



## **Piotr Mickiewicz**

Professor, University of Gdańsk  
<https://orcid.org/0000-0002-3533-337X>

## **Daniel D. Kasprzycki**

PhD, University of Professional Education in Wrocław  
<https://orcid.org/0000-0002-7412-3447>

# Maritime episodes of the Russian 'special operation' against Ukraine<sup>1</sup>

## Introduction

The waters of the Black and Azov Seas play an important, but not a primary role in the overall military operations carried out as part of Russia's 'special operation.' It is possible to define this role in detail only in the context of the overall goals and directions of operational activities. It is also reasonable to use the conclusions that can be drawn from both the course of the naval episodes of the 2008 Georgian-Russian war and the change in the strategic security environment that occurred in the Black Sea region with the annexation of the Crimean Peninsula and Russia's gaining access to the north-western coast of the Sea of Azov.

The specificity of the legal regime of sea basins and the principle of ensuring freedom of navigation in the open sea and safety of navigation, which dominates in the policy of coastal states, determined the research approach. In the process of preparing this study, the realistic paradigm was adopted for basic research, which allows us to describe and interpret the policy pursued by coastal states as the main

---

<sup>1</sup> The text is a shortened version of a study prepared for the Defense Security Cooperation University, Washington, DC.

maritime players. The article is a case study – an analysis of naval episodes used during the ‘special operation’ against Ukraine. The main methods used in the research process are: theoretical methods in the form of a case study, analysis of documents and scientific literature, system analysis, and an empirical method in the form of data analysis.

The purpose of the study is to show the essential elements of the naval operations conducted as part of the ‘special operation’ against Ukraine, and to identify its essential features and transformations in the use of combat potential. The working hypothesis is the assertion that operations on maritime bodies of water served a supporting role to the land operation in the Russian concept, and their purpose was to dominate the Black Sea by preventing the conduct of commercial shipping and protective activities by the naval forces of Ukraine. The tactics used took the form of the so-called naval power policy of classical warfare. This thesis was verified through the application of research methods in the form of a case study, comparative analysis, and analyses of literature and documents. The main research limitation is the period of naval actions analysis, which was one year from the beginning of Russian aggression.

## Evolution of the role of the Azov and Black Seas in 2014–2022

The Sea of Azov, despite unfavourable shipping conditions,<sup>2</sup> has been an important freight route for Ukraine, especially for transporting metallurgical products and coal. Russian policy also viewed the basin as part of a sea-river transportation system, and after the annexation of Crimea, the strategic goal became to obtain a direct connection providing water and food supplies from the Krasnodar Region and, in prospect, Rostov-on-Don. The Black Sea basin, on the other hand, is an area that allows strategic control of the situation in Southeast Europe, limiting American and European expansion in Central Asia, maintaining control over Central Asian raw material resources, controlling the strategic situation in the Eastern and Southern Mediterranean, and engaging in economic and political processes in the Middle East. Traditionally, dominion over this body of water is considered an indicator of Russia’s political position, which means that breaking this monopoly in the northern part of this body of water is treated as a significant threat to state sovereignty.

The strategic role of the two seas during the ‘special operation’ is a consequence of the implementation – new in the context of the 2014 assumptions – of the plan

---

<sup>2</sup> It is a body of water with an average depth of 7 meters and it freezes over during the winter. During cold winters, ice covers most of the basin. During the autumn-winter period, storm-force winds threaten vessels engaged in navigation, which are mostly sea-river barges and vessels with a draft of up to 4 meters.

for their use. After the annexation of the Crimean Peninsula, the Russian minimum goal was to control the western coast of the Sea of Azov from Mariupol to the Crimean Peninsula, and the maximum – to take control of the economic centres of Eastern Ukraine.<sup>3</sup> The failure of this project led to a back-up option in the form of building a bridge across the Kerch Strait and investing in energy infrastructure in Crimea. However, this did not mean abandoning plans to gain full control of the Sea of Azov, this time because of the potential to control a significant portion of Ukraine's trade in goods, especially since it included a key volume of goods for the country's economy (metallurgical products and agricultural crops). On the other hand, with regard to the Black Sea basin, the primary goal was to obtain shipping capacity to the Mediterranean, which was achieved through the creation of political and economic relations with Turkey and, on occasion, the approval of Chinese activity in the expansion of transport routes in the region. On the other hand, attempts to gain the ability to control shipping in these waters and the sanctioning of the new arrangement of Exclusive Economic Zones (EEZs) resulting from the annexation of the Crimean Peninsula should be considered secondary goals until 2022. With regard to the former goal, a special role has been assigned to shipping routes leading to the ports of Odessa and Azov's Mariupol, while with regard to the latter – to the basins at the bottom of which oil deposits have been identified (including the southwestern part of Ukraine's sea basins).<sup>4</sup>

With the commencement of the 'special operation' against Ukraine, these goals became the priority for Russian naval operations. This is because it had been recognized that Ukraine's export dependence could be used to undermine the country's defence potential, and that preventing shipping was the simplest means of achieving this goal. In the course of military operations, on the other hand, it became apparent that through the shipping routes along the western coasts of the Black Sea it was possible to deliver aid to the Ukrainian state. These conditions made it necessary to effectively block the operation of Ukrainian ports in the north-western part of the Black Sea, but without the use of a classic naval blockade<sup>5</sup> or the so-called 'exclusion zones' (*security zones* with the right to control commercial vessels and those on state service and the *forbidden zone*). Nor was it decided to carry out an air strike or tactical naval landing on Odessa as was done in the port of Poti. This was due to both an assessment of the

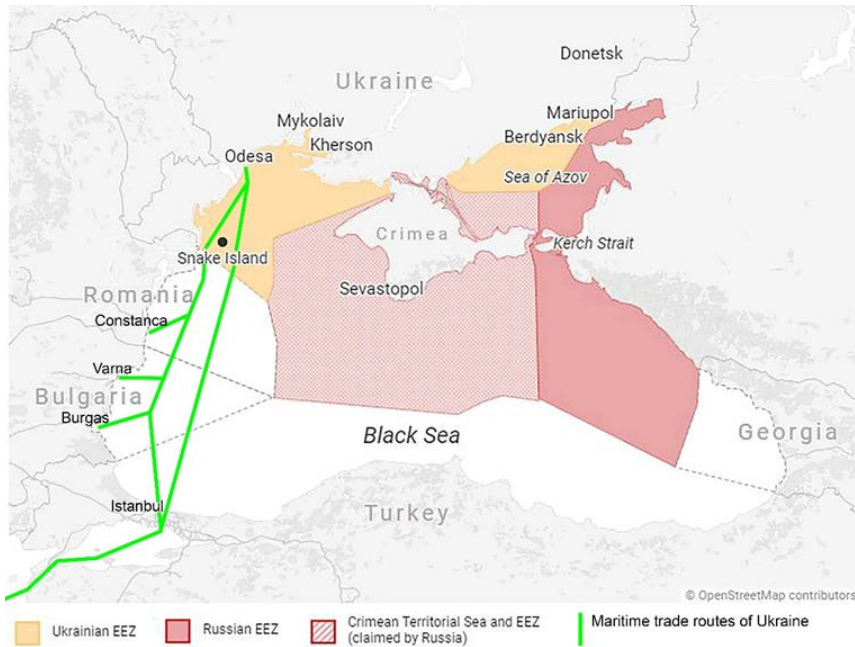
<sup>3</sup> P. Mickiewicz, *Obszar Czarnomorski i Morze Śródziemne w polityce Rosji*, „Rocznik Bezpieczeństwa Międzynarodowego” 2016, vol. 10, no. 1, pp. 67–81, <https://doi.org/10.34862/rbm.2016.1.5>.

<sup>4</sup> Idem, *Świadectwo początku upadku imperium? Doktryna Morska z 31.07.2022 r. jako strategia operacyjna Federacji Rosyjskiej po ukraińskim upokorzeniu*, „Colloquium” 2022, vol. 14, no. 3 (47), pp. 73–94, <https://doi.org/10.34813/23coll2022>.

<sup>5</sup> It can be used when the attacked state uses it for defensive purposes, or it is applicable in an operation to stabilize international order. See M. Ilnicki, A. Makowski, S. Pejas, „*Wojna minowa na morzu*”, Wydawnictwo Adam Marszałek, Toruń 1998, pp. 115–117, 157–163.

Ukrainian defence potential deployed in the region and the size of the Odessa agglomeration itself, which effectively nullified the possibility of carrying out a tactical landing. Such an operation would have to be part of a military operation aimed at the southern areas of Ukraine. A naval blockade, on the other hand, would involve open sea areas also used by NATO states. Both of these factors caused the Black Sea warfare to take on the formula of military episodes and an effective naval mining operation.

Figure 1. Exclusive Economic Zones in the Black Sea, maritime trade routes of Ukraine and strategic location of Snake Island – status as of 2022



Source: the Authors' own elaboration on the basis of A. Colibășanu, A. Crowther, J. Hickman, G. Scutaru, *The Strategic Importance of Snake Island*, The Center for European Policy Analysis, 27 September 2022, <https://cepa.org/comprehensive-reports/the-strategic-importance-of-snake-island/> [accessed: 07 February 2023].

## Black Sea warfare from February 2022 to February 2023

Russia's 'special operation' against Ukraine began around 5:00 a.m. local time on 24 February 2022, with a massive Russian air and missile strike. The attacks were carried out from the territory of Belarus, along the entire eastern Russian-Ukrainian border and from the Crimean Peninsula.<sup>6</sup> In the Russian-Ukrainian war, the Rus-

<sup>6</sup> The first wave of Russian strikes used Su-24M and Su-34 strike aircraft, escorted by fighters – including MiG-29/35, Su-27, Su-35. Strategic bombers – Tu-95, Tu-22M3, Tu-160 – which carried cruise missiles (mainly Ch-31P and Ch-101) were also dispatched.

sian Black Sea Fleet was to play a key role because of its, at least theoretical, combat potential. A few months before the start of hostilities, this component had been reinforced with tactical compounds, troops, and subunits, drawn from the 49<sup>th</sup> Combined Arms Army and 58<sup>th</sup> Combined Arms Army, as well as air and anti-aircraft units of the Air and Space Forces mainly from the 14<sup>th</sup> Air Force and Air Defence Army.<sup>7</sup> The above-mentioned operational compounds were under the command of the Southern Military District.

Table 1. Comparison of general strength of the two adversary navies as of the beginning of 2022

Equipment by type	Ukrainian Navy	Russian Black Sea Fleet
Main naval assets		
Tactical submarines	0	6
Principal surface combatants	1	6
Patrol & coastal combatants	12	36
Mine warfare & mine countermeasures	1	10
Amphibious	2	10
Logistics & support	8	15
Naval aviation/aviation		
Fixed-wing aircraft	4	c. 300–350*
Helicopters	16	c. 80*
Air defence (missile systems only)		
SAM Systems	c. 70–72**	c. 160–200*
Coastal defence (missile systems only)		
AShM Systems	c. 1–4	c. 70–90

\* Together with the hardware of the Air and Space Forces. \*\* SAM systems from the Ukrainian Air Force deployed in the area of ports and naval bases (Note: In 2022, the Ukrainian Navy did not and still does not have, as of February 2023, organic SAM systems, as a result of the adopted organizational structure).

Source: the Authors' own elaboration.

As can be seen from the above compilation, Ukraine was able to counter such great potential with a very modest force of its navy.<sup>8</sup> This has had a significant impact on the shape and nature of the ongoing struggle. Analysing the actions of the Russian naval forces from the perspective of one year since the outbreak of the war, it can be deduced that the following tasks were most likely to be set:

- establishing an effective naval blockade of the Ukrainian coast and ports, using all available anti-access potential (naval forces, aviation, coastal defence troops);

<sup>7</sup> M. Cielma, *Wojna w Europie – agresja na Ukrainę*, „Nowa Technika Wojskowa” 2022, No. 3, pp. 6–12; M. Glajzer, *Lotnicze i morskie aspekty agresji na Ukrainę. Część I*, „Nowa Technika Wojskowa” 2022, no. 3, pp. 13–19.

<sup>8</sup> *Ibidem*.

- providing support for the operations carried out by the air-land component by conducting coastal shelling and performing tactical naval landings (Snake Island was considered a target of strategic importance);
- conducting activities within the framework of a strategic operation to destroy Ukraine's critical and military infrastructure using saturation missile strikes.

The Black Sea Fleet entered combat operations in the Black Sea area with the launch of 'special operation'. In view of the weakness of Ukraine and an almost complete lack of counteraction on their part, control of the shipping lanes around the Crimean Peninsula was quickly and efficiently taken.<sup>9</sup> The aim of these actions was to block key sea routes for Ukraine, primarily to Odessa.<sup>10</sup> In practice, this prevented the export of Ukrainian agricultural crops and metallurgical products.<sup>11</sup> These actions should be regarded as the establishment – in violation of the Law of the Sea – of a maritime blockade. The operation involved both ships and supporting naval aviation, and coastal defence assets. Naval mines were also used, although it should be stressed that such operations were conducted by both sides in this conflict. Through their use, the Russians attempted to blockade the Black Sea ports.<sup>12</sup> The Ukrainian Navy lay mines in the approaches to ports and beaches to protect the coast from sea landing. The Black Sea mine operation should be considered a success from an operational point of view, as in the first weeks of the war, about 100 ships were stranded in ports along with about 1,500 sailors.<sup>13</sup> On the

<sup>9</sup> B.J. Armstrong, *The Russo-Ukrainian War at Sea: Retrospect and Prospect*, Texas National Security Review – War on the Rocks, 21 April 2022, <https://warontherocks.com/2022/04/the-russo-ukrainian-war-at-sea-retrospect-and-prospect/> [accessed: 06 February 2023].

<sup>10</sup> K. Ellison, *Battle on The Black Sea: Maritime Implications of The Russo-Ukrainian War*, Currents: A Student Blog, School of Maritime and Environmental Affairs, University of Washington, 06 June 2022, <https://smea.uw.edu/currents/battle-on-the-black-sea-maritime-implications-of-the-russo-ukrainian-war/> [accessed: 06 February 2023].

<sup>11</sup> Ukraine and Russia export nearly 30% of the world's wheat supply. Although the reported figures vary to some extent, it can be assumed through their analysis that Ukraine produces about 20% of the world's supply of high-quality wheat and 7% of all wheat. The World Food Programme buys half of its wheat supply from Ukraine. It has been estimated that a major disruption of supply chains could lead to a humanitarian disaster. According to the United Nations Conference on Trade and Development (UNCTAD), the countries most likely to be affected by the decline in Russian and Ukrainian grain exports are in Africa. 100% of Somalia's and Benin's wheat imports come from Ukrainian and Russian sources. Egypt, Sudan, the Democratic Republic of Congo, Senegal, and Tanzania import more than 60% of their wheat from the same sources. *On the trail of Ukrainian grain*, Lloyd's List Intelligence, <https://www.lloydslistintelligence.com/knowledge-hub/data-storytelling/on-the-trail-of-ukrainian-grain> [accessed: 07 February 2023].

<sup>12</sup> M. Glajzer, *Lotnicze i morskie aspekty agresji na Ukrainę. Część II*, „Nowa Technika Wojskowa” 2022, no. 4, pp. 14–19; B.J. Armstrong, *op. cit.*

<sup>13</sup> In addition, dozens of ships were also located in the roadsteads of Ukrainian ports. K. Ellison, *op. cit.*

other hand, pointing out the illegality of the introduced naval blockade, it should be emphasized that it had not been formally announced, the ships enforcing the naval ban initially did not broadcast appropriate warnings, and their warning shots repeatedly hit civilian vessels of various shipowners.<sup>14</sup>

Indicating the limited possibilities of carrying out tactical landings in the Black Sea and the abandonment of their disembarkation in the Sea of Azov, it is important to emphasize the role of the sham landing operations that were undertaken during 'special operation' until mid-April.

### Strategic dimension of maritime activities between 24 February 2022 and 04 July 2022

As already mentioned, the naval activities of the 'special operation' were in support of the land operation. Nevertheless, three naval episodes played an important role in the overall Russian operation as well as Ukraine's defence operations, namely:

- the battle for control of Snake Island,
- missile shelling of naval targets, carried out by the Ukrainian forces,
- naval minelaying actions.

Figure 2. Approximate distance of Snake Island from selected significant Black Sea locations shown in nautical miles and kilometers



Source: the Authors' own elaboration on the basis of A. Colibășanu, A. Crowther, J. Hickman, G. Scutaru, *op. cit.*

<sup>14</sup> These began to be broadcast only in late February – a few days after the start of hostilities. *Ibidem*; J. Foggo, B. Mainardi, *Boiling the Frog – Russia's Black Sea Aggression Part II, the War*, The Center for European Policy Analysis, 06 May 2022, <https://cepa.org/article/boiling-the-frog-russias-black-sea-aggression-part-ii-the-war/> [accessed: 07 February 2023].

## Russian landing on Snake Island

As part of the Black Sea Fleet-led offensive, on 24 February, the Black Sea Fleet's flagship, the Project 1164 missile cruiser *Moskva*, the Project 22160 patrol ship *Vasily Bykov* and the Project 18280 intelligence-gathering ship *Yuri Ivanov*, headed toward Ukraine's Snake Island.<sup>15</sup> In the early afternoon, Russian ships began shelling the Ukrainian outpost. The Ukrainians responded to the Russian demand for surrender with a firm refusal, 'instructing' – to put it mildly – the Russian ships 'to move away.' Eventually, after several hours of shelling, the Ukrainians capitulated in the evening, and a small subdivision of the Russian Naval Infantry landed on the island and took them prisoner. On the captured island, the Russians deployed their forces. From a military point of view, the deployment of surveillance equipment, airborne reconnaissance systems, anti-aircraft and anti-ship systems makes it possible to conduct operations covering the entire north-western Black Sea region, including the coasts of Bulgaria, Romania and the Danube estuary, connecting Europe with the Black Sea – a total area of about 600 km<sup>2</sup>. This is of particular importance, given that the Romanian port of Sulina served as an alternative shipping route for Ukrainian goods after Russia blockaded Odessa and other Ukrainian ports. Another issue to consider is that of the Dardanelles, controlled by Turkey under the 1936 Montreux Convention.<sup>16</sup> Equally important is the economic importance of the island. As already mentioned, it is located on an important navigation corridor connecting all Ukrainian, Romanian and Bulgarian ports from the Black Sea to the mouth of the Danube. According

<sup>15</sup> Snake Island has an area of just under 17 hectares and a shape resembling the letter X. A. Colibășanu, A. Crowther, J. Hickman, G. Scutaru, *op. cit.*; M. Glajzer, *Lotnicze i morskie aspekty... Część II*, *op. cit.*, p. 18; H. Mongilio, S. LaGrone, *UPDATED: Russian Navy Launches Amphibious Assault on Ukraine; Naval Infantry 30 Miles West of Mariupol*, USNI News, U.S. Naval Institute, 25 February 2022, <https://news.usni.org/2022/02/25/russian-navy-launches-amphibious-assault-on-ukraine> [accessed: 07 February 2023].

<sup>16</sup> On 28 February, the Turkish government decided to close the Black Sea straits to warships. Announcing the decision, Turkish Foreign Minister Mevlüt Çavuşoğlu publicly invoked Article 19 of the Convention, which states that in the event of a war in which Turkey is not one of the parties, ships of belligerent states may not pass through the straits except to return to bases, but ships of other states retain the right to use the straits. At the same time, M. Çavuşoğlu asked all other states not to try to send their ships into the Black Sea at that time. This was only a request or recommendation, but not a formal prohibition, as this would require invoking Article 21 of the Convention, giving Turkey the right to close the straits completely, but only in the event that Turkey deems itself in immediate danger of war breaking out on its territory. However, it should be stressed that this fact would be very difficult to justify. It is imperative to point out that for Ukraine, the closing of the straits has no real significance for the course of the war. In the face of Russian dominance on the sea and a well-functioning land supply route, bringing supplies by sea would be reasonably impossible without the risk of a military confrontation with the Russian Federation. R. Pedrozo, *Closing the Turkish Straits in Times of War*, "International Law Studies" 2022, vol. 99, pp. 517–520, <https://digital-commons.usnwc.edu/ilsvol99/iss1/19/> [accessed: 04 July 2023].



to experts, control of these routes is critical to Europe's security and prosperity in the event of a wider conflict with Russia. The island's economic importance is also influenced by its large deposits of natural gas, which were discovered in 2009 in both the Ukrainian and Romanian EEZs. Hence, from the point of view of the Russian Federation's interests, the possible annexation of the island would allow it to significantly expand its EEZ and gain control not only over shipping lanes but also over its rich natural gas deposits. This explains why Russian strategists, when planning the invasion of Ukraine, considered this small patch of land so important.<sup>17</sup>

Table 2. Russian military equipment and personnel deployed on Snake Island in 2022 during the occupation

Type	No.	Comments
9K330 Tor M2	1	SP SAM system
9K37 Buk M2	1	SP SAM system
9K22 Tunguska	1 (?)	SP SAM – missile and artillery system; based on the testimony of Ukrainian soldiers who spoke of a Russian anti-aircraft vehicle firing at them from a transport barge, located right next to the island, but not on the island itself
96K6 Pantsir S-1	4	SP SAM – missile and artillery system
9K51 BM-21 Grad	2	122 mm SP MRL
9K51M Tornado-G	2	122 mm SP MRL
AFV	1	Unidentified type (BMP-1 or BMP-2)
Military trucks	3	6x6 trucks
Diesel generators	2	Unidentified type
ISTAR	6	Designated by Ukrainian MoD as 'medium-size military objects.' These facilities were in general no larger than standard cargo containers and they were carefully disguised with camouflage nets. Probably elements of the Russian ISTAR systems (electro-optical and infrared intelligence, surveillance, target acquisition, and reconnaissance systems).
Soldiers	c. 60–90	Including at least naval infantry platoon

Source: the Authors' own elaboration.

The above summary supports the thesis that the Russian side clearly wanted to build the Anti-Access/Area Denial (A2/AD) capabilities. However, these plans were thwarted by the Ukrainian side.<sup>18</sup> From the moment the Russian occupation of the island began, the Supreme Command of the Ukrainian Armed Forces was planning to recapture Snake Island, but initially did not have the necessary resources to carry out this endeavour. The Black Sea Fleet was *de facto* the master at sea. An additional important asset of Russian forces was the ability to operate under the cover of

<sup>17</sup> A. Colibășanu, A. Crowther, J. Hickman, G. Scutaru, *op. cit.*

<sup>18</sup> *Ibidem.*

its own aviation and 'anti-aircraft umbrella' from Crimea. It was complemented by the flagship of the Black Sea Fleet, the aforementioned Project 1164 *Moskva* missile cruiser, which had a powerful anti-aircraft, missile, and artillery armament.

### The importance of missile fire on naval targets – the case of the cruiser *Moskva*

The guarantee of Russian control of Snake Island was the constant presence in its area of the cruiser *Moskva*, which simultaneously carried out the task of controlling the basin and identifying and tracking of aircraft (the so-called PIRAZ function – Positive Identification Radar Advisory Zone). Thus, the cruiser's destruction became an important operational objective for Ukrainian forces. It was achieved – according to the Ukrainian sources, which should be strongly emphasized – probably as a result of a combined attack by the Bayraktar TB2-type drones and a strike missile strike from Ukrainian territory.<sup>19</sup> The Russians attempted to salvage and tow their badly damaged ship to Sevastopol, but without success. It eventually sank on 14 April. The operational success of Ukrainian forces resulted in a change in Russian naval activity. Russian ships began manoeuvring at a considerable distance from the Ukrainian coast due to possible Ukrainian ASM threat. As a consequence, naval activity was mainly limited to skirmishes between small patrol vessels, mutual attacks between combat drones and kamikaze drones,<sup>20</sup> and aerial attacks by aircraft and helicopters. More than a dozen smaller vessels of both sides were sunk or damaged in these battles. However, the Black Sea Fleet was still able to control the sea lanes leading to Ukrainian ports.

---

<sup>19</sup> According to the Ukrainian side, the attack was carried out in such a way that several Bayraktar TB2-type drones absorbed or dispersed (in an unspecified way) the Russian cruiser's air defense systems, after which it received two hits with R-360 Neptune-type anti-ship missiles of Ukrainian production launched from land. It should be noted that Roman Romaniuk presents the story of the sinking of the *Moskva* as officially reported by the Ukrainian Defence Ministry. The Russian side claimed that there was an unfortunate accident on the ship, but the actual events contradict this position because after 14 April 2022, Russian ships moved away dozens of nautical miles from the Ukrainian coast, indicating fear of further similar attacks and thus confirming the credibility of the version presented by the Ukrainian side. R. Romaniuk, *Battle for Zmiinyi (Snake) Island. Reconstructing the heroic tale of Ukraine losing and reclaiming the critical island*, *Ukrainska Pravda*, 07 November 2022, <https://www.pravda.com.ua/eng/articles/2022/11/7/7375232/> [accessed: 07 February 2023]; J. Foggo, B. Mainardi, *op. cit.*; Ch. Pleasance, *Ukraine claims it DID take out Putin's sitting duck naval flagship: Kyiv says it hit Moskva cruiser with missile after bungling Russian admirals let it sail around Black Sea within range amid claims of 'hundreds' of casualties onboard*, "Daily Mail", 14 April 2022, <https://www.dailymail.co.uk/news/article-10718499/Ukraine-war-Kyiv-claims-successful-hit-Russian-warship.html> [accessed: 09 February 2023]; T. Ozberk, *Analysis: Chain Of Negligence Caused The Loss Of The Moskva Cruiser*, *Naval News*, 17 April 2022, <https://www.navalnews.com/naval-news/2022/04/analysis-chain-of-negligence-caused-the-loss-of-the-moskva-cruiser/> [accessed: 09 February 2023].

<sup>20</sup> The use of ZALA Lancet-3 kamikaze drones by the Russians has been noticed.

## Ukrainian attempts to recapture Snake Island and attacks on Russian port infrastructure

The sinking of the cruiser *Moskva* was not only a significant reduction in the combat capability of the Black Sea Fleet, but also changed the operational situation around the south-western coast of Ukraine. It became possible to regain control of Snake Island, which was decided on practically as soon as information about the loss of combat capability of the Russian cruiser was confirmed. The earlier fiasco of the landing that the Ukrainian side attempted (according to R. Romaniuk) on the night of 8–9 May<sup>21</sup> resulted in the operation being carried out not in the formula of a landing but of a conducted airstrike against both the military infrastructure deployed in the island's area and the Black Sea Fleet ships trying to provide a defensive umbrella over the island. Air forces, including the Bayraktar TB2 drones, were mainly used to carry out those attacks. In May alone, Ukrainian forces carried out more than a dozen air strikes involving Su-27 and Su-24 aircraft.<sup>22</sup> The most effective actions of the Ukrainian Air Force in this operation were considered to be the following:

- the 2 May 2022 attack which resulted in Ukrainian drones succeeding in sinking 2 Russian Project 03160 Raptor light patrol ships and damaging several targets on Snake Island;<sup>23</sup>
- damage to the Elbrus-type logistics support ship *Vsevolod Bobrov* (12 May 2022);
- sinking of the Project 22870 pusher *Vasily Bekh* by using Harpoon anti-ship missile systems (17 June 2022).<sup>24</sup>

Ukrainian attacks intensified – for example, on 27 June alone, the island became the target of as many as 10 air strikes. On 30 June, Ukrainian artillery launched an intense artillery barrage on Snake Island. The massive artillery fire, concentrated

<sup>21</sup> At that time, 4 Mi-24 and 4 Mi-8 helicopters attempted to attack the island and disembark on it. Ukrainian Hiruzha-M armored gunboats were also in the vicinity of the island. A Mi-14 naval aviation helicopter, ready to pick up any survivors, followed them. Despite the surprise, Russian soldiers managed to organize a defence and repel the attack. R. Romaniuk, *op. cit.*

<sup>22</sup> Ukrainian Su-27 multirole aircraft and Su-24 bombers most often made strikes in pairs.

<sup>23</sup> The effectiveness of the attack was confirmed by the available audio-visual materials. However, it should be noted that in the course of the fighting in the area of the island, at least several Ukrainian drones were shot down, including 3 combat TB2s.

<sup>24</sup> H.I. Sutton, *May 2, Two Raptor Assault Boats Near Snake Island*, Naval News, 04 May 2022, <https://www.navalnews.com/naval-news/2022/05/russian-navys-5-significant-losses-in-the-ukraine-war-so-far/#prettyPhoto> [accessed: 08 February 2023]; X. Vavasour, *Watch Ukrainian TB2 Striking Two Russian Raptor Assault Boats*, Naval News, 02 May 2022, <https://www.navalnews.com/naval-news/2022/05/watch-ukrainian-tb2-striking-two-russian-raptor-assault-boats/> [accessed: 08 February 2023].

on such a small area (just around 17 hectares), caused enormous damage.<sup>25</sup> As a result of these and the low effectiveness of Russian attacks on Ukraine's shore-based missile systems,<sup>26</sup> the Black Sea Fleet command decided to evacuate the garrison from Snake Island. Ukrainian soldiers then arrived on the island. On 4 July, the liberation of the island from Russian occupation was officially announced.

In addition to the shelling of Snake Island, after obtaining arms supplies from the countries supporting them, Ukrainian forces undertook actions that can be described as *guerre de razzia* – naval non-linear (asymmetrical) warfare. Its primary objective was to force the enemy to disperse its forces.<sup>27</sup> Examples of such actions include Ukrainian kamikaze drone attacks on Russian naval bases. In the 29 October 2022 attack, 7 small USVs (unmanned surface vehicles) attacked the Russian naval base in Sevastopol, efficiently overcoming various defences of that base along the way. As a result of the attack, a Project 11356R frigate and a Project 266M minesweeper were severely damaged.<sup>28</sup> This forced the Russians to deploy some forces to protect their bases, but it did not change the overall strategic situation in the Black Sea.

## Applications

Russian naval activities in the 'special operation' consisted of two forms of activity. The first was the so-called naval policy of force in two dimensions, i.e., coercive

<sup>25</sup> On 1 July, the island was bombed by 2 Russian Su-30 multirole aircraft. The attack, carried out with phosphorus (incendiary) bombs, was aimed at destroying the equipment left on Snake Island and not evacuated in time.

<sup>26</sup> The Russians responded with airstrikes on Ukrainian rocket launcher and artillery positions in the Odessa area, carried out mainly by Su-35 and Su-30 aircraft, but this did not stop the Ukrainian attacks.

<sup>27</sup> The term is of French origin. In simple terms, it means *raid warfare*, a style of warfare in which the main objective of the operation is not to capture or destroy the enemy's trade, as in *guerre de course*, or to defeat their fleet, as in *guerre d'escadre*, but to invade their coast and colonies. The strategic objective is very similar to that in *guerre de course*. It is to capture or destroy the enemy's resources and force them to divide their forces to defend their possessions. The difference, however, is that *guerre de razzia* does not include economic gain among its main motives. In this case, all that matters is the end result. This was the tactic of warfare used, for example, by the US Navy against the Royal Navy during the American War of Independence 1775–1783 and the US-British War of 1812. J.C. Bradford, *John Paul Jones and Guerre de Razzia*, "The Northern Mariner" 2003, vol. 13, no. 4, pp. 1–15, <https://doi.org/10.25071/2561-5467.562>; L.A. Norton, *Asymmetric Warfare, Early American Style. Audacious captains employed a disruptive maritime strategy to rattle the British public during the Revolution and the War of 1812*, "Naval History Magazine" 2017, vol. 31, no 1, <https://www.usni.org/magazines/naval-history-magazine/2017/february/asymmetric-warfare-early-american-style> [accessed: 24 February 2023].

<sup>28</sup> H.I. Sutton, *Why Ukraine's Remarkable Attack on Sevastopol Will Go Down In History*, Naval News, 17 November 2022, <https://www.navalnews.com/naval-news/2022/11/why-ukraines-remarkable-attack-on-sevastopol-will-go-down-in-history/> [accessed: 24 February 2023].

diplomacy (naval coercion) and persuasion. These activities pertained to the shipping system and Ukraine itself as a state active at sea. The second activity, also directed at Ukraine, were classical military actions which should be directly regarded as strictly warlike in nature. Both the shelling of facilities on Ukrainian territory and the seizure of Snake Island should be considered an act of aggression, i.e., a violation of Article 2 of the UN Charter. Russia's naval actions achieved two goals: restrictions in navigation by merchant ships and practical stoppage of naval forces of Ukraine in its own ports. The analysis of naval actions confirmed that, in coordinated attacks, land-based anti-ship cruise missiles can defeat advanced warship defences. It highlighted the importance of training crews and designing tough, hit-resistant vessels equipped with appropriate defensive systems and armaments. What is more, the naval operations discussed showed that long-range artillery and missiles designed to fire on land targets can also be useful in a naval scenario, and naval mines, which have been in use for more than 100 years, can still pose a serious threat. Geography still matters in planning naval operations, as there are regions of strategic importance, the control of which brings benefits and allows to control shipping lanes (the Snake Island case). It should also be emphasised that control of the sea, or the denial of the use of the sea, now requires the ability to completely claim the space above, on and below the sea, which calls for additional forces and resources, as well as appropriate long-term planning for the development of naval forces. In addition, the war has confirmed the importance of unmanned naval platforms – both surface (USV) and underwater (UUV) – and their ever-increasing role, which should be kept in mind. The case is similar for unmanned aerial systems (UAVs) of various types. Their roles in the conflict in question are equally important.<sup>29</sup>

It is crucial to keep in mind that any fleet can hide its actual status. 'On paper,' the Black Sea Fleet represented great power, but in reality, proved essentially incapable of conducting operations on a strategic scale. This was influenced not only by erroneous concepts of the use of naval forces, but also by corruption scandals, which proved extremely damaging in the field of shipbuilding, maintenance, and repair. The sheer pace and the intensity of high-profile naval operations which cause significant wear and tear on ships, the exhaustion of their crews, not to mention rapidly melting stocks of spare parts and armaments, also affected the Russians' actions. The issue of crew (training, morale, trust etc.), or the so-called 'soft factor,' underestimated in Russia, is particularly important because this factor is often avoided with various theoretical statements. It is important to systematically improve the time of putting crews on standby, thus enhancing communication and emergency

---

<sup>29</sup> Moreover, inferring from an analysis of the increasing use of unmanned platforms, it can be assumed that unmanned ground systems (UGVs) will also play an important role in future conflicts.

response systems. However, proper coordination with other types of armed forces is the most important. This is an important lesson for the naval forces of other countries as well.

## References

- Armstrong B.J., *The Russo-Ukrainian War at Sea: Retrospect and Prospect*, Texas National Security Review – War on the Rocks, 21 April 2022, <https://warontherocks.com/2022/04/the-russo-ukrainian-war-at-sea-retrospect-and-prospect/> [accessed: 06 February 2023].
- Benecki P., *Photos: First Images of the Lost Russian Cruiser Moskva Emerge*, The Maritime Executive, 17 April 2022, <https://maritime-executive.com/article/photos-first-images-of-the-lost-russian-cruiser-moskva-emerge> [accessed: 09 February 2023].
- Bradford J.C., *John Paul Jones and Guerre de Razzia*, “The Northern Mariner” 2003, vol. 13, no. 4, pp. 1–15, <https://doi.org/10.25071/2561-5467.562>.
- Cielma M., *Wojna w Europie – agresja na Ukrainę*, „Nowa Technika Wojskowa” 2022, no. 3, pp. 6–12.
- Colibășanu A., Crowther A., Hickman J., Scutaru G., *The Strategic Importance of Snake Island*, The Center for European Policy Analysis, 27 September 2022, <https://cepa.org/comprehensive-reports/the-strategic-importance-of-snake-island/> [accessed: 07 February 2023].
- Ellison K., *Battle on The Black Sea: Maritime Implications of The Russo-Ukrainian War*, Currents: A Student Blog, School of Maritime and Environmental Affairs, University of Washington, 06 June 2022, <https://smea.uw.edu/currents/battle-on-the-black-sea-maritime-implications-of-the-russo-ukrainian-war/> [accessed: 06 February 2023].
- Fiszler M., Fiszler J., *Wojna w Ukrainie. Od napaści do kontrofensywy*, Wydawnictwo Polityka, Warszawa 2022.
- Foggo J., Mainardi B., *Boiling the Frog – Russia’s Black Sea Aggression Part II, the War*, The Center for European Policy Analysis, 06 May 2022, <https://cepa.org/article/boiling-the-frog-russia-black-sea-aggression-part-ii-the-war/> [accessed: 07 February 2023].
- Gatopoulos A., *The Battle for the Black Sea*, Al Jazeera, 28 June 2022, <https://www.aljazeera.com/features/2022/6/28/how-russia-and-ukraine-are-vying-to-control-vital-grain-routes> [accessed: 08 February 2023].
- Głajzer M., *Lotnicze i morskie aspekty agresji na Ukrainę. Część I*, „Nowa Technika Wojskowa” 2022, no. 3, pp. 13–19.
- Głajzer M., *Lotnicze i morskie aspekty agresji na Ukrainę. Część II*, „Nowa Technika Wojskowa” 2022, no. 4, pp. 14–19.
- Ilnicki M., Makowski A., Pejas S., *„Wojna minowa” na morzu*, Wydawnictwo Adam Marszałek, Toruń 1998.
- Mickiewicz P., *Obszar Czarnomorski i Morze Śródziemne w polityce Rosji*, „Rocznik Bezpieczeństwa Międzynarodowego” 2016, vol. 10, no. 1, pp. 67–81, <https://doi.org/10.34862/rbm.2016.1.5>.
- Mickiewicz P., *Świadectwo początku upadku imperium? Doktryna Morska z 31.07.2022 r. jako strategia operacyjna Federacji Rosyjskiej po ukraińskim upokorzeniu*, „Colloquium” 2022, vol. 14, no. 3 (47), pp. 73–94, <https://doi.org/10.34813/23coll2022>.
- Mongilio H., LaGrone S., *UPDATED: Russian Navy Launches Amphibious Assault on Ukraine; Naval Infantry 30 Miles West of Mariupol*, USNI News, U.S. Naval Institute, 25 February 2022, <https://news.usni.org/2022/02/25/russian-navy-launches-amphibious-assault-on-ukraine> [accessed: 07 February 2023].

- Neptune Anti-ship cruise missile*, Military-Today.com, <http://www.military-today.com/missiles/neptun.htm> [accessed: 08 February 2023].
- Norton L.A., *Asymmetric Warfare, Early American Style. Audacious captains employed a disruptive maritime strategy to rattle the British public during the Revolution and the War of 1812*, "Naval History Magazine" 2017, vol. 31, no 1, <https://www.usni.org/magazines/naval-history-magazine/2017/february/asymmetric-warfare-early-american-style> [accessed: 24 February 2023].
- On the trail of Ukrainian grain*, Lloyd's List Intelligence, <https://www.lloydslistintelligence.com/knowledge-hub/data-storytelling/on-the-trail-of-ukrainian-grain> [accessed: 07 February 2023].
- Ozberk T., *Analysis: Chain of Negligence Caused The Loss Of The Moskva Cruiser*, Naval News, 17 April 2022, <https://www.navalnews.com/naval-news/2022/04/analysis-chain-of-negligence-caused-the-loss-of-the-moskva-cruiser/> [accessed: 09 February 2023].
- Pedrozo R., *Closing the Turkish Straits in Times of War*, "International Law Studies" 2022, vol. 99, pp. 517–520, <https://digital-commons.usnwc.edu/ils/vol99/iss1/19/> [accessed: 04 July 2023].
- Pleasance Ch., *Ukraine claims it DID take out Putin's sitting duck naval flagship: Kyiv says it hit Moskva cruiser with missile after bungling Russian admirals let it sail around Black Sea within range amid claims of 'hundreds' of casualties onboard*, "Daily Mail", 14 April 2022, <https://www.dailymail.co.uk/news/article-10718499/Ukraine-war-Kyiv-claims-successful-hit-Russian-warship.html> [accessed: 09 February 2023].
- Romaniuk R., *Battle for Zmiinyi (Snake) Island. Reconstructing the heroic tale of Ukraine losing and reclaiming the critical island*, Ukrainska Pravda, 07 November 2022, <https://www.pravda.com.ua/eng/articles/2022/11/7/7375232/> [accessed: 07 February 2023].
- Sutton H.I., *May 2, Two Raptor Assault Boats Near Snake Island*, Naval News, 04 May 2022, <https://www.navalnews.com/naval-news/2022/05/russian-navys-5-significant-losses-in-the-ukraine-war-so-far/#prettyPhoto> [accessed: 08 February 2023].
- Sutton H.I., *Why Ukraine's Remarkable Attack on Sevastopol Will Go Down In History*, Naval News, 17 November 2022, <https://www.navalnews.com/naval-news/2022/11/why-ukraines-remarkable-attack-on-sevastopol-will-go-down-in-history/> [accessed: 24 February 2023].
- Vavasseur X., *Watch Ukrainian TB2 Striking Two Russian Raptor Assault Boats*, Naval News, 02 May 2022, <https://www.navalnews.com/naval-news/2022/05/watch-ukrainian-tb2-striking-two-russian-raptor-assault-boats/> [accessed: 08 February 2023].

## *Maritime episodes of the Russian 'special operation' against Ukraine*

### *Abstract*

Maritime operations during Russia's 'special operation' against Ukraine were complementary to land operations. However, they played an important role in the process of isolating the country and limiting its export capabilities. Pointing to selected naval episodes and showing their political, operational, and tactical context, we indicated several features demonstrating the new dimension of naval force operations and the possibility of using missile armament and air weapons to effectively counter surface ship combat teams. The purpose of the study is to show the essential elements of the naval operations conducted as part of the 'special operation' against Ukraine, to identify its essential features and transformations in the use of combat potential.

Keywords: naval forces, naval operations, naval force capability, Ukraine conflict