Baltic fleets).
December 2021 – January 2022	Reports of an extensive naval maneuver and concentration of vessels in the Black Sea.
February 24, 2022 – the onset of the "Special Military Operation"	The onset of the invasion in Ukraine (four axes of progress): from the north – from Belarus toward Kyiv; from the northeast – toward Kharkov and Sumy; from the southeast – toward Luhansk and Donetsk; from the south – mainly from Crimea toward Kherson. The Snake Island incident led by the " <i>Moskva</i> ", intentions to land in Odesa + blockade of Ukrainian ports.
February 26, 2022	A successful amphibious landing in Mariupol versus a failed landing in Odesa. Naval mining in the Gulf of Odesa + probable drifting to Romania + Dardanelles (Ukrainian!? / Russian?).
February 28, 2022	Turkey announces strict sailing in the straits – according to the Montreux Convention (only military vessels registered in the Black Sea are allowed to pass north).
March 7, 2022	Artillery hit to a Russian patrol ship that later returned to Sevastopol.
The end of March 2022	Announcing the end of the special operation and focus on taking control over the Don Bass districts (Southeast). The Kyiv district was abandoned – emphasis shifted to the southern front – to isolate Ukraine from the sea up to the Moldovan border (in the west), a total of 2,782 km of coast. Deputy Commander of the Black Sea Fleet – Admiral Paliy was killed in Mariupol. A signal for a possibility (!) of integrating a (tactical) nuclear threat from Russia.
April 13–14, 2022	The attack on the flagship " <i>Moskva</i> " – Slava class (a Russian governmental symbol) by the NEPTUNE (Harponsky – compatible with KH-35) missiles involving drones.
April 21, 2022	A Russian takeover of the coast of the Sea of Azov.
April 30, 2022	Attacking infrastructure and seaports (Odesa) with cruise missiles – 30 were launched from Crimea.
The beginning of May 2022	Drone hits of 'Raptor' guard boats and the 'Serena'-class landing craft.
May 12, 2022	A hit near Snake Island by a supply tanker "Bobrov."
May 15, 2022	Launching 4 Russian caliber missiles from submarines (!?) in the Black Sea – toward infrastructure targets in the Lviv area.
June 17, 2022	Coastal missile hits a tug boat.
July 8, 2022	Turkey brokered the opening of a shipping corridor to export grain.
July 9, 2022	Airstrike on the Russian Navy at Crimea Saki Air Base.

Date	General Event/Naval Event
July 31, 2022	Publication of an updated Russian naval doctrine (noting the Mediterranean, Black and Caspian seas as areas of special importance – some of them are therefore relevant to the combat area on the front of the special operation being conducted in Ukraine). Annual Navy Day celebration.
July 31, 2022	A drone hit of the naval headquarters in Sevastopol.
Late July 2022	The concentration of surface vessels in the Adriatic Sea (including 2 Udeloi ships) in front of the American aircraft carrier ' <i>Truman</i> ' and 3 Italian Navy surface ships.
August 17, 2022	The impeachment (?) of the Black Sea Fleet commander and the appointment of Vice Admiral Sokolov.
August 30, 2022	Attack on the Russian naval headquarters in Sevastopol with a Ukrainian unmanned aerial vehicle (UAV).
September 21, 2022	Expanding the mobilization of the reserves (30,000) + announcing the feasibility of using nuclear power. Integration of Iranian drones (Mohajer-6.(?
September 26, 2022	Locating a Ukrainian unmanned aerial vehicle (UAV) in the Sevastopol area.
Late September 2022	Evacuation of K submarines from Sevastopol. Underwater damage to the Nord Stream pipelines (in the Baltic Sea). Annexation of four Donbas (eastern) districts to Russia (15% of Ukraine's territory).
Mid-October 2022	Attacks of exploding drones made in Iran, an expression of the serious threat as a result of the tightening alliance between them.
October 21, 2022	Ukraine's claim of intentions to blow up the dam on the Dnieper River.
October 25, 2022	Fear of a use of a 'dirty bomb'. Putin's claim that a special operation requires a 'special measure.'
October 28, 2022	Crimea bridge explosion (a symbol of Russian rule).
October 29, 2022	An attack by 7 unmanned aerial vehicles (of the model located in early October) in the Crimean area of at least two Russian Navy ships in Sevastopol, including the destroyer <i>Admiral Makarov</i> (replacing the <i>Moskva</i> -the flagship of the Black Sea Fleet, which was sunk in April). During the attack, 9 unmanned aerial vehicles were also synchronized from the air. The targets were inside and outside the port. In response, Russia announced its withdrawal (for two days) from the shipping corridor agreement for the export of grain (which was originally valid until November 15, 2022). Turkey mediated this agreement and saw to its implementation, which means turning food into a weapon in Russia's hands, and Russia's possible damage to vessels and civilian shipping movements in the Black Sea.
November 8, 2022	An attack in Novorossiysk using drones. In practice, of a fuel terminal south of the military port itself.

Legend:

Maritime events before the operation General events on land General events with Turkish involvement General events with Iranian involvement Maritime events **Ayal Hayut-man** is a Research Assistant at the Maritime Policy & Strategy Research Center, University of Haifa and a PhD student in Jewish Philosophy at Tel Aviv University. From 2010-2015 he served as Assistant Director of External Relations at the Israel Atomic Energy Commission.

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