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CHAPTER 5

GEOGRAPHIC FRAMEWORK OF RUSSIAN MARITIME OPERATIONS

“States that are more fortunate in the extent of their seaboard, and in physical conditions which facilitate the circulation of the life-blood of trade throughout their organization, owe at the least candor, if not sympathy, to the fetters under which Russia labors in her narrow sea-front, in her vast and difficult interior, and in a climate of extreme rigor.”¹⁵⁹

- Alfred Thayer Mahan, “The Problem of Asia and its Effect Upon International Policies,” 1900

“The situation of Russia in relation to the sea is unfavorable in an almost grotesque manner.”¹⁶⁰

- Edward Wegener, “The Soviet Naval Offensive,” 1975

“If you know a country’s geography, you can understand and predict its foreign policy.”

— Napoleon Bonaparte¹⁶¹

Over seventy years before Wegener wrote his theory on the Soviet naval offensive, American naval strategist Alfred Thayer Mahan also wrote of the importance and challenge that Russia posed to not just the United States, but the world. A decade after publishing “The Impact of Sea Power Upon History,” he penned “The Problem of Asia and its Effect Upon International Policies.” Mahan spends a great deal of the book discussing the problem with Russia, not as an

¹⁵⁹ Alfred Thayer Mahan, *The Problem of Asia and Its Effect upon International Policies* (Boston, MA: Harper and Brothers, 1900), 45.

¹⁶⁰ Edward Wegener, *The Soviet Naval Offensive* (Annapolis, MD: U.S. Naval Institute, 1975), 17.

¹⁶¹ Muhammad Saad Ur Rehman, “Is Geography the Primary Determinant of Foreign Policy?,” *The Express Tribune*, December 19, 2019, <https://tribune.com.pk/article/92091/is-geography-the-primary-determinant-of-foreign-policy>.

Asian power, but one of the two European powers (the other being England) “most solidly settled on Asiatic soil.”¹⁶²

The distribution of the Russian dominion and the concentration of its mass, already alluded to, combined with the fact of its irremediable remoteness from an open sea, render inevitable its dependence upon land routes for the bulk of its intercourse with the debatable ground of Asia. Natural conditions are so hopelessly adverse, that it is difficult to see what possible political extension can seriously modify them. By this is meant that, wherever Russia now touches the sea, or can shortly touch it, the points are so remote from the heart of her territory that access to it from them must, after all, be chiefly by land.¹⁶³

In pointing out the further difficulties that Russia faced due to strategic chokepoints, Mahan sounds more like Corbett and Wegener:

They have the further disadvantage that they are upon enclosed seas, liable, therefore, to be definitively shut by a hostile power – land or sea, as the case may be. It is sufficient merely to glance at the Dardanelles and the approaches to the Baltic to see the force of this remark.¹⁶⁴

Had Germany appreciated this warning that Mahan delivered to Russia with regards to geographic constraints, they may have pursued a different naval strategy (hence Wegener’s comment that Germany had misread Mahan). For Russia’s part, in the one hundred and twenty years since Mahan penned “Asia,” the Russian Empire ended and was replaced with the Soviet Union, two world wars were fought, the atomic bomb was invented and used in wartime, the Soviet Union fell, and Russia invaded and annexed the Crimean Peninsula. While ideologies and technologies have come and gone, the geographical truisms outlined by Mahan and others have

¹⁶² Alfred Thayer Mahan, *The Problem of Asia and It's Effect upon International Policies* (Boston, MA: Harper and Brothers, 1900), 36.

¹⁶³ Ibid, 43.

¹⁶⁴ Ibid.

remained. “‘Geography, not history,’...has dominated Russian thinking” writes Robert Kaplan, quoting James H. Billington.¹⁶⁵

Mahan’s concerns over Russia’s “narrow sea-front,” “climate of extreme rigor,” and “enclosed seas, liable...to be definitively shut by a hostile power” are no less drivers of Russian foreign (and therefore naval) policy today than when he wrote about them a hundred twenty years ago. He would go on to predict that these factors would lead to an aggressive foreign policy:

...Russia is in a disadvantageous position for the accumulation of wealth; which is but another way of saying that she is deficient in means for advancing the welfare of her people... This being so, it is natural and proper that she should be dissatisfied, and dissatisfaction readily takes the form of aggression...”¹⁶⁶

As Mahan make clear, a nation’s history and its geography are strongly intertwined, and this is no more evident than in the history of the Russian state. Three primary geographic truths are apparent: Russia is a country of immense size, positioned far into the northern latitudes, constrained by maritime chokepoints. These facts are intertwined with historic and political truisms: Russia’s large area has made it impossible to defend from invading forces, while their strategic straits not impeded by ice are controlled by nations historically unfriendly to them. As Kaplan describes in “Revenge of Geography”:

Russia is the world’s preeminent land power, extending 170 degrees of longitude, almost halfway around the globe. Russia’s principal outlet to the sea is in the north, but that is blocked by Arctic ice many months of the year. Land powers are perennially insecure, as Mahan intimated. Without seas to protect them, they are forever dissatisfied and have to keep expanding or be conquered in turn themselves. This is especially true of the Russians, who flat expanse is almost bereft of natural borders and affords little protection.¹⁶⁷

¹⁶⁵ Robert D. Kaplan, *The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate*. New York: Random House, 2013, 159.

¹⁶⁶ Mahan, *Asia*, 43-44.

¹⁶⁷ Kaplan, 155.

Kaplan's geography-based understanding of what drives Russian national interest was echoed two years later by Tim Marshall in his 2015 book "Prisoners of Geography: Ten Maps That Explain Everything About the World." Like Kaplan, Marshall liberally mixes Russian history with Russian geography, the latter going a long way to explain the former. Although the book covers the entire globe, in the introduction of *Prisoners*, Marshall imagines Vladimir Putin praying to God, and asking:

"Why didn't you put some mountains in Ukraine." If God had built mountains in Ukraine, then the great expanse of the flatland that is the North European Plain would not be such encouraging territory from which to attack Russia repeatedly. As it is, Putin has no choice: he must at least attempt to control the flatlands to the west.¹⁶⁸

Marshall goes on to expound upon the problem of the Northern European Plain, described as a pizza-shaped wedge extending from France to the Urals. This description highlights the connection between a country's *land* geography and its *maritime* geography; the two cannot be separated:

The thin end of this wedge is Poland. Here, the vast North European Plain stretching from France to the Urals (which extend a thousand miles south to north, forming a natural boundary between Europe and Asia) is only three hundred miles wide. It runs from the Baltic Sea in the north to the Carpathian Mountains in the south...From a Russian perspective this is a double-edged sword. Poland represents a relatively narrow corridor into which Russia could drive its armed forces if necessary and thus prevent an enemy from advancing toward Moscow. But from this point the wedge begins to broaden; by the time you get to Russia's borders it is more than two thousand miles wide, and is flat all the way to Moscow and beyond. Even with a large army you would be hard-pressed to defend in strength along this line.¹⁶⁹

¹⁶⁸ Tim Marshall, *Prisoners of Geography: Ten Maps That Explain Everything about the World* (New York, NY: Scribner, 2016), 1.

¹⁶⁹ *Ibid*, 12-13.

This wedge-shaped Plain is not just a theoretical threat to the Russian psyche. It has indeed been used as an avenue of attack against the Russians over the past half-millennium:

In the past five hundred years they have been invaded several times from the west. The Poles came across the Northern European Plain in 1605, followed by the Swedes under Charles XII in 1708, the French under Napoleon in 1812, and the Germans – twice, in both world wars, in 1914 and 1941. Looking at it another way, if you count from Napoleon’s invasion of 1812, but this time include the Crimean War of 1853-1856 and two world wars up to 1945, then the Russians were fighting on average in or around the North European Plain once every thirty-three years.¹⁷⁰

The Northern European Plain is bounded to the north by the Baltic Sea, and to the south by the Black Sea. Both of these bodies of water are controlled by historical Russian adversaries via strategic choke points; escape to the north is blocked by ice, and distance, ice, and even greater enemies (historically-speaking) are located to their east. This insecurity sets the stage for a thousand years of naval development, which is reflected in the layout of their historic and current force disposition.

5.1 The Russian Federation Navy Disposition: Separated by Distance, Ice and Chokepoints

The preceding discussion on the geographic constraints of Russia explains the current makeup of Russia’s four naval fleets, one flotilla, and one squadron. The bulk of their maritime combat power is located in the Northern (Arctic) Fleet, the Black Sea Fleet, the Baltic Fleet (which includes a naval base in the Kaliningrad Oblast), and the Pacific Fleet. In addition to their main fleets, the Russian Federation Navy maintains a flotilla on the landlocked Caspian Sea, an enclosed sea shared with Iran, Azerbaijan, Kazakhstan, and Turkmenistan (the Caspian was the origination of the Russia’s first-ever employment of cruise missiles in wartime, as mentioned earlier). Finally, though a less permanent presence, the Russian Federation Navy has re-

¹⁷⁰ Ibid, 15.

established a naval squadron in the eastern Mediterranean, known during the Cold War as the 5th “Eskadra” (Fifth Squadron). Submarines deployed to the Mediterranean were the source of Russia’s second employment of cruise missiles in wartime.

Edward Wegener articulated the particular maritime geographic challenges facing the then-Soviet Navy, to a large extent still present today (if not worse):

The original settlement area of the Russian people had no border on the sea at all. At present, the U.S.S.R. has a coastline extending more than 43,000 km, i.e., almost 28,000 miles. But in spite of this colossal stretch, the country – in relation to the size of its territory – is poorly endowed with suitable coasts. More than 90 percent of the coastline is so encumbered with ice that shipping is impossible, or possible only for short periods of the year.

To this handicap is added a second, even more important one: Russian territory is accessible to seagoing traffic only at four points that are separated by vast distances. Two of these points are situated on inland seas – the Baltic Sea and the Black Sea – whose entrances are not in Soviet hands. The other two points, on the Arctic Sea and in the Far East, are separated from the former, and also from each other, by huge distances. It is thus very difficult in wartime to unite forces from one position with those of another, and even impossible in the face of an enemy who has mastery of the oceans...

...Separation of the four Soviet strategic positions and the four Soviet fleets from one another and generally their recessed locations in relation to the ocean are the basic features of Soviet naval strategy, as they were in the past. In a way, our discussion centers around whether and how the U.S.S.R. could – by armament or by advancing its position in the course of military or political expansion – overcome the disadvantages of its geographical situation under circumstances of global confrontation with Western sea power, an adversary with such obvious geographical advantages.¹⁷¹

The impact of this geographic “separation of the four Soviet strategic positions and the four Soviet fleets from one another” cannot be overstated – as in many situations, Russia’s vast size is its greatest strength and its greatest curse. The four touchpoints that Russia currently has with the sea – represented by their fleet headquarters at Severomorsk (Northern Fleet),

¹⁷¹ Edward Wegener, *The Soviet Naval Offensive* (Annapolis, MD: U.S. Naval Institute, 1975), 17-18.

Kaliningrad (Baltic Fleet), Novorossiysk (Black Sea Fleet), and Vladivostok (Pacific Fleet), are no less than ten days sailing from one another (at a nominal 10 nautical mile per hour speed of advance), and up to a 64-day voyage.

5.1.1 The Northern Fleet

Based out of its headquarters in Severomorsk, the most important of Russia's naval fleets is the Northern Fleet. Its significance is due to its proximity to Moscow, and its natural defensibility; the same conditions that make it difficult for Russian Northern Fleet combatants to move into the Atlantic make it problematic for its adversaries to approach from the south. Hence, in the modern era, Russia's only aircraft carrier and only nuclear-powered combatant are located in the Northern Fleet, as are its largest number of and most modern ballistic missile submarines (SSBN's).

Severomorsk, in the Murmansk Oblast and along the Kola Bay, is one of the world's largest northernmost cities. It is located at roughly 69 degrees north latitude; the Arctic Circle runs at 66.6 degrees north latitude, and the North Slope of Alaska includes the 69th parallel. Surprisingly, though, Murmansk (on the northern coast of the Kola Peninsula) is ice-free year-round due to the proximity of the warming Gulf Stream.¹⁷² North of Murmansk – along the route Russian naval vessels have to transit to reach the North Atlantic – the Barents Sea (an “outlying portion of the Arctic Ocean”)¹⁷³ is ice-packed during much of the year, resulting in the development (begun

¹⁷² John Pike, “Severomorsk,” Severomorsk (Globalsecurity.org), accessed April 12, 2022, <https://www.globalsecurity.org/military/world/russia/severomorsk.htm>.

¹⁷³ “Barents Sea,” Encyclopædia Britannica (Encyclopædia Britannica, inc.), accessed April 12, 2022, <https://www.britannica.com/place/Barents-Sea>.

under the Soviet Union) of the world's largest nuclear and non-nuclear ice-breaker fleet. Russia currently has more than 40 icebreaker ships; the United States has two.¹⁷⁴

Ice, while historically creating an impediment to Russia reaching the open ocean (and establishing a "great power" navy), also protected Russia's northern flank from attack by others. Climate change, and the resulting receding ice pack, is changing this aspect of the geopolitical equation in both directions:

For its entire history, Russia was effectively defended from the north by the frozen Arctic Ocean. But the minimum summertime ice pack on the ocean in recent years is about one-third less than the average in the 1980s, when monitoring began, researchers with the Colorado-based National Snow and Ice Data Center said last year. The ocean has lost nearly a million square miles of ice and is expected to be mostly ice-free in the summertime, including at the North Pole, by around the middle of the century.¹⁷⁵

The Northern Fleet, icebreakers and global warming aside, has another impediment (or defensive barrier, depending on the point of view): the strategic Greenland – Iceland – United Kingdom Gap, also known as the GIUK Gap, "long famous as a planned line of defense against the Soviet Northern Fleet's access to the Atlantic Ocean during the Cold War."¹⁷⁶ Although neither of the gaps are narrow enough to fit the definition of an international strait or narrow chokepoint (the GIUK gap is officially categorized as a "strategic waterway"¹⁷⁷), planners on both sides nonetheless viewed the GIUK Gap as a key transit route of the Cold War: "The Gap's geography

¹⁷⁴ Matthew Melino and Heather A. Conley, "The Ice Curtain: Russia's Arctic Military Presence," *The Ice Curtain: Russia's Arctic Military Presence* | Center for Strategic and International Studies, March 26, 2020, <https://www.csis.org/features/ice-curtain-russias-arctic-military-presence>.

¹⁷⁵ Andrew E. Kramer, "In the Russian Arctic, the First Stirrings of a Very Cold War," *The New York Times* (*The New York Times*, May 22, 2021), <https://www.nytimes.com/2021/05/22/world/russia-us-arctic-military.html>.

¹⁷⁶ Robert C. Rasmussen, "An Emerging Strategic Geometry -- Thawing Chokepoints and Littorals in the Arctic," *Center for International Maritime Security*, June 3, 2020, <https://cimsec.org/an-emerging-strategic-geometry-thawing-chokepoints-and-littorals-in-the-arctic/>.

¹⁷⁷ Benjamin Rhode, ed., "The Giuk Gap's Strategic Significance," *Strategic Comments* 25, no. 8 (2019): p. i-iii, <https://doi.org/10.1080/13567888.2019.1684626>.

has tended to favour those seeking to defend the sea lanes of the North Atlantic from threats emerging from the North, but it is not a one-way street: forces heading north from the Atlantic must also funnel through these waters.”¹⁷⁸

The importance of the GIUK Gap during the Cold War is well articulated by Robert D. Kaplan in the forward to a 2017 Center for a New American Security article by Julianne Smith and Jerry Hendrix called *Forgotten Waters: Minding the GIUK Gap*:

The GIUK Gap forms the principal choke point between Russia’s great Northern Fleet and its strategic interests in the North Atlantic and all points south. The Russians, as a resurgent power, have modernized their military forces, but they still face the same geographical limitations as in the past. For a Russian warship to get from icy northern waters to the eastern Mediterranean, it must pass through the GIUK Gap. If American warships are sent with large numbers of troops and materiel to reinforce Europe, they must cross Atlantic waters infested with Russian submarines, surface vessels, or aircraft that transited south through the gap. It is here that the geographies of North America and Europe meet and intermesh.¹⁷⁹

5.1.2 The Baltic Fleet

On April 14, 2022, Dmitri Medvedev, the former president of Russia and one of Vladimir Putin’s closest allies, specifically raised the specter of Russian Navy ships armed with nuclear weapons patrolling the Baltic Sea: “No sane person wants higher prices and higher taxes, increased tensions along borders, Iskanders, hypersonics and ships with nuclear weapons literally at arm's length from their own home...”¹⁸⁰ The threat was made following reports that two non-

¹⁷⁸ Ibid.

¹⁷⁹ Julianne Smith and Jerry Hendrix, “Forgotten Waters: Minding the GIUK Gap,” Center for a New American Security (en-US), May 3, 2017, <https://www.cnas.org/publications/reports/forgotten-waters>.

¹⁸⁰ Guy Faulconbridge, “Russia Warns of Nuclear, Hypersonic Deployment If Sweden and Finland Join NATO,” Reuters (Thomson Reuters, April 14, 2022), <https://www.reuters.com/world/europe/russia-warns-baltic-nuclear-deployment-if-nato-admits-sweden-finland-2022-04-14/>.

NATO Baltic states, Finland and Sweden, were considering joining the alliance following the Russian invasion of Ukraine.¹⁸¹

The Lithuanian Prime Minister quickly accused Russia of maintaining nuclear weapons in the Baltic long before the Ukrainian invasion: ““Nuclear weapons have always been kept in Kaliningrad ... the international community, the countries in the region, are perfectly aware of this ... They use it as a threat...”¹⁸² Indeed, nearly four years earlier the Federation of American Scientists (FAS) issued a report that took note of improvements to suspected nuclear storage facilities at Kaliningrad. Using open-source intelligence from commercial satellites, author Hans Kristensen, director of the FAS “Nuclear Information Project,” wrote:

The latest upgrade obviously raises questions about what the operational status of the site is. Does it now, has it in the past, or will it in the future store nuclear warheads for Russian dual-capable non-strategic weapon systems deployed in the region? If so, does this signal a new development in Russian nuclear weapons strategy in Kaliningrad, or is it a routine upgrade of an aging facility for an existing capability? The satellite images do not provide conclusive answers to these questions.¹⁸³

At the turn of the 20th Century, it was the Russian Imperial Navy’s Baltic Fleet that officially became the second Pacific Fleet, facing chokepoints and distance on the way to its demise at the hands of the Japanese fleet at Tsushima. More than a century later the Baltic remains a force provider for the Russian Federation Navy, sending a steady stream of warships to the eastern Mediterranean in support of Bashar Assad’s forces in the Syrian Civil War.

¹⁸¹ Simo Johnson and Essi Lehto, “Finland to Make Decision on NATO Entry in Coming Weeks, Not Months,” Reuters (Reuters, April 13, 2022), <https://www.reuters.com/world/europe/finland-make-decision-nato-membership-coming-weeks-2022-04-13/>.

¹⁸² “Russia Already Has Nuclear Weapons in the Baltic Region, Says Lithuania,” Reuters (Reuters, April 14, 2022), <https://www.reuters.com/world/europe/russia-already-has-nuclear-weapons-baltic-region-says-lithuania-2022-04-14/>.

¹⁸³ Hans M. Kristensen, “Russia Upgrades Nuclear Weapons Storage Site in Kaliningrad,” Federation Of American Scientists, June 18, 2018, <https://fas.org/blogs/security/2018/06/kaliningrad/>.

5.1.2.1 The Baltic Sea

The Baltic Sea – a significant part of the northern maritime flank of Europe and an “arm” of the Atlantic Ocean – plays an important role in the history of Russia. The Russian capital was located at St. Petersburg, a city established by Peter the Great for the sole purpose of gaining access to this sea, as the Baltic “region has been – and still is – a major crossroads of international trade and an area of vital strategic importance.”¹⁸⁴ St. Petersburg is at eastern end of the strategic Gulf of Finland, itself an eastern arm of the Baltic Sea.

In addition to St. Petersburg (which was renamed Leningrad during the Soviet era and reverted back to St. Petersburg after the fall of the U.S.S.R.) and its surrounding area, Russia has another naval base on the southern end of the Baltic Sea, in a unique geopolitical situation similar to Alaska’s division from the “continental” United States. Established as one of the spoils of war following World War II, Russia’s Kaliningrad Oblast on the warmer southern shore of the Baltic is key geography (and a potential flashpoint) for the Russians:

German East Prussia, which had never been under Russian control, was divided into Soviet and Polish occupation zones at Potsdam 1945. The northern, Soviet part includes Königsberg, renamed Kaliningrad, a medieval city which traditionally ranked among the major cities and ports on the Baltic with a hinterland stretching far into Russia. Kaliningrad Oblast, now an enclave of the vast Russian Republic, saw the repatriation of almost all its Germans and a replacement by Russians.¹⁸⁵

Due to the favorable climatological geography in the southern portion of the sea (St. Petersburg becomes impassable due to ice from December through April or May¹⁸⁶), Kaliningrad’s port of Baltiysk became the headquarters of the Soviet Baltic Fleet and remains so

¹⁸⁴ Gunnar Alexandersson, *The Baltic Straits* (The Hague u.a.: Nijhoff, 1982), 1.

¹⁸⁵ *Ibid*, 48.

¹⁸⁶ “Murmansk,” The Editors of Encyclopaedia Britannica (Encyclopædia Britannica, inc.), accessed April 19, 2022, <https://www.britannica.com/place/Murmansk-Russia>.

for the Russian Federation Navy's Baltic Fleet of today. As noted by writer Sydney J. Freeberg in a 2019 *Breaking Defense* interview with then-commander of U.S. Air Forces in Europe, "the unique position of Kaliningrad, nestled between Poland and Lithuania, well away from the rest of Russia, makes it both an excellent advance base and a highly exposed target."¹⁸⁷

The two primary geopolitical realities of the Baltic Sea facing the Soviet Union during the Cold War has not changed in the modern era: one of Russia's most important outlets to the sea consists of narrow, shallow straits that are surrounded by its enemies. This situation was neither good nor bad, depending on if Russia found itself on the offense or the defense. In his 1982 book "Red Navy at Sea: Soviet Naval Operations on the High Seas, 1956 – 1980," Bruce W. Watson described the situation in the Baltic thus:

The Baltic Sea ports are excellent for stationing ships to defend the Soviet coast, as well as Leningrad [St. Petersburg] and other major Soviet ports. The Baltic is not well suited as a staging area for deployments to the high seas, however, because Soviet ships exiting to the Atlantic must pass along the potentially hostile German and Danish coasts and through the sea's restricted entrance, where they are extremely vulnerable to detection and attack.¹⁸⁸

Highlighting the consistency of Russian geographical truisms, a decade earlier David Fairhall characterized the Soviet strategic conundrum in the Baltic Sea, but in greater detail, stating:

For the Soviet Navy, the Baltic must always have looked like a well designed trap; and so it proved to be during the Second World War. In any Future war with the West, warships trying to escape would have to steam hundreds of miles within comfortable range of NATO airfields, through narrow, easily mined channels – which incidentally provide good cover for the fast patrol boats in which all the Baltic navies specialize. The fairly deep basins around the island of Bornholm would probably provide a sanctuary for submarines because there must be plenty

¹⁸⁷ Sydney Freedberg, "Target, Kaliningrad: Air Force Puts Putin on Notice," *Breaking Defense*, July 22, 2021, <https://breakingdefense.com/2019/09/target-kaliningrad-eucom-puts-putin-on-notice/>.

¹⁸⁸ Bruce W. Watson, *Red Navy at Sea: Soviet Naval Operations on the High Seas, 1956-1980* (Boulder, CO: Westview Press, 1982).

of temperature and salinity layers to make things difficult for the sonar operators listening on the surface.¹⁸⁹

5.1.2.2 The Danish Straits

Similar to the situation faced by Russia with the GIUK Gap (and, as will be discussed, the Turkish Straits), while the Russian's have the basing and ability to exercise a degree of sea control within the Baltic, the entrance and exit of the semi-enclosed sea is under the control of a member of NATO – Denmark. The presence of several islands in the Danish Straits require maritime traffic to utilize one of three distinct passages from the Kattegat Sea through to the Baltic: the Little Belt, the Great Belt, and the Sound. A fourth passage out of the Baltic – the Kiel Canal through Germany, completed in 1895 – connects the Baltic to the North Sea.

Both the Little Belt and the Sound have portions that are extremely narrow and shallow. At its narrowest, the Sound is only 4 kilometers wide, whereas the Little Belt is a mere 700 meters wide at one point (so narrow that in 1935 the Danes built a bridge across the strait, limiting mast heights of traversing ships to 33 meters).¹⁹⁰ For its part, the Great Belt (between the Little Belt and the Sound) has three different possible passages, the widest of which is 14.3 kilometers at its narrowest point (between the islands of Langeland and Lolland).¹⁹¹ To ensure safety of navigation, Denmark established an official traffic route, called "Route T," through the Great Belt:

Currents are rather stable in the Great Belt. The outgoing surface current of brackish Baltic water travels at a speed of up to 1.5 meters per second. Depths vary from 20 to 25 meters in the northern part of the Belt to 66 meters in the

¹⁸⁹ Fairhall, 52-53.

¹⁹⁰ Alexandersson, 65.

¹⁹¹ Distance calculator Langeland Island to Lolland Island, Baltic Sea, *Google Maps*, 02 May 2022, <https://www.google.com/maps/dir/Tourist+and+Trade+Association+of+Langeland,+Torvet+5,+5900+Rudk%C3%B8bing,+Denmark/Lolland,+Denmark/@54.9337289,10.8397816,11z/am=t/data=!4m17!4m16!1m5!1m1!1s0x47b2ca040a43dda9:0x2c5fb6a8de58d13c!2m2!1d10.710465!2d54.936444!1m5!1m1!1s0x47ad50077dec513:0xed91b7139875c67f!2m2!1d11.4649304!2d54.7275433!6m3!1i0!2i3!3i0>.

southern, allowing even the largest ships that can enter the Baltic to pass through this Belt.¹⁹²

The Russian Baltic Fleet was well positioned to control the eastern Baltic Sea and protect the Russian homeland from attack. However, as long as NATO controls the Danish Straits, their prospect for “breaking out” into the Atlantic and affecting American naval operations, such as a sealift to Europe, is bleak. As such, there was great concern in the West over the prospect of a Soviet amphibious operation to seize the Strait:

Clearly, in the wake of age-old Russian dreams of power, it covets control of the Baltic approaches and thereby of absolute and complete control of the Baltic area. The Baltic, in the Soviet view, is to become their *mare clausum* [a body of water closed to other nations]. Control of the Baltic approaches means the inclusion of Denmark in the Soviet power sphere. If political attempts at such inclusion should fail, then occupation in wartime must be considered.¹⁹³

The Russian Federation Navy of the modern era faces the exact same geographical position in the Baltic as the Soviet Navy of 1975; the Straits are just as narrow (now with more bridges), and a NATO nation still controls them. As will be covered later, technology (specifically in the form of the *Kalibr* anti-ship and land attack cruise missile) has resulted in a changed fleet with long-range striking power (though the Baltic Fleet appears to be Russia’s last priority among its four fleets when it comes to the “Kalibrization”¹⁹⁴ of the navy.) Nonetheless, upgrades in anti-ship cruise missile capabilities for its surface combatants has given Kaliningrad the ability to provide a regular escort mission for its surface fleet. The factor of a Russian turn to a naval offensive posture remains a question with no clear answer in the Baltic.

¹⁹² Ibid.

¹⁹³ Edward Wegener, *The Soviet Naval Offensive* (Annapolis, MD: U.S. Naval Institute, 1975), 35.

¹⁹⁴ Kimberly Manuel, Charles A. Richard, and Philip G. Wasielewski, “The ‘Kalibrization’ of the Russian Fleet,” U.S. Naval Institute, April 30, 2022, <https://www.usni.org/magazines/proceedings/2022/may/kalibrization-russian-fleet>.

5.1.3 The Black Sea Fleet

“Geography wills that I have [Constantinople], because if it goes to another I would no longer be master of my house [I]t is indispensable that I possess what geography assigns me”¹⁹⁵

-- Csar Alexander I, to Napoleon’s Ambassador

“I would abandon mastery over half the world, rather than yield Russia those narrow straits.”¹⁹⁶

-- Napoleon

On June 19, 2021, the flagship of the Russian Black Sea Fleet, *Moskva* (Moscow), was sailing past the Greek island of Chios on a southeasterly direction. Its destination was the eastern Mediterranean, and its mission was to perform escort duties for the sealift of Syria. This was the first time in five years that the Cold War-era *Moskva*, bristling with large anti-ship and anti-air missiles, had left the Black Sea. In the constrained waters of the northern Aegean Sea, they no doubt passed close to the Russian Federation Navy large amphibious ship *Saratov*, heading in the opposite direction towards the Turkish Straits, a day away from Istanbul and their eventual destination of the Black Sea Fleet home port of Novorossiysk. *Saratov* was the lead ship of the *Tapir*-class of amphibious ships (NATO reporting name *Alligator*). The *Alligator*-class amphibious vessels were first launched in 1966, and had been used as a “regular feature on Russia’s ‘Syrian Express’ shipping route.”¹⁹⁷

¹⁹⁵ Vernon John Puryear, *Napoleon and the Dardanelles* (Berkeley, CA: University of California Press, 1951).

¹⁹⁶ Metin Munir, “Hazards on the Bosphorus,” *The Washington Post* (WP Company, February 4, 1981), <https://www.washingtonpost.com/archive/politics/1981/02/04/hazards-on-the-bosprus/7dde2e6c-eea9-4676-a7a1-a1f4b02fb0a4/>.

¹⁹⁷ Jack Stubbs and Maria Tsvetkova, “On Ground in Syria, Scant Evidence of Draw down Trumpeted by Kremlin,” *Reuters* (Thomson Reuters, April 15, 2016), <https://www.reuters.com/article/us-mideast-crisis-syria-russia/on-ground-in-syria-scant-evidence-of-draw-down-trumpeted-by-kremlin-idUSKCN0XC1SH>.

Less than ten months later, both *Moskva*, Russia's command ship of the Black Sea, and *Saratov*, one of the workhorses of the Syrian Express, would be at the bottom of the sea, the first two principal Russian or Soviet naval vessels sunk in wartime since World War II.

On March 24, 2022, *Saratov*, sitting with two other large amphibious vessels in a Russian-occupied Ukrainian port in the Sea of Azov, was struck by a Soviet-made *Tochka-U* (NATO designator SCARAB-B), a short-range ballistic missile. Dramatic video captured a large explosion on the *Saratov*, while the two other vessels (one on fire) made for open water. Less than a month later the *Moskva*, off the Crimean Peninsula in the Black Sea, was apparently struck by a pair of Ukrainian-produced *Neptune* sea-skimming antiship cruise missiles,¹⁹⁸ hastily made copies of Russian-made Kh-35¹⁹⁹ (NATO-designated SS-N-25 *Switchblade*). The *Neptune* had only entered Ukrainian service the year prior.

Perhaps an even greater blow to the Russian war effort in Ukraine, however, is the fact that Moscow is not able to replace these vessels with ships from outside the Black Sea Fleet. Soon after the war began, Turkey invoked the Montreux Convention's articles on passage through the Turkish Straits in wartime. Foreign Minister Cavusoglu "warned all riparian and non-riparian countries not to let warships go through the straits."²⁰⁰ Once again history repeated itself, as Russia's lack of access to a key maritime chokepoint directly led to an inability to achieve national objectives. After being ignored for more than twenty years while the Persian Gulf and the Pacific

¹⁹⁸ Rachel Treisman, "Russia Now Says 1 Crew Member Died, 27 Are Missing in the Sinking of Its Warship," NPR (NPR, April 22, 2022), <https://www.npr.org/2022/04/15/1093026912/russian-moskva-warship-sunk-ukraine>.

¹⁹⁹ "Kh-35 Anti-Ship Cruise Missile," Military today (Military-Today.com), accessed April 27, 2022, http://www.military-today.com/missiles/kh_35.htm.

²⁰⁰ Mumin Altas, "Turkiye Warns All Countries against Warships Going through Turkish Straits," Anadolu Ajansı (AA.com, February 28, 2022), <https://www.aa.com.tr/en/russia-ukraine-crisis/turkiye-warns-all-countries-against-warships-going-through-turkish-straits/2518827>.

drew its attention away, the West is once again learning the strategic significance of the Black Sea and the Turkish Straits.

5.1.3.1 The Black Sea

Humankind's relationship with the Black Sea is literally one of the oldest stories in existence. According to myth, in 1300 B.C. a young Greek sailor named Jason gathered a crew and boarded the vessel Argos in search of the Golden Fleece. "Most of the trip was on the Black Sea between Bosphorus and Kolhida Straits" and "is considered the first expedition on sea with precise goals."²⁰¹ Although the first known manuscript of this tale is dated from around 800 B.C.,²⁰² older writings refer to what today is known as the Black Sea:

The first information about the Black Sea we owe to Ancient philosophers, starting with Homer (1000 B.C.), Hecateu (500 B.C.), Herodot (485 – 425 B.C.), Aristotel (384-322 B.C.), Ptolemeu (127 – 151 A.D.) who left texts and cartographic drawings, some of some [sic] astoundingly precise for that time. Aristotel occupies a special place within the gallery of first scholars who tried to understand the Black Sea. Therefore, in *Meteorology*, a fundamental paper written during the second Athenian period, Aristotel describes the active circulation of waters from Azov Sea, through Black Sea, Bosphorus and Dardanelle Straits, through Aegean and Mediterranean Seas towards the Atlantic Ocean...Here we find the first accurate description of currents from Bosphorus Strait as well as much other information about Black Sea and Azov Sea.²⁰³

At one point during the epic journey, Jason and his Argonauts have to sail through the "clashing rocks" that guard the entrance to the Black Sea. The myth arose when Greek sailors were first able to negotiate their way up the powerful currents of the Bosphorus to enter the

²⁰¹ Emil Vespremeanu and Mariana Golumbeanu, *The Black Sea: Physical, Environmental and Historical Perspectives* (Cham: Springer International Publishing AG, 2017), 10.

²⁰² Wood, Michael. "History - Ancient History in Depth: Jason and the Golden Fleece." BBC. BBC, February 17, 2011. https://www.bbc.co.uk/history/ancient/greeks/jason_01.shtml#:~:text=The%20story%20is%20a%20set,where%20early%20epic%20poetry%20developed.

²⁰³ Ibid.

Black Sea beyond.”²⁰⁴ The oldest texts, perhaps in reference to the difficult navigation or the hostile tribes encountered along their route, referred to the sea as Axeinos Pontus, or the hostile sea. “In time the sea was transformed in Greek eyes...to Euxeinos Pontus, the 'welcoming sea'.”²⁰⁵ To this day, the Black Sea is also known as the Euxine Sea. As for the relatively recent name “Black Sea”, there is very little consensus among scholars as to how it attained that moniker.

According to the modern scientific lexicon, “*the Black Sea is a semi-enclosed sea, component of the Mediterranean Sea* (European Mediterranean or Euro-African Mediterranean) to whose main basin are linked several straits and seas: Bosphorus Strait, Marmara Sea, Dardanelles Strait and Aegean Sea.” [emphasis in the original]²⁰⁶ Although the Black Sea is less than half the size (in area) of the previously addressed Baltic Sea, its 422,000 square kilometers of surface area is roughly “one third the size of continental Europe.”²⁰⁷

The *Guardian*’s Cold War author David Fairhall wrote of the strategic difficulties facing Russia in the Black Sea in his 1971 book “Russian Sea Power”:

Physically, the Black Sea is even more of a backwater than the Baltic. Its only natural outlet is through the long, narrow channels of the Bosphorus and the Dardanelles, which in places are only half a mile wide – and belong to a member of NATO.

The exchange of water between the Black Sea and the Mediterranean produces vicious surface and underwater currents...But whatever the difficulties, this route has carried the bulk of the Soviet Union’s seaborne oil exports.²⁰⁸

²⁰⁴ Ibid.

²⁰⁵ Ibid.

²⁰⁶ Vespremeanu and Golumbeanu.

²⁰⁷ “Black Sea NGO Network,” Black Sea NGO Network | Our Black Sea, accessed May 7, 2022, [http://www.bsnn.org/black_sea.html#:~:text=Six%20countries%20share%20the%20Black,\(including%20the%20Azov%20Sea\).](http://www.bsnn.org/black_sea.html#:~:text=Six%20countries%20share%20the%20Black,(including%20the%20Azov%20Sea).)

²⁰⁸ Fairhall, 54.

From an economic standpoint, though half a century has passed since Fairhall penned his Cold War assessment of the importance of the Euxenos Pontus to the Soviets, the modern-day importance of the Black Sea to Russia cannot be overstated. According to Statista's 2021 record of cargo throughput by port, of the top fifteen Russian ports by millions of metric tons of output, a plurality (five) of the top ports were located in the Black Sea: Novorossiysk, Taman, Tuapse, Kavkaz, and Rostov-on-the-Don. Of these, Novorossiysk is by far Russia's workhorse, with a 2021 output of 143 million metric tons of throughput; in comparison, the Baltic Sea port of Ust-Luga (on the Kaliningrad Oblast) came in second with 109 million metric tons of throughput – a full 25% less volume of traffic than Novorossiysk.²⁰⁹ In the global economy, Russia's shortest maritime waterway access from its industrial heartland to the arteries of Europe, the Middle East, and even South Asia runs from the Black Sea through the Turkish Straits and into the Mediterranean Sea. This fact sheds light on the Russian perspective of the security of the Black Sea as a vital national security objective.

From a militarily defensive perspective, the Black Sea is the southern maritime flank of Russia and the northern maritime flank of Turkey. As such, the region experienced significant action in both World Wars, although prior to Russia's invasion of Ukraine there had not been any large scale naval battle in the Black Sea since the destruction of the Ottoman Fleet in Sinope by the Russian Black Sea Fleet on 30 November 1853.²¹⁰ Even so, tensions between the Russian and American navies in the Black Sea were often times high, and appeared to be deteriorating as the 1980's drew to a close.

²⁰⁹ Statista Research Department, "Russia: Cargo Throughput 2021, by Port," Statista, January 28, 2022, <https://www.statista.com/statistics/1023550/russia-cargo-throughput-by-port/>.

²¹⁰ Igor Delanoe, "After the Crimean Crisis: Towards a Greater Russian Maritime Power in the Black Sea," *Southeast European and Black Sea Studies* 14, no. 3 (2014): pp. 367-382, <https://doi.org/10.1080/14683857.2014.944386>, 368.

In March 1986 the USS *Caron* (a *Spruance*-class destroyer) and the USS *Yorktown* (the second unit of the ground-breaking *Ticonderoga*-class Aegis cruisers, commissioned just two years earlier) sailed into the Black Sea to conduct Freedom of Navigation Operations (FONOPS). According to then-Secretary of the Navy John Lehman, the U.S. had conducted such operations before, in 1968, 1979, and 1984.²¹¹ This time, however, as a part of the Reagan Administration's more aggressive maritime approach to the Soviet Union, they "asserted their right of innocent passage in the Black Sea within Soviet territorial waters, passing within six miles of the Soviet coast, eliciting a Soviet protest."²¹² Less than two years later, the same two U.S. ships sailed back into the Black Sea to conduct innocent passage maneuvers:

This time they got a much more violent reaction from the Soviets. While "innocently passaging" nine miles off Crimea, they were both rammed by a Soviet frigate and destroyer...This was a serious incident, with protests and counterprotests on both sides. What we did not know at the time, however, was that it would also be the last major incident at sea between Soviet and U.S. surface forces.²¹³

Although there were no injuries and only minor damage to the *Yorktown*, this event highlighted the significance both sides placed on the body of water. Within three years, however, the Soviet Union had crumbled, severely altering the geography of the Black Sea from a Russian standpoint. Prior to 1991, the Soviet Union (specifically Russia, Georgia and Ukraine) and Warsaw Pact countries (Romania and Bulgaria) owned approximately 4,500 kilometers of Black Sea coastline, as opposed to Turkey (and hence NATO) which only controlled 1,330 kilometers. Upon the dissolution of the U.S.S.R., Russia's new Black Sea coastline totaled a mere 800 kilometers. In

²¹¹ John F. Lehman, *Oceans Ventured: Winning the Cold War at Sea* (New York, NY: W.W. Norton & Company, 2020), 225.

²¹² *Ibid*, 183.

²¹³ *Ibid*, 225.

1994, with Romania and Bulgaria joining the North Atlantic alliance, NATO countries ended up with greater than 1,865 kilometers of coastline – more than double that of Russia.²¹⁴

A 2014 article by Igor Delanoe, published by Routledge in the journal *Southeast European and Black Sea Studies*, described the Black Sea as Russia’s “window” on the Mediterranean; a window that had been closing since the fall of the Soviet Union:

The Black Sea belongs to Russia’s southern flank, spanning from the Caspian Sea to Ukraine. It provides Russia, since the end of the eighteenth century, with a ‘window’ on the warm Mediterranean waters, and beyond, it is the closest access to the world ocean for the Russian Navy and Russia’s merchant fleet. Of the five Russian maritime theatres – namely the Northern, the Baltic, the Black Sea, the Caspian and the Pacific theatre – the Black Sea is the one that has undergone the deepest geopolitical changes during the two past decades. Whereas the Black Sea was a ‘Soviet lake’ during the Cold War, Moscow’s influence in the region has been challenged and rolled back by Western influence during the 2000s. The loss of a major part of its coastlines through the independence of Ukraine has been an additional source of geopolitical frustration for Russia after 1991, which saw its ‘window’ on the Black Sea cut down from the whole northern shore of the basin before the collapse of the USSR to a short portion of the Caucasian coasts.²¹⁵

Even so, in the days and years following the end of the Cold War, relations between the West and Russia, specifically in regard to the Black Sea, were on a seemingly optimistic path. Especially following the September 11, 2001, terrorist attacks on the United States, Russian maritime cooperation with NATO warmed to levels never seen before, and never seen since. One such example was Russian participation in the counter-terror exercise “Active Endeavor” in the Mediterranean. According to NATO’s website:

Under *Operation Active Endeavour*, NATO ships patrolled the Mediterranean and monitored shipping to help deter, defend, disrupt and protect against terrorist

²¹⁴ “Black Sea NGO Network,” Black Sea NGO Network | Our Black Sea, accessed May 7, 2022, [http://www.bsnn.org/black_sea.html#:~:text=Six%20countries%20share%20the%20Black,\(including%20the%20Azov%20Sea\).](http://www.bsnn.org/black_sea.html#:~:text=Six%20countries%20share%20the%20Black,(including%20the%20Azov%20Sea).)

²¹⁵ Delanoe, 370.

activity. The operation evolved out of NATO's immediate response to the terrorist attacks against the United States of 11 September 2001.²¹⁶

NATO forces "hailed over 128,000 merchant vessels and boarded some 172 suspect ships under *Active Endeavor*," which lasted from 2001 until 2014.²¹⁷ What seems remarkable in retrospect is the fact that, according to NATO, "Russia deployed vessels twice, in 2005 and 2006."²¹⁸ According to a Fact Sheet on NATO's website, the cooperation was considered groundbreaking at the time, describing Russian involvement in *Active Endeavor* as:

An important milestone in NATO's military relationship with the Russian Federation, when the Russian vessel, PITLIVIY joined the operation in Sept 06, marked the first truly combined NATO-Russia force deployment. Russia continues to participate in the operation's liaison and information exchange components, and an additional Russian ship is engaged in combined pre-deployment training with a view to an operational deployment in Autumn.²¹⁹

The *Pitlivi* was a NATO-designated *Krivak-II FFG* (Guided Missile Frigate), a relic of the Cold War designed primarily for anti-submarine warfare (though with enhanced anti-air capability). Still, the decision by NATO to allow a Russian combatant to participate in a combined naval exercise was remarkable, a testament to how far relations had come since the Soviet Union existed a mere 15 years earlier. In order to prepare for the deployment and participation in the operation, officers of the Russian frigate deployed aboard the large missile cruiser *Moskva*, the Black Sea Fleet flagship that was conducting operations (apparently with NATO vessels) in the Mediterranean at the time. According to an online NATO Update from May of 2006:

Crewmembers of the frigate already successfully completed an initial at-sea training period while on board RFS Moskva during a Mediterranean deployment

²¹⁶ "Operation Active Endeavour (Archived)," NATO (North Atlantic Treaty Organization, March 9, 2011), https://www.nato.int/cps/en/natohq/topics_7932.htm.

²¹⁷ Ibid.

²¹⁸ Ibid.

²¹⁹ "Fact Sheet on NATO-Russia Military Cooperation," NATO (North Atlantic Treaty Organization), accessed May 6, 2022, <https://www.nato.int/docu/comm/2007/0705-chod/fact-sheet-nato-russia.pdf>.

in February. The upcoming OAE training event will build on previous experience, extending beyond joint maritime maneuvering to include compatibility of systems, familiarization with NATO standard procedures, and handling of classified information.²²⁰

In other words, officers of the *Pitliviy* went onboard the *Moskva* to participate in “joint maneuvering” with NATO vessels. Although no details are provided, this would at a minimum involve establishing bridge-to-bridge communications in order to conduct basic maritime operations in relatively close proximity to one another *as partners* (as opposed to the previous sixty years of operating in close proximity as adversaries). Even more remarkably, eventually the *Pitliviy* participated in more advanced maneuvers that required “compatibility of systems, familiarization with NATO standard procedures, and handling of classified information.”²²¹

From a naval perspective, such an exchange between NATO and Russia was designed to build trust between the two former competitors. This kind of information sharing would not be something that NATO would consider if they felt that Russia would return to an adversarial relationship in the near future, since ostensibly such information (specifically systems interoperability, intelligence sharing and standard operating procedures) would be something that could be used against NATO in any future maritime conflict with Russia. *Operation Active Endeavor* went ahead as scheduled in September of 2006 and was repeated with the *Pitliviy*’s sister ship (and the only other Cold War-era *Krivak* left in Russia’s inventory) *Ladny* in September of 2007.²²² At least by the yardstick of naval cooperation, Russia’s relationship with the West was on a very positive trajectory.

²²⁰ Massimo Daicampi, NATO update: Russian Federation Ship Pitliviy continues preparations to join NATO Operation Active Endeavour (NATO, May 18, 2006), <https://www.nato.int/docu/update/2006/05-may/e0515b.htm>.

²²¹ Ibid.

²²² “Summit Guide 2009 - NATO,” Summit meetings of Heads of State and Government Strasbourg, France / Kehl, Germany 3-4 April 2009 (NATO, January 24, 2011), <https://www.nato.int/summit2009/summit-guide-09.pdf>, 83.

That was September of 2007, perhaps the zenith of NATO-Russian relations. Less than a year later, NATO and Russia would again be operating in close proximity to one another in the Black Sea, but this time once again as adversaries. Fifteen years later, the *Moskva* – the Russian missile cruiser that had conducted trust-building operations with NATO navies to prepare the officers of the *Pitliviy* for combined maneuvers with NATO – had been sunk at the hands of the Ukrainians, perhaps with the help of American intelligence.²²³ How did things deteriorate so severely and so quickly?

On August 1, 2008, the Russian-Georgian War began, marking the first time since the end of the Cold War (and the first time since the 1979 Soviet invasion of Afghanistan) that Russian forces had violated another state's sovereignty in defense of its perceived national security objectives. That same month the U.S. and other NATO nations began using warships to transport humanitarian aid through the Black Sea to Georgia. According to a New York Times article, by the end of August Russian military commanders "were growing alarmed at the number of NATO warships sailing into the Black Sea, saying that NATO vessels now outnumbered the ships in their fleet anchored off the western coast of Georgia."²²⁴ That same Time article noted that:

The policy has left American and Russian naval vessels maneuvering in close proximity off the western coast of Georgia, with the American concentrated near the southern port of Batumi and the Russians around the central port of Poti. It has also left the Kremlin deeply suspicious of American motives.

"What the Americans call humanitarian cargoes – of course, they are bringing the weapons," President Dmitri A. Medvedev of Russia told the BBC in an interview on Tuesday, adding, "We're not trying to prevent it."²²⁵

²²³ Shane Harris et al., "U.S. Provided Intelligence That Helped Ukraine Sink Russian Warship," The Washington Post (WP Company, May 6, 2022), <https://www.washingtonpost.com/national-security/2022/05/05/us-intelligence-ukraine-moskva-sinking/>.

²²⁴ Andrew E Kramer, "NATO Ships in Black Sea Raise Alarms in Russia," *New York Times*, August 28, 2008, Proquest Historical Newspapers edition, p. A16.

²²⁵ Ibid.

This geostrategic situation appears to have been deemed unacceptable to Vladimir Putin. Beginning with the 2008 conflict in Georgia, and culminating with the 2014 invasion and annexation of the Crimean Peninsula, Russia changed its relative geographic position within the Black Sea in its favor (thus opening its “window on the Mediterranean”) through military adventurism:

... the annexation of Crimea has provided Russia with a broader and a better coastline on the Azov and the Black seas. Before March 2014, Russia had approximately 570 km of coast in the shallow Sea of Azov, and nearly 400 km of hostile shore on the Black Sea between the Kerch straight and the Georgian border, with no deep ports to dock a fleet. After the 2008 Russian-Georgian conflict, Moscow has gained an additional 300 km which correspond to the Abkhazian coastline under Russia’s de facto military control. Crimea provides Russia not only with a greater coastline and the best Black Sea port, Sevastopol, but other assets such as Yevpatoria, Feodosia and Kerch, which are better and safer than Russian Black Sea ports located on the Caucasian shore, and are now under Russian sovereignty.²²⁶

While reacquiring coastline could be rationalized by Russia as a defensive move, from a naval offensive point of view the Black Sea Fleet has provided for a majority of forward deployed forces for both Russian and Soviet navies over the centuries, due to the proximity and importance of the Mediterranean Sea. This was no more evident than during the Syrian Civil War. As noted in a 2016 *Irish Times* article by Stephen Starr:

Russian warships and naval vessels, often two at a time, have been seen passing through the Straits en route to Syria from Russia’s northern Black Sea ports with increasing frequency this year.

“At least 90 per cent of the military supplies, weapons, ammunition, and equipment that Russia supplies to the Syrian Assad regime are shipped from ports on the Black Sea, primarily Sevastopol and Sochi, through the Bosphorus and the Dardanelles, to the two Syrian ports, Tartous and Latakia,” said Chris Harmer, a senior naval analyst at Institute for the Study of War in Washington DC.

Everything from tanks hidden by camouflage, to howitzers, armoured personnel carriers and prefabricated buildings are believed to pass through

²²⁶ Delanoë, 375.

Istanbul. One vessel, the Ropucha class landing ship 158 Caesar Kunikov, has made six voyages to Syria this year, according to reports.²²⁷

The rebirth of the Black Sea Fleet has not just been the result of geographic annexation and increased utilization. As recently as 2014, the Russian warships based in the Black Sea were considered “one of the most obsolete Russian fleets.”²²⁸ In 2010, in a shockingly candid and honest assessment and criticism of his own forces, then-Commander of the Russian Navy Vladimir Vyostiky, in an interview with *RIA Novosti*, admitted that the Black Sea Fleet was in extremely poor condition and in need of a complete overhaul:

All these are antique ships, some of them built in the late 60s, and should be completely decommissioned by 2020, as well as two non-running submarines that are listed in the fleet. At the same time, the main military threats stem from the southern direction. Igor Korotchenko, director of the Center for Analysis of the World Arms Trade, supports the complete renewal of the Black Sea Fleet.²²⁹

Following years of neglect after the end of the Cold War, Moscow implemented a naval modernization program, the focus beginning in the Black Sea. Perhaps the most significant of these improvements came in the form of a half dozen improved diesel-electric submarines, known by the Russian program name 636.3, and the NATO name *Improved Kilo*-class. The Black Sea basin is very deep and an ideal environment for submarine operations. As described earlier, these *Kilos* are equipped with the *Kalibr* family of cruise missiles, which includes a supersonic anti-ship cruise missile (ASCM) variant (NATO-name SS-N-27a *Sizzler*), a subsonic (but long range) land-attack cruise missile (LACM) version (NATO-name SS-N-30a *Sagaris*), and an anti-submarine

²²⁷ Stephen Starr, “Russia Using Sea Route via Istanbul to Supply Assad Regime,” *The Irish Times* (*The Irish Times*, June 22, 2016), <https://www.irishtimes.com/news/world/europe/russia-using-sea-route-via-istanbul-to-supply-assad-regime-1.2693761>.

²²⁸ Delanoe, 371.

²²⁹ “Россия к 2020 г. Полностью Обновит Черноморский Флот,” *Ведомости* (*Ведомости*, June 23, 2010), <https://www.vedomosti.ru/politics/articles/2010/06/24/rossiya-k-2020-g.-polnostyu-obnovit-chernomorskij-flot>.

version employing a torpedo (similar to the US “Anti-Submarine Rocket”, or “ASROC”). These submarines were joined in the Black Sea by a variety of small surface combatants (frigates and guided-missile patrol boats) that also carried the different versions of the *Kalibr*.

Russian-published and open-source ranges of the different variants of the *Kalibr* (including export versions) vary greatly. The U.S. Army’s Training and Doctrine Command (TRADOC) described this dilemma on their website “Operational Environment Data Integration Network (ODIN)” under the entry for the *Kalibr*:

Kalibr land-attack versions in use by Russia have various claimed maximum ranges. The U.S. Department of Defense estimates its range at 1,400 km (870 mi), and Russian Defence Minister Sergei Shoigu put its range at "almost 1,500 km (930 mi)." Following its first operational firing in October 2015, Russian Ministry of Defence statements suggested a range of 2,000 km (1,200 mi), while a December 2015 Office of Naval Intelligence report gathered a number of Russian statements projecting ranges between 1,500-2,500 km (1,600 mi). Discrepancies in range values may be attributed to political declarations for strategic effect, or potentially longer 2,500 km-range claims could be associated with a thermonuclear armed variant²³⁰ while shorter 1,500 km-range estimates are for the conventionally armed missile.²³¹

While unclassified capabilities assessments differ in their conclusions, in 2018, during his tenure as Commander of the Black Sea Fleet, Admiral Aleksandr Vitko addressed some of these capabilities in an interview with the periodical *Military Thought: A Russian Journal of Military Theory and Strategy*:

In the Southwestern direction, only the Black Sea Fleet has such weapons (besides the Iskander missile complexes with the range up to 500 km) and is capable to deal missile strikes, using high-precision weapons, against critically important infrastructure assets, belonging to the potential adversary at up to 1700 km distance. This permits us to strike targets directly from the Black Sea waters, where Russian warships are reliably covered not only by coastal long-range missile

²³⁰ While a full consideration of the nuclear-warhead aspects of the *Kalibr* are beyond the scope of this paper, it will be addressed in Part IV as an “area for further study”

²³¹ “OE Data Integration Network,” ODIN (U.S. Army Training and Doctrine Command), accessed May 4, 2022, [https://odin.tradoc.army.mil/WEG/Asset/3M54K_\(SS-N-27_Sizzler\)_Russian_Anti-Ship_Cruise_Missile](https://odin.tradoc.army.mil/WEG/Asset/3M54K_(SS-N-27_Sizzler)_Russian_Anti-Ship_Cruise_Missile).

systems, but also by pursuit aviation. Accordingly, proceeding from new missile systems' performance characteristics, potential capabilities of the warships, completing tasks within the Navy constant formation in a remote operational area, expand even more.²³²

The range of 1,700 kilometers is a symbolically significant number, as that is nearly the precise range from just off the coast of Russia's occupied Ukrainian naval base of Sevastopol to Berlin. Indeed, over half of Europe would be in danger from a *Kalibr* fired off the coast of Ukraine. This capability turns the Black Sea from a location that Russia would be able to exercise naval defensive operations (with the exception of its neighbors on the Black Sea) to one of a naval offensive. As will be discussed at greater depth, especially as tensions increase in the European theater, a Russian LACM threat to Europe should not be discounted, even apart from a general war between NATO and Russia. In a very well-sourced and significant 2018 report published by the Livermore Center titled *Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds*, author Dave Johnson lays out several ways Russia could employ weapons such as the *Kalibr* for "Conventional Precision Strike for Strategic Deterrence." One such operation is called (in Russian writings) a "demonstrative strike:"

One Russian source suggests that critically important facilities could be designated for a demonstrative strike by precision weapons, intentionally avoiding casualties or any grave negative impact on population survival. This would seem to call for a facility that is close enough to a population centre or otherwise monitored for an attack to be observed immediately, unmanned or lightly manned in order to keep casualties to a minimum, and assessed as having no dangerous secondary effects. If analysis of the Russian intention is correct, this is the strike option with the smallest escalatory potential. A demonstrative strike fitting this profile could be intended as a warning before the intensification of a crisis to direct conflict, or the escalation of an ongoing conflict.²³³

²³² A. V. Vitko, "The Black Sea Fleet: A Factor for Expanding Combat Capabilities in the Responsibility Zone," *Military Thought* 26, no. 3 (September 30, 2017): pp. 36-42, <https://doi.org/https://dx.doi.org/10.21557/MTH.49677034>, 40.

²³³ Dave Johnson, "Russia's Conventional Precision Strike Capabilities, Regional Crises, and Nuclear Thresholds," *Livermore Papers on Global Security* No. 3, February 2018, <https://doi.org/10.2172/1424635>, 49.

This capability – projecting maritime power via land-attack cruise missiles *north and west* into Europe – is a new and present danger to Europe. However, for Russia to fully employ a naval offensive strategy, it would have to leave the Black Sea and operate in what Admiral Vitko referred to as a “remote operational area.” Thus, the ships of Russia’s Black Sea Fleet would need to traverse what has been a strategic focus of Russia since the days of Peter the Great: the Turkish Straits.

5.1.3.2 The Turkish Straits

But Catherine, without dissolving her alliance with the Austrians, proceeded to a unilateral violation of the Treaty of Kucuk Kaynarci, annexing in 1783 all the Crimean Peninsula and founding in Sevastopol a large military base, whose purpose was the advancement of the ‘Greek Plan’, i.e., the advance of the Russians through the straits to the Mediterranean.²³⁴

—Rozakis and Stagos, *The Turkish Straits*, 1987

As the world witnessed in 2022, the Black Sea holds strategic value for Russia (and the West) in and of itself, especially in times when Russia does not hold de facto control of that sea. Whether from a defensive or an offensive standpoint, however, the true importance of the Euxine Sea lies in the passage between it and the Great Sea beyond: the Mediterranean. Control of the Turkish Straits have for centuries cast Russia’s hungry gaze onto the city that had once been called Byzantium, became Constantinople, and is now named Istanbul. In 1886 an American missionary (and founder of a Christian college in then-Constantinople), Cyrus Hamlin, wrote an article for *The Atlantic* titled “The Dream of Russia,” outlining this focus:

For a thousand years, Russia has had a vision of Constantinople as the centre of Russian power. Her first descent upon it was made in the ninth century, while still a heathen nation; and her latest in the nineteenth. Can any parallel instance be found, in which a nation has held fast to one great idea for a thousand years,

²³⁴ Rozakēs Chrēstos L. and Petros N. Stankos, *The Turkish Straits* (Dordrecht u.a., Netherlands: Nijhoff, 1987), 21.

through all vicissitudes of fortune, and all changes in government, religion, and civilization? It has been called the dream of Russia, – is it not a marvelously prophetic dream?²³⁵

Hamlin's 19th century use of the word "marvelously" should not be afforded positive connotations in describing Russia's designs; the lengthy article itself was a dire warning of the consequences should they attain control of the Turkish Straits:

And yet the dream of Russia is not realized! United Europe stands in the way. The possession of Constantinople will, in time, if realized, make Russia great at sea. She would have the Black Sea, the Marmora, the Mediterranean. She would next grasp at Egypt and the Indian Empire; and England, France, and Italy would be reduced to comparative insignificance. As she would then command the Danube, and would crush the hated Hungarians, Austria and Germany have reason to look upon the future with solicitude. Putting off the evil day will not save them. The real contest is no longer between Russia and Turkey, but between Russia and Europe.²³⁶

"Marvelously prophetic" seems apropos, as Europe in 2022 is united behind Ukraine in its fight against Russian Black Sea dominance. While the Russian focus is on the North-South maritime passageway that the Turkish Straits represent, there is a dual aspect to the importance of the region of the Turkish Straits; that as a bridge between the East and the West. Ferenc Vali, a lawyer and author who specialized in international law, wrote of this geopolitical uniqueness in his 1972 book "The Turkish Straits and NATO:"

All the natural routes – land, sea, and air, from the Black Sea to the Mediterranean and from the Balkans to the Persian Gulf – lead across Turkey and in most cases, in one way or other, across the Straits area. The Turkish Straits form, without doubt, "one of humanity's most important crossroads."²³⁷ The Bosphorus and the Dardanelles primarily serve as waterways for maritime traffic, but their strategic significance far exceeds their original and natural destiny. Control over this area provided the apple of discord between European Great Powers for two and a half

²³⁵ Cyrus Hamlin, "The Dream of Russia," *The Atlantic* (Atlantic Media Company, April 12, 2017), <https://www.theatlantic.com/magazine/archive/1886/12/the-dream-of-russia/522855/>.

²³⁶ Ibid.

²³⁷ Lewis V. Thomas and Richard N. Frye, *The United States and Turkey and Iran* (Cambridge, Mass.: Harvard University Press, 1951), 5.

centuries. The ominous Eastern Question may be epitomized as follows: Which power should succeed the faltering Ottoman Empire as master of Constantinople and the Straits?²³⁸

Vali goes on to point out that this importance was recognized long before 19th century great power competition, and stretches back into antiquity:

The double role which the Straits area plays today was well known to the ancient world. The Dardanelles and the Bosphorus served on the one hand, as waterways for the traffic between the Black Sea and the Mediterranean, and on the other hand as connecting points for the land-to-land traffic from Asia to Europe and vice versa. When leading his campaign against the Scythians north of the Black Sea (about 512 B.C.), the Persian King Darius led his army over the Bosphorus by means of a bridge which was probably near the spot north of Istanbul where the Bosphorus Bridge is being constructed at present. And his son, Xerxes, bridged the Dardanelles when leading his famous campaign for the conquest of Greece in 480 B.C.²³⁹

In the late eighteenth century Russia arrived on the world stage as a Black Sea power and set its sights on the real prize. The immediate competitor was the Ottoman Empire; the strategic threat was Great Britain. As documented by Milan Vego in his chapter in the 2000 book *Naval Strategy and Policy in the Mediterranean: Past, Present and Future*:

Between 1766 and 1914 Russia and Turkey went to war 13 times over which power was to control the straits. Also, for most of the nineteenth century, Great Britain and Russia were in conflict for control of the Turkish Straits. Russia usually obtained preferential treatment for the transit of its warships following wars with Turkey (treaties in 1805, 1833 and 1877). However, Britain often nullified these treaties through diplomacy or war.²⁴⁰

It is due to the particular geography of the Turkish Straits that the West has been able to impose its will on Russian naval operations, from the 18th century to the current day. That

²³⁸ VÁLI Ferencz Albert, *The Turkish Straits and NATO* (Stanford, California: Hoover Institution Press, Stanford University, 1972), 11.

²³⁹ Ibid, 14-15.

²⁴⁰ John B. Hattendorf, *Naval Policy and Strategy in the Mediterranean: Past, Present and Future* (London, UK: Cass, 2000), 165.

geography consists of two straits – the Bosphorus in the north and the Dardanelles in the south – connected by the inland Sea of Marmara. The Bosphorus is the narrowest maritime straight on the planet, the only one that is measured in meters vice kilometers; the Dardanelles is the world's second narrowest strait. Michael Sokolnicki, the Polish ambassador to Turkey during World War II, described the geography in his 1951 book *The Turkish Straits* thus:

The total distance from the Black Sea to the Aegean Sea is around 190 miles (300 klm.), of which the Bosphorus ²⁴¹ accounts for 17 miles (28 klm.) and the Dardanelles for 41 miles (66 klm.), with the 125-mile long (200 klm.) stretch of the Sea of Marmara in between. The narrowest part of the Bosphorus is 720 yards (660 m.) wide and that of the Dardanelles some one and a quarter miles (2 klm.). Both straits are deep enough for even the largest battleships to pass through, but, on the other hand, the coastal batteries fully command the passage, which can, moreover, be easily and effectively closed by mine-fields.²⁴²

The width of the Bosphorus and Dardanelles (660 meters and 2 kilometers) are an order of magnitude narrower than the next closest challengers: the Strait of Gibraltar (14 km), the Danish Straits (also 14 km), and the Bab al Mandeb in the southern Red Sea (21 km). The Strait of Hormuz, the focus of multiple generations of American war planners, is not in the same conversation at 54 kilometers.²⁴³

5.1.3.2.1 The Bosphorus

From the Russian perspective, the first of three waterways of the Turkish Straits encountered is the Bosphorus, the world's narrowest maritime chokepoint. This narrowness, combined with currents and high merchant ship traffic volume (three times denser than the Suez

²⁴¹ Note the difference in spelling; *Bosphorus* and *Bosporus* are both accepted spellings of the Strait, with the former being more popular in older writings. The Turkish Government website has instances of both spellings; this work will use the more modern *Bosporus* spelling, unless quoted from a source using the alternative.

²⁴² Michael Sokolnicki, *The Turkish Straits* (Beirut, Lebanon: American Press; Eastern Quarterly, 1950), 1.

²⁴³ Various distances calculated using Distance calculator, *Google Maps*, 09 May 2022.

Canal) makes the Bosphorus “one of the world’s most difficult waterways to navigate,”²⁴⁴ even for modern warships.

There is no better researched and written work on narrow maritime waterways than the series titled “International Straits of the World,” published since the 1970’s through the current day. The 1987 edition of “The Turkish Straits” by Christos Rozakis and Petros Stagos is the quintessential reference manual on the geographic, economic, political and historic aspects on the subject:

The length of the Bosphorus is about 19 miles. The width at the southern entrances is two and one-quarter miles; abreast of the southern entrance to the Golden Horn, the breadth of the strait is rather less than a mile and the entrance to the Golden Horn [the inlet to Istanbul], the breadth of the strait is rather less than a mile and the entrance to the Golden Horn narrows to about a quarter of a mile. The strait then narrows further and about five and one-quarter miles from Istanbul...it reaches its minimum of 750 meters. The strait then tends north-westward for about two and one-half miles, with an average width of about three-quarters of a mile, after which it turns in a north-easterly direction for about six miles to its northern entrance.²⁴⁵

While the narrowness of the Bosphorus is unique and challenging, it is actually the associated currents that cause the real struggle from a navigational perspective:

The depths in the main channel of the strait are deep, from 36 to 124 meters. The rapid currents present difficulties that call for a pilot’s help. In fact, the fast surface current may be observed as it is formed by the waters of the rivers that flow into the Black Sea and thence through the Bosphorus to the Sea of Marmara. An opposite undercurrent containing salt water moves to the Black Sea through the Bosphorus. These currents flow, depending on the wind’s strength, at an average speed of three km, but sometimes they can reach a speed of seven to eight km. When the descending currents of the Black Sea run at a high speed, they reflect secondary currents towards the shores of the Bosphorus that make navigation difficult, if not dangerous.²⁴⁶

²⁴⁴ Shamseer Mambra, “6 Bosphorus Strait Facts You Must Know,” Marine Insight, October 11, 2021, <https://www.marineinsight.com/know-more/6-bosphorus-strait-facts-you-must-know/>.

²⁴⁵ Rozakēs Chrēstos L. and Petros N. Stankos, *The Turkish Straits* (Dordrecht u.a., Netherlands: Nijhoff, 1987), 5.

²⁴⁶ Ibid.

The conditions that make it difficult for a Russian warship (or any country's naval vessels) to navigate the Bosphorus makes it impossible to do so covertly, at least on the surface. There are Twitter profiles dedicated to near-real time tracking and reporting of ships heading both north and south past Istanbul (see <https://twitter.com/yorukisik>, self-described as a "BOSPHORUS OBSERVER: Obsessive ship-spotting by the Bosphorus").²⁴⁷ The open-source analyst can glean a large amount of detailed information from such an "obsessive" observer, beyond simply utilizing the Montreux Convention's reporting of which warships are scheduled to transit the Straits. For example, during the first years of the Syrian Express, the website "informnapalm.com" (a site critical of Russian involvement in Ukraine) used photos from such open sources to determine how much freeboard a Russian LST was showing on the trip south to Syria, and the difference upon its northbound return. This allowed them to make assessments as to how many tons of military supplies had been delivered to Syria.²⁴⁸ This condition changes as a Russian ship departs the Bosphorus and heads into the second of three bodies of water that make up the Turkish Straits: the Sea of Marmara.

5.1.3.2.2 The Sea of Marmara

Moving south from the Bosphorus, a Russian Federation Navy vessel would enter the Sea of Marmara. The connection between the two Turkish Straits is a deep and relatively wide body of water, bordered by European Turkey to the west and Asiatic Turkey to the east. Interestingly, there are no ports of significance within its boundaries. As described by Rozakis and Stagos:

The maximum length of the Sea of Marmara is about 175 miles and its breadth at its widest point is nearly 50 miles. The channels of the Sea of Marmara are deep,

²⁴⁷ Insert footnote with the Twitter user

²⁴⁸ "War in Syria: How the Russian Navy Helps Bashar Assad," InformNapalm.org (English), March 17, 2016, <https://informnapalm.org/en/war-in-syria-how-the-russian-navy-helps-bashar-assad/>.

with an average of 493 meters and a maximum depth of 1,225 meters. The coastal banks are comparatively flat, with depths varying between 45 and 90 meters...Navigation through the Sea of Marmara presents no great difficulty. There are no navigational dangers...²⁴⁹

Following the journey through the Sea of Marmara, a Russian vessel approaches the narrow Dardanelles.

5.1.3.2.3 The Dardanelles

The final chokepoint Russia has to navigate to make it into the Aegean and eventually Mediterranean waters are the Dardanelles. Although this waterway is significantly wider and easier to navigate than the northern Bosphorus – Rozakis and Stagos assert “there is no difficulty in navigating the Dardanelles”²⁵⁰ – it is its proximity to the Mediterranean that has assured this passage has played a key role in the history of the Turkish Straits. Indeed, the name of the western peninsula forming the Dardanelles is more famous, or infamous depending on the perspective, than the Dardanelles themselves: Gallipoli. Here, it becomes apparent that not only the hydrography of the water but the geography of the land combines with the political map to form a true “chokepoint” in realistic terms.

5.1.3.2.4 Defending the Straits

When the threat from mines, coastal artillery, missiles or drones are added to the basic navigability problem, militarily “closing” the Turkish Straits is a relatively simple task by the country who controls the land. In *The Turkish Straits and NATO*, Vali writes:

Both the Dardanelles and the Bosphorus are ideally suited for defense against conventional surface attack. Like narrow entrances to harbors, they could in the past be easily defended against intruding warships provided mines and heavy gunnery were available. Natural heights on both banks of these narrow passages

²⁴⁹ Chrēstos L. and Stankos, 4-5.

²⁵⁰ Ibid, 3.

facilitated the construction of fortifications. Amphibious operations against a well-armed and well-fortified defense force were considered impossible or at least highly hazardous. In fact, no hostile navy ever managed to enter the Straits against sustained resistance, neither the Bosphorus from the north (as was planned but never attempted by Tsarist Russia) nor the Dardanelles from the southwest. The only large-scale amphibious attempt to force the Dardanelles was the so-called Gallipoli Campaign undertaken by British ANZAC (Australian and New Zealand Army Corps) and French forces in World War I.²⁵¹

The Gallipoli Campaign, in particular its failure to achieve the strategic objective of knocking the Ottoman Empire out of the fight in order to relieve pressure on Russia, had ramifications that were greater than the relatively few numbers of casualties (by World War I standards) suffered by the belligerents:

On the eastern front, German victories threatened Russia. Britain, with limited military assets available, chose to commit assets to the Mediterranean and Mesopotamian regions to relieve the pressure on Russia: Britain viewed Russia's possible capitulation (due to horrendous losses – over a million men in a few short months) as a serious threat to the western front – those German divisions committed in the east would be available for reassignment in the west. This would severely affect the tenuous balance of power in the west, giving Germany the opportunity to break the stalemate that existed there.²⁵²

There was also a logistic and economic strategic objective in the decisions that led to Gallipoli. As today, Russia's immense geography determined that the Black Sea was the most important location from a shipping perspective for Russia:

The crux was Russia. With industry that was much less developed than the leading Western powers, she desperately needed to import war supplies. Yet because the enemy was blockading the Baltic and Black seas the only viable supply routes were through Archangel in the north and Vladivostok in the Far East. In both cases the goods necessarily took months to reach their destination, whereas delivery via the straits and Black Sea would be far quicker.²⁵³

²⁵¹ Albert, 8.

²⁵² Bud Bishop, "Operational Art: An Analysis of Britain's Southwest Asia Campaign in World War I" (dissertation, 1997), 3.

²⁵³ Anthony John Heywood, "A Century on, Gallipoli Campaign Should Be More than Just a Symbol of Futility," The Conversation, January 25, 2021, <https://theconversation.com/a-century-on-gallipoli-campaign-should-be-more-than-just-a-symbol-of-futility-53084>.

The importance of Russia to the Allied cause in World War I cannot be overstated. Forcing Germany to fight on two fronts while throwing young soldiers into the meatgrinder of Russia was key to success, similar to the role they would play in World War II a generation later. In order to get Russia to join the Allies in World War I, Great Britain and France had offered what Russia most coveted: Constantinople and control of the Turkish Straits. In what has become known as the “secret memos” or the “Constantinople agreement,” a series of correspondence was exchanged in 1915 between Russia and the Allies, with the latter promising the former the key terrain they had desired for hundreds of years, as outlined in the below exchange between ambassadors and aides:

Aide-Memoire FROM RUSSIAN FOREIGN MINISTER TO BRITISH AND FRENCH AMBASSADORS AT PETROGRAD, 19 FEBRUARY/4 MARCH 1915:

The course of recent events leads His Majesty Emperor Nicholas to think that the question of Constantinople and of the Straits must be definitively solved, according to the time-honored aspirations of Russia.

Every solution will be inadequate and precarious if the city of Constantinople, the western bank of the Bosphorus, the Sea of Marmara and of the Dardanelles, as well as southern Thrace...should henceforth not be incorporated into the Russian Empire.

BRITISH Aide-Memoire TO THE RUSSIAN GOVERNMENT, 27 FEBRUARY/12 MARCH 1915:

Subject to the war being carried on and brought to a successful conclusion...His Majesty's Government will agree to the Russian Government's aide-memoire relative to Constantinople and the Straits, the text of which was communicated to His Britannic Majesty's Ambassador by his Excellency M. Sazonof on February 19th/March 4th instant.²⁵⁴

²⁵⁴ Jacob C. Hurewitz, *Diplomacy in the near and Middle East: A Documentary Record 1535-1956* (Gerrards Cross, UK: Archive Ed, 1987).

Of course, the operation did not succeed. The Allied campaign to seize the Turkish Straits through an invasion on the Gallipoli Peninsula lasted nearly a year (from February 1916 – January 1917), cost over 140,000 casualties amongst the Allies (including an astounding 44,000 killed),²⁵⁵ and resulted in complete failure to reach the objectives that had been estimated by planners to take a week to reach. The Ottomans were not knocked out of the war, war supplies did not reach Russia, and by February of 1917 revolution had broken out. By November the Bolsheviks had seized power, leading in March 1918 to the Treaty of Brest-Litovsk, officially ending Russian belligerency against Germany (though the Russian Army had already been eliminated as an effective fighting force through battle and desertion).

With a regime change involving Russia and its early departure from the war, the Allies were more than happy to dissolve the requirements in the secret memos promising them the Turkish Straits (for their part, the new Bolshevik government wanted nothing to do with treaties with imperialists made by the former rulers). With the United States joining the effort the same year, the treaty with Russia did not come in time for Germany to prevail. The Great War ended, and the Treaty of Versailles was signed in June of 1919. However, the question of the Turkish Straits was so vexing that it was not until 1923 that the “final treaty of World War I”²⁵⁶ was signed between the Allies and what had been the Ottoman Empire, recognizing the modern-day borders of Turkey (and thus simultaneously deciding the fates of Syria and Iraq’s northern borders) while

²⁵⁵ “Gallipoli Casualties by Country,” New Zealand History (New Zealand Ministry of Culture and Heritage, March 1, 2016), <https://nzhistory.govt.nz/media/interactive/gallipoli-casualties-country#:~:text=The%20Gallipoli%20campaign%20was%20a,where%20British%20and%20Irish%20troops.>

²⁵⁶ “Treaty of Lausanne,” Encyclopædia Britannica (Encyclopædia Britannica, inc.), accessed May 10, 2022, <https://www.britannica.com/event/Treaty-of-Lausanne-1923>.

also deciding the fate of the Turkish Straits. The Bosphorus, Sea of Marmara and the Dardanelles were declared demilitarized zones and the Straits were free to transit by all nations:

The High Contracting Parties are agreed to recognize and declare the principle of freedom of transit and of navigation, by sea and by air, in time of peace as in time of war, in the strait of the Dardanelles, the Sea of Marmora and the Bosphorus, as prescribed in the separate Convention signed this day, regarding the regime of the Straits.²⁵⁷

That separate Convention went on to establish a security guarantee for the Straits, not by Turkey but by a coalition of the winning side in World War I:

Should the freedom of navigation of the Straits or the security of the demilitarised zones be imperilled [sic] by a violation of the provisions relating to freedom of passage, or by a surprise attack or some act of war or threat of war, the High Contracting Parties, and in any case France, Great Britain, Italy and Japan, acting in conjunction, will meet such violation, attack, or other act of war or threat of war, by all the means that the Council of the League of Nations may decide for this purpose.²⁵⁸

Of course, it took slightly more than ten years for the 20th Century political winds to shift dramatically – the four guarantors of freedom in the Straits and safety for Turkey had split into two, half on the Allied side and half on the Axis. Concerned over the apparent failure of the Treaty of Versailles to prevent the resurgence of a revanchist Germany and the threat it could represent to Turkey (at a minimum), a new treaty was introduced, signed, and adopted on July 20, 1936 that still remains in effect to this day – the “1936 Convention Regarding the Regime of the Straits (but thereafter referred to as the Montreux Convention, after the city where it was signed: Montreux, Switzerland):

²⁵⁷ “Treaty of Peace (Treaty of Lausanne) (1923),” Treaty of Peace (Treaty of Lausanne) (1923), accessed May 10, 2022, <https://jusmundi.com/en/document/treaty/en-treaty-of-peace-treaty-of-lausanne-1923-treaty-of-peace-treaty-of-lausanne-tuesday-24th-july-1923>.

²⁵⁸ Lausanne Peace Treaty: II. convention relating to the régime of the Straits (Republic of Türkiye Ministry of Foreign Affairs), accessed May 10, 2022, https://www.mfa.gov.tr/ii_-convention-relating-to-the-regime-of-the-straits.en.mfa.

It reinstated Turkey's territorial sovereignty and ended the demilitarized status of the Turkish straits (the Dardanelles and the Bosphorus and, for the purposes of the convention, the Sea of Marmara between them), all connecting the Aegean (and, by extension, the Mediterranean) to the Black Sea. The convention ensures free passage for merchant shipping during peace time. Unlike, for example, the Suez and Panama canals, Turkey cannot charge fees for transit, other than pre-determined "taxes or charges" outlined in an annex to the convention...²⁵⁹

Restrictions were placed on the transits of the Straits by warships, with the rules varying depending on whether the nation in question was a Black Sea riparian state (described in the Convention as a "Black Sea Power") or not. One of the most significant provisions was the requirement of all nations to provide future notice to Turkey of any plans for warships to transit the Straits. Commonly referred to as a "Montreux Declaration," Article 13 of the convention states:

The transit of vessels of war through the Straits shall be preceded by a notification given to the Turkish Government through the diplomatic channel. The normal period of notice shall be eight days; but it is desirable that in the case of non-Black Sea Powers this period should be increased to fifteen days. The notification shall specify the destination, name, type and number of the vessels, as also the date of entry for the outward passage and, if necessary, for the return journey. Any change of date shall be subject to three days' notice.

Entry into the Straits for the outward passage shall take place within a period of five days from the date given in the original notification. After the expiry of this period, a new notification shall be given under the same conditions as for the original notification.

When effecting transit, the commander of the naval force shall, without being under any obligation to stop, communicate to a signal station at the entrance to the Dardanelles or the Bosphorus the exact composition of the force under his orders.²⁶⁰

²⁵⁹ Kemal Kirişçi and Serhat Güvenç, "Montreux Convention, at 85, Needs Tending for US-NATO-Russia Security and Stability," Just Security, July 20, 2021, <https://www.justsecurity.org/77524/montreux-convention-at-85-needs-tending-for-us-nato-russia-security-and-stability/>.

²⁶⁰ "1936 Convention Regarding the Regime of the Straits." Singapore. Accessed May 11, 2022. <https://cil.nus.edu.sg/databasecil/1936-convention-regarding-the-regime-of-the-straits/>, 7.

Note that this is worded as a “notification” of vice “permission” by Turkey, assuring the right (in peacetime) of both Black Sea and non-Black Sea powers warships to transit the Straits. All nations have restrictions placed on total ship tonnage able to transit at a given time, but non-Black Sea powers are limited in the length of stay a warship has in the Black Sea: “Vessels of war belonging to non-Black Sea Powers shall not remain in the Black Sea more than twenty-one days, whatever be the object of their presence there.”²⁶¹

Russia has been historically of two minds regarding the Convention. On the one hand, as a Black Sea riparian state they enjoy privileges not allowed to their Cold War rivals, the United States; “The convention goes to great lengths to enable Black Sea Powers with ports outside the Black Sea to freely reposition warships – a benefit only Turkey itself and the Soviet Union could use.”²⁶²

On the other hand, there were still significant restrictions placed upon them that challenged their sovereign employment of military power due to Turkey’s ownership of the Straits; Article 24 of the convention spelled this out by stating that “The functions of the International Commission set up under the Convention relating to the regime of the Straits of the 24th July, 1923, are hereby transferred to the Turkish Government...” and that “They will supervise the execution of all the provisions of the present Convention relating to the passage of vessels of war through the Straits.”²⁶³

²⁶¹ Ibid, 8.

²⁶² Nicholas J. Meyers, “The Significance of the Turkish Straits to the Russian Navy,” Foreign Policy Research Institute, March 16, 2022, <https://www.fpri.org/article/2022/03/the-significance-of-the-turkish-straits-to-the-russian-navy/>.

²⁶³ “1936 Convention Regarding the Regime of the Straits.” Singapore. Accessed May 11, 2022. <https://cil.nus.edu.sg/databasecil/1936-convention-regarding-the-regime-of-the-straits/>, 10.

On a number of occasions this caused Russia to employ rhetorical tactics to skirt some provisions of the Regime. For example, the Convention in effect excludes the transit of aircraft carriers through the Straits by limiting the displacement (tonnage) of any single vessel. Article 14 states “The maximum aggregate tonnage of all foreign naval forces which may be in course of transit through the Straits shall not exceed 15,000 tons.”²⁶⁴ While an earlier article makes an exception for “capital ships” of riparian states (“Black Sea Powers may send through the Straits capital ships of a tonnage greater than that laid down in the first paragraph of Article 14,”)²⁶⁵ the Convention also goes to great lengths to make clear that aircraft carriers – those vessels “designed or adapted primarily for the purpose of carrying and operating aircraft at sea”²⁶⁶ – are *not* considered capital ships. Therefore, as a non-capital ship, aircraft carriers would only be allowed to transit the Turkish Straits if they were less than the maximum 15,000-ton displacement.

With the exception of some escort- and aircraft maintenance-carriers, even by World War II standards, a 15,000-ton limit excludes true aircraft carriers for all practical purposes. The *Nimitz*-class of supercarrier, built in 1967, displaces approximately 90,000 tons by comparison. Russia’s only modern aircraft carrier *Admiral Kuznetsov* displaces close to 60,000 tons.²⁶⁷ The practical exclusion of modern-era carriers has led the Turkish government to openly announce such on its government website implementing the Montreux Convention, stating “Aircraft

²⁶⁴ “Ibid, 7.

²⁶⁵ Ibid, 6.

²⁶⁶ Ibid, 16.

²⁶⁷ “Kuznetsov Class (Type 1143.5) Aircraft Carrier,” Naval Technology, April 9, 2021, <https://www.naval-technology.com/projects/kuznetsov/>.

carriers whether belonging to riparian states or not, can in no way pass through the Turkish Straits.”²⁶⁸

Nonetheless, “on July 18th, 1976, the 40,000-ton Soviet naval vessel *Kiev*, sporting a 600-foot flight deck and a complement of helicopters and fixed-wing aircraft, steamed into the Mediterranean after completing its transit of the Turkish Straits.”²⁶⁹ Because only “capital ships” by 1936 standards – cruisers and destroyers – could exceed 15,000 tons and still make the journey, the Soviets had designated the *Kiev* as a “helicopter-carrying cruiser.” Arguing that the Montreux Convention did not clearly define what made a ship a cruiser or carrier, the Soviets argued that the *mission* of the *Kiev* was what mattered, and that its primary mission was anti-submarine warfare. F. D. Froman conducted a well-researched analysis of the situation for the San Diego Law Review and came to the conclusion that:

On the basis of the opinions of knowledgeable observers and of analysis of the *Kiev*’s weapons and its design, there is no way to avoid the conclusion that the *Kiev* was designed and constructed primarily to carry and operate aircraft at sea, its other mission capabilities notwithstanding. Indeed, the conclusion is inescapable that the *Kiev* is an aircraft carrier within the meaning of the Montreux Convention.²⁷⁰

Unlike “helicopter carriers” the Soviets had produced in the past, the *Kiev* carried twelve-to-fifteen YAK-38 *Forgers*, “V/STOL” (Vertical or Short Take Off and Landing) fighter aircraft, similar in design (though lagging in capability) to the U.S. Marine Corps and Royal Navy *Harrier*

²⁶⁸ “Implementation of the Montreux Convention,” Implementation of the montreux convention (Republic of Turkiye Ministry of Foreign Affairs), accessed May 11, 2022, <https://www.mfa.gov.tr/implementation-of-the-montreux-convention.en.mfa>.

²⁶⁹ F. David Froman, “Kiev and the Montreux Convention: The Aircraft Carrier That Became a Cruiser to Squeeze Through the Turkish Straits,” *San Diego Law Review* 14, no. 3 (1977): pp. 681-717, https://digital.sandiego.edu/sdlr/vol14/iss3/11/?utm_source=digital.sandiego.edu%2Fsdlr%2Fvol14%2Fiss3%2F11&utm_medium=PDF&utm_campaign=PDFCoverPages, 681.

²⁷⁰ *Ibid*, 701-702.

aircraft. One thing the YAKs could do, theoretically, was project power; the *Forger* could reportedly carry up to “4,400 pounds of externally-mounted ordnance,” including general purpose bombs, anti-surface and anti-ship missiles.²⁷¹ That capability, combined with the tonnage of the *Kiev*, made it clear that the vessel violated the spirit (if not the specific letter) of the Convention. Nevertheless, perhaps due to the politics of the Cold War in 1977, “Istanbul’s military port authorities accepted the Soviet classification of ‘antisubmarine cruiser’ and allowed the *Kiev* to pass.”²⁷²

Much more recently, but once again involving a new type of vessel that had a unique capability to project power, the Russian Federation Navy skirted the intent of the Montreux Convention by deploying upgraded submarines from the Black Sea to the Mediterranean. Unlike the *Kiev* in the 1970’s, this involved the transit and operational employment of a warship in *wartime*. While submarines are not included in the types of vessels allowed to transit the Straits by non-Black Sea Powers under any circumstances, Article 12 of the Convention states that:

Black Sea Powers shall have the right to send through the Straits, for the purpose of rejoining their base, submarines constructed or purchased outside the Black Sea, provided that adequate notice of the laying down or purchase of such submarines shall have been given to Turkey. Submarines belonging to the said Powers shall also be entitled to pass through the Straits to be repaired in dockyards outside the Black Sea on condition that detailed information on the matter is given to Turkey.²⁷³

²⁷¹ “Yakovlev Yak-38 (Forger),” Military Factory - Global Defense Reference, April 29, 2021, https://www.militaryfactory.com/aircraft/detail.php?aircraft_id=189.

²⁷² Ibid, 681-682.

²⁷³ “1936 Convention Regarding the Regime of the Straits.” Singapore. Accessed May 11, 2022. <https://cil.nus.edu.sg/databasecil/1936-convention-regarding-the-regime-of-the-straits/>, 6-7.

During the upgrade of the Black Sea Fleet's submarine inventory in the mid-2010's, Russia sent newly constructed *Kilo 636.3*-class attack submarines²⁷⁴ from the Baltic (where they were built and conducted sea trials) through the Mediterranean, employ *Kalibr* Land Attack Cruise Missiles against real-world targets in Syria (normally counter-regime entities such as the Islamic State), then transit to their homeport in the Black Sea. This method was technically within the wording of the Convention; however, once they were in the Black Sea, they could not then transit south to conduct further operations in Syria and legally return to the Black Sea. The loophole in Montreux was the exception for submarines to be able "to be repaired in dockyards outside the Black Sea."

Russian submarine expert H.I. Sutton meticulously detailed the pattern of Russian *Kilo* transits through the Turkish Straits (not an easy task at the open-source level) in an article for the U.S. Naval Institute in July of 2020:

The current pattern started in 2015, shortly after Russia's intervention of the war in Syria. The...submarine, Rostov-on-Don, paused shortly in the Mediterranean during its delivery voyage to the Black Sea. It launched Kalibr missiles at targets in Syria before transiting the Bosphorus Strait. Then in 2017, another Kilo-class boat, Krasnodar, did the same thing. This time its pre-delivery combat excursion was longer, a couple of months.

As Krasnodar entered the Black Sea, two additional boats, Velikiy Novgorod and Kolpino, started their own pre-delivery combat deployments. This time they operated for much longer, more than a year. When they did eventually sail through the Bosphorus, it was "for the first time after their construction or purchase."

With all six improved Kilo-class submarines destined for the Black Sea Fleet now there, Russia could not use the pre-delivery clause again. Therefore, the two boats

²⁷⁴ Russia's *Kilo 636.3* program refers to the modernization of the 877-version of *Kilo*'s. The 636.3 variant has either been built with, or been upgraded to, the *Kalibr* fire control system, capable of employing the anti-ship, anti-submarine, or land-attack missile of the same name. For a succinct explanation see Peter Suci, "Russia's Kilo-Class: The 'Black Hole' Submarine the US Navy Hates," 19FortyFive, April 8, 2022, <https://www.19fortyfive.com/2022/04/russias-kilo-class-the-black-hole-submarine-the-us-navy-hates/>.

which replace Velikiy Novgorod and Kolpino on station in the Mediterranean had to pass out of the Black Sea. Thus, *Staryy Oskol* and *Krasnodar* passed south through the Bosphorus ostensibly for scheduled maintenance.

The move raised eyebrows at the time, with the USNI News writing that if the submarines conducted military operations it could be considered a breach of the Montreux Convention.²⁷⁵

Both submarines – the *Staryy Oskol* and the *Krasnodar* – did indeed conduct operations in the Mediterranean, with the former then returning to the Black Sea. However, in attempting to keep to the letter (if not the spirit) of the Convention, both boats first conducted maintenance in the Baltic, as reported by the website “Bosphorus Naval News:”

Russian improved Kilo class (Project 636.3) submarine *Stary Oskol* made a northbound passage through Istanbul on 23rd September 2021.

This passage was the end of a very long overhaul and operational deployment. She was last seen in Istanbul passing southbound on 25.4.2019. She exited the Black Sea to sail to the Admiralty Shipyard in St. Petersburg for an overhaul. Later since December 2020, she was stationed in the Med.²⁷⁶

For its part, the *Krasnodar* passed north through the English Channel in July 2020, as reported by H.I. Sutton in the *Financial Times*,²⁷⁷ ostensibly enroute Baltic Sea repair facilities. Like *Staryy Oskol* the *Krasnodar* returned to Tartus, Syria, but never made the follow-on trip into the Black Sea – it remains one of two *Improved Kilo*-class submarines that remain on station in the eastern

²⁷⁵ H. I. Sutton, “Russian Black Sea Sub Deployments to Mediterranean Could Violate Treaty,” USNI News, July 8, 2020, <https://news.usni.org/2020/07/08/russian-black-sea-sub-deployments-to-mediterranean-could-violate-treaty>.

²⁷⁶ “Improved Kilo Class Submarine *Stary Oskol* Returned Home,” Improved Kilo Class Submarine *Stary Oskol* Returned Home |, September 26, 2021, <https://turkishnavy.net/2021/09/26/improved-kilo-class-submarine-stary-oskol-returned-home/>.

²⁷⁷ H.I. Sutton, “New Intelligence Reveals Russian Submarine Heading into English Channel,” Forbes (Forbes Magazine, July 19, 2020), <https://www.forbes.com/sites/hisutton/2020/07/19/new-intelligence-reveals-russian-submarine-heading-into-english-channel/?sh=26606c895abe>.

Mediterranean, unable to pass into the Turkish Straits by Montreux Convention restrictions imposed since the invasion of Ukraine.

Most recently the implementation of the Montreux Convention has become a part of the global popular lexicon in relation to the Russian invasion of Ukraine in February 2022. Only Article 19 addresses the specific implications of the Convention involving belligerents in wartime when one of the warring parties is *not* Turkey:

In time of war, Turkey not being belligerent, warships shall enjoy complete freedom of transit and navigation through the Straits under the same conditions as those laid down in Articles 10 to 18. Vessels of war belonging to belligerent Powers shall not, however, pass through the Straits...²⁷⁸

Russia kicked off its invasion of Ukraine on February 23, 2022, in what Russian President Vladimir Putin described it as a “special military operation.”²⁷⁹ While much of the analysis at the time chalked this up to information operation euphemisms, Moscow went to great lengths to remove the term “war” from any Russian-originated discussion of the invasion:

For instance, a statement by Russia’s internet censor board, Roskomnadzor, warns that referring to the ongoing military campaign as an “invasion”, “attack” or “declaration of war” will lead to the offending website being blocked.

Since Tuesday, schools across Russia have hosted special war-themed social studies classes, where teachers must tell schoolchildren between the seventh and 11th grades the official government’s position on history and what the Kremlin deems the “special operation”.²⁸⁰

²⁷⁸ “1936 Convention Regarding the Regime of the Straits.” Singapore. Accessed May 11, 2022. <https://cil.nus.edu.sg/databasecil/1936-convention-regarding-the-regime-of-the-straits/>, 8-9.

²⁷⁹ Alexander Ward, Nahal Toosi, and Paul McLeary, “Russia Attacks Ukraine,” POLITICO, February 24, 2022, <https://www.politico.com/news/2022/02/23/russia-invasion-ukraine-00011238>.

²⁸⁰ “Do Not Call Ukraine Invasion a ‘War’, Russia Tells Media, Schools,” Russia-Ukraine war News | Al Jazeera (Al Jazeera, March 2, 2022), <https://www.aljazeera.com/news/2022/3/2/do-not-call-ukraine-invasion-a-war-russia-tells-media-schools>.

Not referring to the invasion as a “war” may have had its desired effect on Turkey, though it only lasted a short while. Russia commenced its invasion on a Thursday; on Friday, Ankara was “working to determine if a state of war existed in the region.”²⁸¹ By Sunday “Turkey’s foreign minister said...that the situation in Ukraine had become a war, a legal distinction that paves the way for Ankara to potentially ban Russian warships from entering the Black Sea through a strategic chokepoint.”²⁸² Specifically appealing to the Montreux Convention, Turkish Foreign Minister Mevlut Cavusoglu stated to CNN Turk:

“Under these conditions, we will apply the Montreux agreement. Article 19 is pretty clear. In the beginning, it was a Russian attack and we evaluated it with experts, soldiers, and lawyers. Now it has turned into a war. This is not a military operation; it is officially a state of war.”²⁸³

However, although Article 19 allows Turkey to deny access to the Straits by belligerents in a conflict, Ankara went significantly further by closing off the passage to *all* warships, not just those of Russia and Ukraine; “Turkish Foreign Minister Mevlut Cavusoglu was cited by state media as saying that Turkey had demanded all Black Sea and non-Black Sea states to halt passage through its straits.”²⁸⁴ Technically, according to Montreux, this was not within Turkey’s power to declare, unless it felt it was “threatened with imminent danger of war,”²⁸⁵ under which it could invoke Article 21 of the Convention and close the Straits to all warships. Barring that, Turkey should only close passage to warships of Ukraine and Russia; since Ukraine has no functional

²⁸¹ Jarred Malsin, “Turkey Says War Exists in Black Sea, Allowing It to Block Russian Navy,” The Wall Street Journal (Dow Jones & Company, February 27, 2022), <https://www.wsj.com/livecoverage/russia-ukraine-latest-news-2022-02-26/card/turkey-says-war-exists-in-black-sea-allowing-it-to-block-russian-navy-uDQC9dMZsNGZLQsfWYg>.

²⁸² Ibid.

²⁸³ Meyers.

²⁸⁴ Tuvan Gumrukcu, “Invoking Montreux Convention, Turkey Closes Access to the Black Sea,” MarineLink (Maritime Activity Reports, Inc., March 1, 2022), <https://www.marinelink.com/news/invoking-montreux-convention-turkey-494666>.

²⁸⁵ “1936 Convention Regarding the Regime of the Straits.” Singapore. Accessed May 11, 2022. <https://cil.nus.edu.sg/database/cil/1936-convention-regarding-the-regime-of-the-straits/>, 9.

navy, this would in effect only impact the Russian Federation Navy. In an impassioned plea to do just that, Cornell Overfield detailed the chronology of Turkey's responses in an article for the website lawfareblog.com appropriately titled "Turkey Must Close the Turkish Straits Only to Russian and Ukrainian Warships:"

Since Russia's invasion of Ukraine began, Turkey's response has swung from signaling an underapplication of the convention to signaling an overapplication of it.

On Feb. 24, the first day of the invasion, Ukraine asked Turkey to exercise its power under the convention to close the straits to Russian warships, and Ukrainian President Volodymyr Zelensky reiterated this plea in a tweet. Turkey's initial response was noncommittal and emphasized that Russian warships would still transit.

On Feb. 27, Turkish Foreign Minister Mevlut Cavusoglu acknowledged Putin's invasion as a war—an important first step toward invoking Article 19. (Faced with the Soviet Union insisting that Turkey apply Article 19 to U.S. warships during the Vietnam War, Turkey held that the U.S. was not at war.) A flurry of coverage predicted that an Article 19 invocation was imminent and the straits would be closed to Russian warships.

On Feb. 28, however, Turkey steered away from Article 19. Instead, Cavusoglu "warned all riparian and non-riparian countries not to let warships go through the straits" (emphasis added) without clarifying the basis for this warning. Although no implementing regulations have been published yet, Cavusoglu's words suggest that Turkey would close the straits to all warships, not just those from Russia and Ukraine.

Turkey's president, foreign minister and defense minister have all claimed that Turkey is strictly implementing the convention.²⁸⁶

As no NATO states were at war during the Russian invasion of Ukraine, they should ostensibly be allowed to transit into the Black Sea under normal peacetime regulations of the Montreux Convention. Overfield explains the legal and military ramifications of Ankara's extra-jurisdictional moves:

²⁸⁶ Cornell Overfield, "Turkey Must Close the Turkish Straits Only to Russian and Ukrainian Warships," Lawfare (Lawfareblog.com, March 5, 2022), <https://www.lawfareblog.com/turkey-must-close-turkish-straits-only-russian-and-ukrainian-warships>.

...Turkey's staying its latest course would create a precedent that allows Turkey to close at will the straits entirely to foreign warships. If rooted in Article 19, closing the straits to all warships would create a precedent of Turkey closing the straits entirely during any interstate war. This could, as in the current case, impede collective defense and deterrence efforts.²⁸⁷

This potential eroding of the provisions of Montreux has significant implications moving forward, both in the ability of Turkey to legally restrict Russian forces from entering the Black Sea (as in the case of the Ukraine war), or in its ability to control the movement of Russian Black Sea Fleet warships from entering the Mediterranean in some future operation. While in the short term the conflict with Ukraine has focused attention on Russian support to the Black Sea Fleet from RFN vessels outside the Straits, history has shown that Russia's long-term considerations concern their ability to support operations in the Mediterranean (and possibly beyond) with the Black Sea as the base of origination. The Montreux Convention, though imperfect, has placed effective constraints on Russia's maritime activities in the Mediterranean over nearly a hundred years, not the least of which is NATO's ability to receive advance notice of RFN naval combatant movements.

5.1.4 The Mediterranean Squadron

The word "Mediterranean" is somewhat of a misnomer. Taken from the Latin, its literal translation has nothing to do with water, but with land: the "middle of the land," or "inland." The reason for this is because the body of water referred to in the Bible as the "Great Sea" is the great divider and the great uniter – separating Europe from Asia (the Middle East) and Africa, while containing bays and estuaries and natural harbors that allowed people groups to connect for trade. The United Nations describes its unique significance as such:

²⁸⁷ Ibid.

The Mediterranean Basin has been the cradle of world civilization since the first settlements in Jericho in 9000 B.C...Our Sea played a major role in the communication of the peoples around it and prevented clashes between people with different interests from different parts of the Basin. No other such basin exists in the world. The world map shows what a unique location the Mediterranean Sea has in the world – it is big enough to house all of us but at the same time, with its unique shape, with its islands, bays and straits, it creates the means to connect the people around it.²⁸⁸

The geographic characteristics of the Mediterranean are important to note, for they drove the development of naval technology, which in turn determined which civilizations were able to succeed at the crucial moment in world history. Although modern geographers tend to divide the Sea into west-central-east sections, as Hattendorf relays in *Naval Strategy and Policy in the Mediterranean*, it is the north-south divide that holds the most historical significance. The southern Mediterranean suffers from a myriad of maritime obstacles:

In general, the southern coastline is dangerous, even without taking the winds and currents into consideration. Moreover, the best ports often suffer from insufficient supplies of fresh water, food or both, a pattern of scarcity that posed great problems for galley fleets that had to be resupplied regularly.²⁸⁹

The portion of the Sea that borders Europe, on the other hand, is benefited by agreeable maritime geography:

Though long stretches of the Mediterranean coastline are inhospitable for both people and ships, nature bestowed extraordinary favors on a few sites. The northern half of the Mediterranean is relatively benign, marked by abundant natural ports on the mainland and on selected islands. Given these characteristics, it is no wonder that seafarers tended to favor “trunk routes” in the northern half of the sea, where they could move easily from island to island and from port to port.²⁹⁰

²⁸⁸ Gülsün Sağlamer, “The Mediterranean Sea: Cradle of Civilization,” United Nations (United Nations), accessed May 14, 2022, <https://www.un.org/en/chronicle/article/mediterranean-sea-cradle-civilization>.

²⁸⁹ Hattendorf, *Naval Policy and Strategy in the Mediterranean*, 5.

²⁹⁰ Ibid.

From the very beginning these trunk routes were economic – maritime – in nature. However, if the first ship ever built was a merchant vessel, then it could be said that the second ship built was a pirate ship, and the third was a naval vessel designed to defend the merchant ship and destroy the pirates. This gave rise to large naval forces vying for the protection and control of the routes (first from pirates, eventually from other countries' naval forces):

For thousands of years, political and military rivalries focused on a number of key points along the trunk routes in the northern Mediterranean. Whoever controlled enough of those points could determine the terms and conditions of access to the trunk routes, even if they could not monopolize their use. However, if they could keep their lines of communication and supply open, well-entrenched forces could maintain a presence in the heart of alien territory. Nearly all the major battles and sieges in the early modern period were fought over one or another key point along the northern trunk routes.²⁹¹

As one can imagine, the immutable physical geography and climatology of the Northern Mediterranean, combined with the slowly changing naval technology over the centuries, drove specific locations of these battles and sieges:

Nearly all the ideal battle sites are in the northern half of the Mediterranean, and most of them are clustered from Sardinia and Corsica eastward. It is no coincidence that the Battle of Actium in 31 B.C. and the Battle of Preveza in 1538 occurred at virtually the same place in the Ionian Sea.²⁹²

Nearly three hundred years after the Battle of Preveza, the Russian Imperial Navy joined unlikely allies – Britain and France – against a large but technologically backward Turkish Fleet in the familiar waters of the Ionian Sea. The Battle of Navarino resulted in a lopsided victory for the combined fleet, and has risen to the level of folk lore in the Russian Navy:

In Navarino Bay (October, 1827) ten British, Russian and French ships of the line with eighteen frigates and sloops destroyed seven Turkish ships and forty-three frigates and sloops. According to the Russians, the brunt of the fighting was borne

²⁹¹ Ibid, 6.

²⁹² Ibid.

by their contingent of four ships and four frigates, and in particular by the eighty-gun flagship *Azov*, commanded by Lazarev, which fought so gallantly that the Tsar decreed that there should always be a ship of the line named *Pamyat Azova*²⁹³; and her ensign has always carried the badge of St George (for Valour) in commemoration.²⁹⁴

Navarino was not the Russian's first foray into the Mediterranean, but it was by far the most high-profile, highlighting the importance that Russia places on the Mediterranean. Unlike the Barents, Baltic, and Black Seas (or for that matter the Pacific Ocean), Russia has no physical border on the *Mare Nostrum*, the term given to the Mediterranean Sea by the Romans to connote imperial ownership of what is generally considered the most important body of water in the history of Western Civilization. Yet in 1827 at the battle of Navarino, Russia found itself as part of combined naval armada facing the Turks in the Ionian Sea, in what was considered the last major battle by warships equipped with sail alone.

Thus, in summing up what has been said, we clearly see that the Mediterranean Sea, which is located close to the southwestern borders of Russia, beginning with the period of the sailing fleets, was the region having a most important significance for her defense. Russian squadrons conducted combat operations there not to seize foreign territories or enslave peoples, but for the sake of ensuring the security of their own country. This was a struggle of forces on the foremost line of defense of the country when threats of aggression arose from the southwest.²⁹⁵

The above quote was written by then-Fleet Admiral of the Russian Navy Admiral Sergei Gorshkov and cleared for publication in 1972 by the Soviet Union. The title of the work, the second chapter in an 11-chapter series, was titled "Russia's Road to the Sea, Peter I to Napoleon." As the title

²⁹³ In memory of the *Azov*. Although there are currently no Russian Federation Navy vessels with this name, there are two that are similar. The *Ropucha*-class amphibious vessel *Azov* is based out of the Black Sea and has been involved in the "Syrian Express" resupply to Syrian president Bashar Assad. The Intelligence-Gathering Ship *Priazovye* is also stationed in the Black Sea Fleet.

²⁹⁴ Malcolm George Saunders, *The Soviet Navy* (London, UK: Weidenfeld and Nicolson, 1958), 36.

²⁹⁵ S. G. Gorshkov and Herbert Preston, *Red Star Rising at Sea* (Annapolis, Maryland: United States Naval Institute, 1974), 19-20.

implies, the essay is a historiological piece written with the goal of explaining the importance of naval power in Russian history, with perhaps a subtle suggestion to the Soviet leadership to continue the expansion of the navy, ongoing at that time. Given the political atmosphere in the U.S.S.R. in the early 1970's there is a great deal of communist propaganda in the essay. However, it does express the Soviet perspective on the history of the Mediterranean and displays Gorshkov's appreciation for the key role that naval power has played (and continues to play) in great power competition.

Interestingly, though the chapter covers all of Russian and Soviet history, there is only one section break in the entire work; a little more than halfway into the essay, Gorshkov dedicates nearly half the paper to a section titled "The Russians in the Mediterranean Sea." Near the end, the Admiral quotes a 1968 TASS statement which wrote:

"The Soviet Union as a Black Sea power, and, consequently, a Mediterranean power, is exercising its indisputable right to have a presence in this region. Soviet naval ships are in the Mediterranean not to create a threat to any people or state. Their mission is to promote the cause of stability and peace in the Mediterranean Sea region."²⁹⁶

The first sentence of the above quote written by government-approved media and repeated by Gorshkov should not be overlooked. In the Russian view, because they are a Black Sea riparian state, they are a de facto riparian state of the Mediterranean.

The third chapter of Gorshkov's series of articles was titled "The Post-Napoleonic Period to Russo-Japanese War." This period of history included one of the most consequential defeats in Russian history, the Crimean War, as well as a pair of wars with Turkey beforehand and

²⁹⁶ Ibid, 21.

afterwards. Reflecting on the results and consequences of the conflicts and the role the Mediterranean played, Gorshkov opined that:

Thus, tracing the role and significance of the Navy in the long struggle for outlets to the southern seas and freedom of Russian navigation on the Mediterranean, the following conclusion can be drawn. With the consolidation of Russia on the shores of the Black Sea during the period prior to the Crimean War, when the primary obstacle to the achievement of this objective was Turkey, the Russian Navy successfully executed its missions. Subsequently, when the question of a direct egress for Russia to the Mediterranean arose, affecting the interests of the major capitalist powers of Europe in their sphere of interest, the relative weakness of the Russian Navy was immediately manifested.²⁹⁷

This quote by Gorshkov provides the Western analyst with perhaps the most important insight into the Russian mindset when it comes to their ability to conduct missions in the Mediterranean: given a fair fight with a regional opponent (such as Ukraine, Georgia or Turkey), Russia can hold its own. However, when arrayed against a coalition of especially modern opponents, Russia is no longer master of its own domain.

This is what makes Russian power projection into Syria via ground forces and land-attack cruise missile attacks so significant, and begs the question: did Russia consider itself arrayed against the U.S. and NATO in Syria during Russian support of Assad? If so, did the capabilities of modern Russian naval forces provide enough of a threat that the United States or NATO determined the benefit was not worth the risk, allowing Russia to achieve its objectives in Syria? The answers to these questions form the heart of the problem at hand and will be explored further throughout this paper.

²⁹⁷ Ibid, 29.

5.1.5 The Pacific Fleet

This paper focuses on Russian operations in the Mediterranean and the Black Sea, and by extension the force-providing fleets of the Baltic Sea and the Arctic. However, a basic understanding of Russia's easternmost maritime border is imperative to gain insight into the broader Russian defensive mindset. After all, while multiple invasions came from the west, none were ultimately successful, in large part "due to its strategic depth...By the time an army approached Moscow it already had unsustainably long supply lines, a mistake that Napoleon made in 1812, and that Hitler repeated in 1941".²⁹⁸

Instead, the invasion that mattered, that left an indelible mark on the Russian psyche, came from the east, in the form of the Golden Horde,²⁹⁹ Mongols that "brutally conquered"³⁰⁰ and subjected the Russian people for nearly a quarter millennium from the 13th to the 15th century. While this will be discussed at greater length in the following section, suffice it to say that the eastern axis of the Russian threat presents a clear and present danger in the minds of Russia.

The Russian Pacific Fleet for all intents and purposes consists of two main naval bases: Vladivostok in the south and Petropavlovsk to the north. Petropavlovsk, on the Kamchatka Peninsula, is unique among Russian ports in that it has complete and open access to the world ocean, not constrained by chokepoints (or in the case of the GI-UK gap, a strategic waterway) controlled by adversaries. However, the entire Crimean Peninsula itself is not accessible from the rest of mainland Russia, other than by air: "No railways or roads lead to Kamchatka from the rest

²⁹⁸ Marshall, 13.

²⁹⁹ Charles J. Halperin, *Russia and the Golden Horde* (Bloomington, IN: Indiana University Press, 1985).

³⁰⁰ Kaplan, 65.

of Eurasia.”³⁰¹ Petropavlovsk-Kamchatsky is the world’s second largest city that is not accessible by road (the first being Iquitos, Peru).³⁰²

The naval base at Petropavlovsk is north of the 53rd parallel of latitude; by comparison, the entirety of the continental United States lies below the 50th parallel. The Russian Pacific Fleet’s adversarial counterpart, the U.S. Pacific Fleet, is headquartered in Pearl Harbor, Hawaii, just north of the 23rd parallel: 27 degrees of latitude, or 1,620 nautical miles south. As with the Baltic and Northern Fleets, this means that the Russian Pacific Fleet also has to contend with ice during a large portion of the year: “From the end of Nov[ember] or mid-Dec[ember] until the beginning of May, the harbour is ice-bound, but icebreakers work in the severe months and it is easily kept open.”³⁰³ As with the ice-bound Northern Fleet in the Barents Sea, Petropavlovsk boasts Russia’s deadliest single weapons platform: the nuclear ballistic-missile firing submarine (or SSBN). In particular, the base was upgraded in 2015 to receive the next-generation (post-Cold War) SSBN’s, the Russian-named Project 955 *Borei*-class (termed *Dolgorokiy*-class by NATO), armed with the new *Bulava* strategic nuclear ballistic missile.³⁰⁴

The actual headquarters of the Russian Pacific Fleet is located over 1,500 nautical miles away from Petropavlovsk, at Vladivostok Naval Base, located just 35 miles from Russia’s border with China, and 50 miles from its border with North Korea. Traveling west along Kuril Island chain

³⁰¹ Dmitry Paranyushkin, “How to Travel to Kamchatka,” Way to Russia Guide, August 9, 2020, <https://waytorussia.net/FarEast/Kamchatka/HowToTravel.html#:~:text=No%20railways%20or%20roads%20lead,it%20is%20the%20air%20flight.>

³⁰² Zachary Williams, “Winter in Petropavlovsk-Kamchatsky,” ORPHANED NATION, January 29, 2019, <https://www.orphanednation.com/winter-in-petropavlovsk-kamchatsky/>.

³⁰³ “Petropavlovsk-Kamchatsky Port,” The Shipping Platform (SHIPNEXT.com), accessed May 17, 2022, <https://shipnext.com/port/petropavlovsk-kamchatsky-rupkc-rus.>

³⁰⁴ David Scott, “Russian Naval Strategy for the Indo-Pacific,” CIMSEC (Center for International Maritime Security, April 14, 2022), <https://cimsec.org/russian-naval-strategy-for-the-indo-pacific/>.

and passing south of the Sea of Okhotsk, a Russian naval vessel would pass through the La Perouse Strait, south of Russian-owned Sakhalin Island and north of the Japanese-held island of Hokkaido. Once again, the Russian Navy must contend with a difficult-to-transit and oft-times icebound maritime chokepoint controlled (on one side) by an ally of the United States; the La Perouse Strait:

...is 27 miles (43 km) wide at its narrowest part, between Cape Krilon (Sakhalin) and Cape Sōya (Hokkaido) and varies in depth from 167 to 387 feet (51 to 118 m). The strait is characterized by extremely strong marine currents. It is closed by ice in the winter.³⁰⁵

Like Petropavlovsk, Vladivostok has benefitted from the overall upgrade in capabilities the Russians have invested in the Pacific Fleet. The project began with making substantial firepower improvements to both surface and sub-surface platforms, adding *Kalibr* capability to a Cold War-era *Udaloy*-class large anti-submarine warfare destroyer (*Admiral Vinogradov*) and *Oscar-II* guided-missile carrying submarines (SSGN's).³⁰⁶ One of the first units in the entire Russian Federation Navy to receive the *Zircon* hypersonic cruise missile (addressed further in Chapter 8) was apparently the *Gremyashchiy*-class frigate (Project 20385),³⁰⁷ which in late 2021 made the Pacific Fleet its homeport.³⁰⁸

The increase in Pacific Fleet capabilities accompanies an operational focus by Russia which, among other things, adds to the U.S. concerns over and necessary focus on the Pacific

³⁰⁵ Amy Tikkanen, "La Perouse Strait," Encyclopædia Britannica (Encyclopædia Britannica, inc.), accessed May 17, 2022, <https://www.britannica.com/place/La-Perouse-Strait>.

³⁰⁶ "Russia to Upgrade Submarine Irkutsk and Destroyer Admiral Vinogradov in 2022," Navy Recognition, March 30, 2022, <https://www.navyrecognition.com/index.php/naval-news/naval-news-archive/2022/march/11570-russia-to-upgrade-submarine-irkutsk-and-destroyer-admiral-vinogradov-in-2022.html>.

³⁰⁷ "The Gremyashchiy-Class - Extremely Lethal with Zircon Missiles," YouTube (FORCE Technology, March 13, 2021), https://www.youtube.com/watch?v=e9_uxBrjs7o.

³⁰⁸ Dzirhan Mahadzir, "U.S. and Japanese Ships Hold Anti-Submarine Warfare Drills in the South China Sea," USNI News, November 16, 2021, <https://news.usni.org/2021/11/16/u-s-and-japanese-fleets-hold-anti-submarine-warfare-drills-in-the-south-china-sea>.

theater. For example, in June of 2019 the U.S. Navy publicized an incident between a Russian *Udaloy*-class destroyer *Admiral Vinogradov* (the ship that would eventually receive a major weapons upgrade three years later):

U.S. Seventh Fleet spokesman Commander Clayton Doss said a Russian destroyer came within 50 to 100 feet of the USS *Chancellorsville*, "putting the safety of her crew and ship at risk." Doss said the U.S. ship was "on a steady course and speed when the Russian ship DD572 maneuvered from behind and to the right of" the American warship, forcing it to reverse all engines at full throttle to avoid a collision.³⁰⁹

In March of 2022, Japan raised serious concerns over a 10-ship "surface action group" (SAG) traveling through the Tsugaru Strait (between Hokkaido and the main Japanese island of Honshu). At the time Japan's Defense Minister Nobuo Kishi tied the incident to events in Europe, stating "the Russian Navy has been conducting large-scale maritime exercises in the Sea of Okhotsk and other areas in order to show off its ability to operate in the east and west in response to the actions of the Russian military around Ukraine."³¹⁰ This SAG included the *Gremyashchiy*, equipped with the aforementioned *Zircon* hypersonic missiles. These actions and others by Russia force the United States to face a "two front" cold war with Russia, ensuring a portion of U.S. naval forces be kept in the Pacific, regardless of concerns over China.

The Russian Pacific Fleet has played a more direct role in European maritime affairs besides drawing off U.S. forces to the West. Russia's aging amphibious fleet, consisting of *Ropucha I* and *II* and *Alligator*-class LST's ("Landing-Ship Tank" – amphibious ships capable of

³⁰⁹ Stephen Smith, "Video Shows Russian Destroyer Nearly Colliding with U.S. Warship," CBS News (CBS Interactive, June 7, 2019), <https://www.cbsnews.com/news/russian-destroyer-admiral-vinogradov-nearly-collides-uss-chancellorsville-warship-today-2019-06-07/>.

³¹⁰ Dzirhan Mahadzir, "Japan Again Raises Concern over 10 Warship Russian Navy Surface Group," USNI News, March 11, 2022, <https://news.usni.org/2022/03/11/japan-again-raises-concern-over-10-warship-russian-navy-surface-group>.

transporting armor) have been regularly sent to the Black Sea to take part in the “Syrian Express” sealift. At the end of 2021, a Pacific-fleet surface action group which included the flagship of the Russian Pacific Fleet, the *Slava*-class cruiser *Varyag*, made the long journey to the Mediterranean on the eve of Russia’s invasion of Ukraine.

This support continues even after the Russian invasion of Ukraine. In March of 2022 a group of four Pacific Fleet amphibious ships departed their homeports and headed towards the Mediterranean, again through the Tsugaru Strait. Due to Turkish restrictions on warships entering (or departing) the Black Sea during the Russian/Ukrainian conflict, it is possible these vessels are enroute to resupply forces in Syria. If so, this 9,550 nautical mile journey³¹¹ using Cold War-era amphibious ships highlights the continued importance Russia places on its mission in Syria, even while large-scale combat operations continue in Ukraine.

Another aspect of Russia’s presence in the Pacific is the growing relationship between Moscow and Beijing. Though improving diplomatic ties have been well-documented, these have been accompanied by an unusually high level of military-to-military engagements between what the 2017 U.S. National Security Strategy termed the world’s two “revisionist powers.”³¹² Though these exercises have included the Baltic, the Mediterranean, and even the Black Seas, because of the maritime geographical proximity of Russia to China, much of the interaction has been in the Pacific.

Enroute to the Mediterranean prior to hostilities with Ukraine, the *Varyag*’s surface action group rendezvoused with Chinese vessels in the Indian Ocean for exercise *Peaceful Sea*

³¹¹ “Sea Distance Calculator,” ShipTraffic.net, accessed May 23, 2022, <http://www.shiptraffic.net/2001/05/sea-distances-calculator.html>.

³¹² Donald J. Trump, *National Security Strategy of the United States* (Washington, DC: White House, 2017), 25.

2022, providing the two fleets “with valuable experience in carrying out integrated anti-piracy missions, as well as strengthen[ing] their capabilities in dealing with marine threats and ensuring the security of vital sea lines of communication,”³¹³ as reported by TASS. It is noteworthy that the RFN, even thousands of miles away in the Pacific, is practicing the securing of SLOCs, the significant factor for what Hattendorf claimed in the Mediterranean was key to “well-entrenched forces” maintaining “a presence in the heart of alien territory.”³¹⁴

The Chinese navy – officially named the “People’s Liberation Army Navy” – has become the world’s largest³¹⁵ and most modern³¹⁶ navy over past twenty years, the United States Navy included. There were obvious political benefits that Moscow realized by highlighting their relationship with Beijing on the eve of their invasion of Ukraine. Additionally, there are real benefits at the operational and tactical levels of warfighting gained by the RFN during such exercises with (and against) a capable 21st-century navy.

³¹³ “Russian and Chinese Navies Hold Peaceful Sea 2022 Exercise in the Arabian Sea,” Naval News (TASS Russian News Agency, January 26, 2022), <https://www.navalnews.com/naval-news/2022/01/russian-and-chinese-navies-hold-peaceful-sea-2022-exercise-in-the-arabian-sea/>.

³¹⁴ Hattendorf, *Naval Policy and Strategy in the Mediterranean*, 6.

³¹⁵ Mallory Shelbourne, “China Has World’s Largest Navy with 355 Ships and Counting, Says Pentagon,” USNI News (U. S. Naval Institute, November 3, 2021), <https://news.usni.org/2021/11/03/china-has-worlds-largest-navy-with-355-ships-and-counting-says-pentagon>.

³¹⁶ “Report to Congress on Chinese Naval Modernization,” USNI News, November 15, 2022, <https://news.usni.org/2022/11/14/report-to-congress-on-chinese-naval-modernization-15>.

CHAPTER 6

HISTORICAL FRAMEWORK OF RUSSIAN MARITIME OPERATIONS

An overarching theme of this paper is that Russia is successfully using its navy in the 21st century in ways it never has before. To do this, and with the preceding discussion of naval theory and geography as a baseline, an overview of the history of the Russian and Soviet navies will now be explored, from the earliest examples of the Kievan Rus making use of its maritime geography through the Soviet Navy in the Cold War. Most of this history takes place following the coronation of Peter the Great, considered the Father of the Russian Navy. Russian and Soviet experiences with power projection “from the sea,” sea control, sea denial, and expeditionary warfare will receive the lion’s share of the focus. This will lead to the identification of two specific historical examples worthy of further examination.

6.1 The Evolution of Pre-20th Century Russian Maritime Doctrine

“While our main interest is focused on the present and future, the foundation for the future rests on the past. A comprehensive, documented, sound analysis and appraisal of the evolution of Soviet naval strategy is an important contribution to understanding current and prospective developments.”

- Raymond L. Garthoff
*Introduction to Soviet Naval Strategy (1968)*³¹⁷

No country develops military doctrine in a vacuum. A nation’s history drives their perception of threat and opportunity, both of which are impacted by its geographic position. Russia may be the quintessential example of this; one cannot understand Russian naval operations today without a grasp of events that occurred centuries ago. Most notably was the

³¹⁷ Robert Waring Herrick, *Soviet Naval Strategy* (Annapolis, MD: United States Naval Institute, 1968), xxv.

conquering of the Kievan society of city-states by the Mongols in the thirteenth century, followed by two and a half centuries of occupation and rule. As Robert Kaplan writes:

The ultimate land-based empire, with no natural barriers against invasion save for the forest itself, Russia would know forevermore what it was like to be brutally conquered, and as a result would become perennially obsessed with expanding and holding territory, or at least dominating its contiguous shadow zones.³¹⁸

There were other ramifications besides a national psyche dominated by “the bitterest of feelings of inferiority and insecurity.”³¹⁹ The current lagging in technological prowess when compared to the West can find its origins in the occupation, in addition to the apparent propensity for the nation to favor autocracy:

While Russia endured centuries of Mongol rule, Western Europe would undergo a renaissance of science, art and technology. Dominated by an Asian power and isolated from the West, Russia would not benefit from this revival...From the Mongols, the Russians learned the system of autocratic rule. The Russia that would emerge from the Mongol sphere of influence in the late fifteenth century would do so as an absolute monarchy.”³²⁰

From the perspective of military doctrine, the first and most devastating attack in Russia’s history had come from the land, not the sea. As stated by Daniel, “The finest navy of the age could have done little to save” the fledgling Russian state, and this “relative importance of land armies over ocean going navies remained a tenet of Soviet military thought.”³²¹ Even after Ivan III (the Great) threw off the yoke of Mongol rule in 1480. This land-based threat perspective would be reinforced time and again, by such notorious figures as Napoleon and Hitler, leading Kaplan to propose that “Insecurity is the quintessential Russian national emotion.”³²² Though

³¹⁸ Kaplan, 65.

³¹⁹ Ibid.

³²⁰ Daniel, 14.

³²¹ Ibid, 15.

³²² Kaplan, 159.

boasting the world's largest coastline, Russia is the quintessential "elephant" in military theory, the great continental power (like Persia or Napoleonic France), juxtaposed with the "whale" of an Athens, Great Britain, or imperial Japan.³²³ This makes the fact that Russia is embracing technological superiority and naval expeditionary missions in the current environment all the more remarkable, and worthy of study.

After the Mongols left, Russia remained stuck with, from a maritime perspective, very unfortunate geography. Most of its coastline is on the Arctic Ocean, and thus iced over much of the year. The country itself is more northern than many people in the West appreciate: Moscow, at about 55 degrees north, is farther north than Newfoundland in Canada, and lies at about the same latitudinal position as the Alaskan panhandle. The majority of the population lives in the southwestern portion of the country, with the most important outlets to the world ocean (both militarily and for trade) being via the Baltic Sea and the Black Sea. These outlets presented challenges in political geography in addition to physical geography. "Having escaped from Mongol rule, Russia found herself isolated from the Baltic Sea by Sweden and Denmark, and from the Black Sea by the Turks and the Crimean Tatars."³²⁴

6.1.1 Peter the Great

This isolation would begin to erode via the ruler credited as the father of the Russian Navy, Czar Peter the Great. Centuries of Mongol rule had ensured that, by the time of Peter's birth in 1672, the European Renaissance had passed Russia by.³²⁵ With a Western mentality (bolstered by journeys to Sweden, Holland, England, Germany and Austria), Peter would defeat

³²³ David Armitage, "The elephant and the whale: Empires of land and sea," *Journal for Maritime Research* 9, no. 1 (2007): doi:10.1080/21533369.2007.9668360.

³²⁴ Daniel, 15.

³²⁵ Ibid, 20.

the Swedes to take firm control of the Baltic, eventually resulting in a Russian Baltic Fleet of 800 vessels in his lifetime.³²⁶

While his efforts in the West were undeniably successful, Peter's southern naval campaigns, while initially enjoying gains against the Turks in the Black Sea, were eventually foiled geopolitically by outside foreign powers (a reality that still impacts modern Russian foreign policy). While initially establishing a base of operations on the Sea of Azov, interference from Poland and Denmark would lead to Russia relinquishing its Azov port and suspending its designs to press on towards the Black Sea; it would be another fifty years before Russia would gain access to the Black Sea.³²⁷ This was because, though a Great Power, Russia had not become a sea power, despite Peter's efforts to inculcate a maritime culture amongst his subjects.

When Andrew Lambert wrote the book *Seapower States* (2018), his focus was on only five states – Athens, Carthage, Venice, the Dutch Republic and Britain – that he argued fit the definition of the book's title in the original Greek (vice Mahanian) sense.³²⁸ Though most of the book is dedicated to his seapower states, one chapter, titled "The Limits of Continental Naval Power," was dedicated exclusively to Russia, and in particular to Peter the Great. Though Peter undoubtedly transformed Russia into a great local naval power – a feat that required vast resources, focus, and strength of personality – Lambert argues that Peter himself had no desire to create in Russia a seapower state, nor could he, under the continental constrictions they faced.³²⁹ The focus of his naval efforts were to support (in most cases successfully) the typically Russian terrestrial wars being fought from the Baltic to the Caspian:

³²⁶ Ibid, 21.

³²⁷ Ibid, 21-22.

³²⁸ Lambert, 6-7.

³²⁹ Ibid, 232.

Ultimately, the navy was the key to securing the seaward flanks of St. Petersburg and projecting power, raiding the outskirts of Stockholm in 1720. In all cases the Russian object was territorial. No sooner had the tsar secured the central Baltic than he shifted his naval efforts to the Caspian, redeploying manpower and expertise to attack Persia. Once again Peter's warships were supporting a land offensive, focused on territorial expansion.³³⁰

While the Russian Imperial Navy could now hold their own in local seas against regional powers – Sweden, Denmark, Persia, and even the Turks in the Sea of Azov – Russia's underlying economic weakness ensured it could not match a true naval great power such as Britain. Thus, when the Royal Navy entered the Baltic to stem the tide of Russian advances, Peter returned to a historically naval defensive to protect St. Petersburg: "His fleet could impress regional powers, and perhaps move troops to secure the Danish Narrows...but it was not going to take on the Royal Navy."³³¹

This assessment by Lambert is germane to the discussion of the modern use of Russian naval power in the 21st century. Because the underlying continental bones of Russia's culture (influenced by immutable geography and deep historically defensive roots) remained unchanged, the Russian and Soviet use of sea power in the centuries would wax and wane:

The Russian/Soviet state never tried to become a seapower; Peter did not change the autocratic, centralized warfare state created by Ivan IV, obsessed with territorial expansion and defensive depth. Russia had no need to become a seapower; a navy would be useful to transport the army, secure Russia's watery flanks, and above all protect the capital.³³²

The return of the Russian navy to this traditional role was apparent in the 2022 invasion of Ukraine (as well as the 2012 seizure of Crimea, and the 2008 war against Georgia). While the

³³⁰ Ibid, 239.

³³¹ Ibid, 242.

³³² Ibid, 244.

Syrian Civil War involved transport of ground forces, the fact that Syria is a non-contiguous state to Russia makes the support to the Army more than simply securing Russian flanks; the operation is more expeditionary in nature.

Peter's naval development, while unprecedented in the short length of time it took to accomplish (perhaps the 21st century Chinese Navy will have something to say about that), did not alter the culture. Thus, upon his death, his advances were quickly undone, with his son transferring the capital from St. Petersburg to Moscow, symbolic of his attitude towards the navy: "By the 1760s the navy had collapsed so completely that its revival under Catherine II looked strikingly similar to the original Petrine project, equally dependent on foreign officers, shipbuilders, and designs."³³³ Since current Russian President Vladimir Putin fashions himself a modern-day Peter the Great,³³⁴ and has no doubt placed generational emphasis on the use of Russian naval forces in wartime, there is the possibility that Putin's navy will suffer the same fate upon his death as Peter's, whenever that day may come.

6.1.2 Catherine the Great

The eventual conquest of the Black Sea would be accomplished by Peter's granddaughter Catherine the Great, sailing two squadrons from the Baltic into the Mediterranean, crushing the Turks during the Russo-Turkish War of 1768 - 1774 in the Battle of Chesma in 1770, and again in the Black Sea.³³⁵ Chesma is sometimes cited as the turning point of the once unstoppable Ottoman Empire. The Russian Baltic Fleet had become the Mediterranean Squadron (similar to

³³³ Ibid.

³³⁴ Anton Troianovski, "Putin the Great? Russia's President Likens Himself to Famous Czar.," *The New York Times* (The New York Times, June 9, 2022), <https://www.nytimes.com/2022/06/09/world/europe/putin-peter-the-great.html>.

³³⁵ Daniel, 24.

the role the Black Sea Fleet would play nearly 250 years later) and brought the war to Turkey's possessions in Beirut and Syria. At the time, Damascus was one of the most important possessions of the Ottoman Empire, and Beirut was the key port providing its supply line.³³⁶ In July of 1773 the Russian's employed a blockade against Beirut while conducting naval gunfire artillery barrage, reportedly launching over 20,000 projectiles in the first eight days.³³⁷ While initially relying on local rebels to Ottoman rule, eventually disembarked Russian troops were required to enforce the landward portion of Lebanon's siege. Thus, in a preview of things to come a quarter millennium later, Russian naval expeditionary forces were supported by naval power projection from the sea (though the lack of precision artillery fire resulted in minimal damage to the city, even with the massive numbers of projectiles fired).³³⁸ By the 2010's, of course, satellite-aided positioning will overcome the inherent inaccuracies of ballistic firing.

By 1774 Catherine forced the Turks to sign the Treaty of Kuchuk – Kainardzy, which allowed Russian naval ships "to navigate freely on the Black Sea up to the Bosphorus, and in the Mediterranean Sea up to the Dardanelles."³³⁹ Fanned by the flames of success, Catherine's ambitions in Asia Minor grew ("...the Czarina's advisers began to prepare plans for the partition of Turkey..."³⁴⁰), which would give rise to a deep-seated suspicion in the West, especially regarding Russian designs on Constantinople.

³³⁶ Boris Egorov, "When the Russians Conquered Beirut," *Russia Beyond*, July 7, 2021, <https://www.rbth.com/history/333979-when-russians-conquered-beirut>.

³³⁷ *Ibid.*

³³⁸ *Ibid.*

³³⁹ Viktorija Jakjmovska, "A Shift in the Russo-Ottoman Balance of Power in the Black Sea Region: The Treaty of Kuçuk Kainardji of 1774," *Oxford Public International Law*, accessed May 23, 2022, <https://opil.ouplaw.com/page/kainardji-treaty>.

³⁴⁰ Fairhall, 20-21.

6.1.3 The Crimean War

Looking back on history, this would prove to be the high point of Russian naval conquest. Though they would enjoy some further success at the expense of the Turks through the early 19th century, that would end with the Crimean war. In an attempt to again gain access to the Mediterranean through control of the Turkish Straits, Tsar Nicholas I occupied the Balkans and destroyed a Turkish fleet, “prompting England and France, displaying uncharacteristic cooperation, to enter the war on the side of the Turks.”³⁴¹ The French Foreign Minister Alphonse De Lamartine expressed the existential concern Britain and France experienced, quoted by Mairin Mitchell in his exhaustive book “The Maritime History of Russia, 848 – 1848”:

In that war England and France had joined, because both Powers feared that Russia’s efforts to gain free access from the Black Sea to the eastern Mediterranean might seriously affect their own maritime interests. Lamartine writing on the very eve of war said: “Russia at the Dardanelles means the Russian frontier at Marseille and Toulon, and he pointed out that Russian control of the Straits would mean that the Mediterranean became a Russian Lake.”³⁴²

The Russians would discover just how geographically vulnerable their naval forces were to a superior Western fleet:

...the Anglo-French alliance blockaded the Baltic, harassed the Russian fleet in the Pacific, and sailed a naval force into the Black Sea laying siege to the Russian stronghold of Sevastopol...After a year of isolation the Russians surrendered, abandoned the Balkans and peace was declared. The Treaty of Paris of 1856 included prohibition of Russian naval units and coastal fortifications on the Black Sea.³⁴³

³⁴¹ Daniel, 27.

³⁴² Mairin Mitchell, *The Maritime History of Russia: 848-1948* (London, UK: Sidgwick and Jackson Limited, 1949), 129 - 130.

³⁴³ Daniel, 27.

6.2 20th Century Russian and Soviet Naval Experience

6.2.1 Entrance into the Modern Era of Naval Operations

As the 19th century drew to a close, the Industrial Revolution was changing warfare in profound ways, introducing weapons and tactics that remain staples of warfare to this day; thus, the world entered what can even now be considered the “modern era” of warfare. In the 20th century two specific historical instances will be encountered that bear a resemblance to Russia’s modern experience in Syria: the Russo-Japanese War in 1904-1905, and the Spanish Civil War in 1936. The thesis of this dissertation is: Technological advances in precision-guided munitions and anti-ship cruise missiles enabled Russian naval forces to contribute to Russian success in the Syrian Civil War (the first time it has successfully supported expeditionary Russian ground forces in modern times – that is, against a country with whom Russia or the Soviet Union did not share a border). In order to answer this question first the definition of what constitutes “modern times” must be determined.

Both the Russo-Japanese War and the Spanish Civil War take place in the 20th century; the 19th century saw the “Age of Sail” come to an end and the “Age of Steam” begin. That transition occurred sometime between the 1827’s Battle of Navarino and the 1862 Battle of Hampton Roads. The former, part of the Greek War of Independence, was the last major naval battle to involve only sailing ships. The latter, involving the steam-powered ironclads the *USS Monitor* and the *CSS Virginia*, was the first battle involving exclusively steam, when “the graceful wooden sailing ships of the age of fighting sail became forlorn relics of the past.”³⁴⁴ While many

³⁴⁴ Anna Gibson Holloway, “The Battle of Hampton Roads,” The USS Monitor Center, January 21, 2016, <https://monitorcenter.org/the-battle-of-hampton-roads/>.

conflicts involving naval battles occurred in the interim (including the decisive Crimean War of 1853-1856), they involved a mix of both sailing and steam-powered vessels.

Russia had one major interstate war following the Battle of Hampton Roads, the Russo-Turkish War of 1877-78. However, most of the naval action took place on rivers from the Black Sea. In any case Russia shared a common border with the Ottoman Empire (and the Imperial Russian Navy was not required to transit an International Strait), so the Navy was not supporting ground forces that were “expeditionary.” The next interstate war involving Russia would take place nearly three decades later, and this time would share some additional geographic and political similarities with Russian naval support to the Syrian Civil War.

Even had Russia employed naval assets outside its periphery between the American Civil War and the turn of the century, Lautenschlager makes a compelling argument that it wasn’t until the late 1890’s that the true revolution in naval technology took place. It was not just the “age of steam” and the armoring of gunboats that heralded the turn towards modernity. Other, less talked about technologies developed at the same time (thanks to the industrial revolution) that, combined, allowed fleets to effectively fight or project power from long distances (as discussed in a previous section). This included advancements in chemical propellants, gunnery, metallurgy and wireless telegraph technology that to a large extent came together between 1895 and 1900.³⁴⁵

6.2.2 Russo-Japanese War

Geography would play an even more significant role in the Pacific, as the world entered the 20th Century. While Russia had built an impressive fleet by this time, “important advances in

³⁴⁵ Lautenschlager, 12.

technology (including radio communications) were neglected...”, which would prove costly in a war with the Empire of Japan. Unsatisfied with their Pacific port at Vladivostok (due to winter ice and Japanese control of nearby straits), the Russians leased Port Arthur from the Chinese, on the other side of the Korean Peninsula, at the entrance of the Bohai Gulf (the modern-day location of the Chinese North Sea Fleet, responsible for the defense of Beijing from maritime attack or invasion).

On February 8, 1904, the Japanese launched a surprise attack on Port Arthur, and bottled up Russia’s Pacific Fleet through blockades of Port Arthur and Vladivostok. In response, the Baltic Fleet was sent 18,000 nautical miles, taking the long route around Africa after being denied use of the Suez Canal. The long voyage impacted material readiness and morale and combined with superior Japanese tactics resulted in the complete decimation of the Baltic Fleet and Pacific Fleets. This operational loss would have long-lasting strategic consequences for the country: “After the humiliating defeat on both land and sea by the Japanese, support for the Tsar plummeted and the monarchy began to lose its iron grip on Russian society.”³⁴⁶

6.2.2.1 Conflict Overview

The technological revolution of the end of the 19th century would segue into the Russo-Japanese War of the beginning of the 20th. The world’s first major conflict of the new century also featured one of the great upsets in the history of naval warfare. Russia’s war with the upstart Japanese empire was considered at the time to be the quintessential “David versus Goliath” battle, with the same surprising outcome. Attempting to lift the siege of a beleaguered Russian Army thousands of miles away from home, two different Russian fleets suffered utter

³⁴⁶ Ibid, 32.

annihilation at the hands of the Imperial Japanese Navy, the first time in modern history that a European power had been defeated by an Asian one. As observed in Syria, the Russian's were attempting to hold onto a leased warm-water base, that of Port Arthur; unlike the eastern Mediterranean today, the Russian's did not exercise control of the sea, and had to travel 18,000 miles to get their forces into a position to aid in the fight.

Russia had spent the previous half-century expanding eastward at breakneck speed. Taking advantage of turmoil in China, in the 1860's "suddenly Russia spread far down the coast of Asia into the warm Sea of Japan. There she quickly began what would become the strategic port and naval base of Vladivostok,"³⁴⁷ just fifty miles to the east of the Korean Peninsula. One hundred and fifty miles to the west of the Korean Peninsula was Port Arthur, a Chinese port won by the Japanese at the end of the Sino-Japanese war of 1895. Concerned over Japan's growing strategic power:

*Russia, Germany, and France intervened to force her to relinquish this strategic site on the Yellow Sea. Then in 1898 Russia herself took it over, leasing it for twenty-five years. Soon she built it into a powerful fortress-naval base – also the opening wedge for gaining all of Manchuria.*³⁴⁸

This lease on Port Arthur was soon extended to 99 years and became the terminus of a spur off the Trans-Siberian Railroad. Construction of the railroad, starting in 1891:

...was an attempt to tie Vladivostok more closely to the centers of the tsar's empire. Vladivostok, however, because it was ice-bound for several months each winter, did not fully satisfy Russian desires for a window on the Pacific. A more southerly, ice-free port obviously would be more valuable.³⁴⁹

³⁴⁷ Ernest McNeill Eller, *The Soviet Sea Challenge* (Chicago, Illinois: Cowles Book, 1971), 78.

³⁴⁸ Ibid.

³⁴⁹ Donald W. Mitchell, *A History of Russian and Soviet Sea Power* (New York, NY: Macmillan, 1974), 204.

No two countries may have ever been on so obvious a collision course as Russia and Japan in the Far East at the turn of the 20th century. Japan “likewise hungered for Korea and Manchuria and expended every resource to build up her army and navy for the conflict that seemed inevitable...”³⁵⁰ In order to counter the Russian-German-French alliance against it, Japan established its own with Britain. Japan then developed its own naval base on the island of Tsushima: “a short run from Pusan and athwartship the route between Port Arthur and Vladivostok, it put her fleet in an excellent strategic position.”³⁵¹ Russia now faced another strategic choke point, just to be able to mutually support one of its two Pacific bases with the other. As Ernest Eller describes in his 1971 book “Soviet Sea Challenge,” the Russians found themselves divided and restricted globally within the Pacific theater itself, presenting a golden opportunity:

It seemed to be a situation of now or never to Japan to meet the Eurasian giant whose army was still mostly in Europe, and whose navy of fifteen battleships far exceeded hers but was divided in three fleets. Russian ships in the Black Sea were confined by treaty that closed the Straits to foreign warships. The Baltic Fleet would take time to arrive...at the selected time of attack the Russian Far East fleet was divided. The seven battleships lay at Port Arthur, but four heavy cruisers were at Vladivostok, and a cruiser and gunboat temporarily at Chemulpo (Inchon).³⁵²

Japan took advantage and conducted a surprise torpedo attack (without first declaring war) on the sleeping Russian battleship fleet in Port Arthur on the moonless night of February 7th, 1904. The attacks achieved their objectives and were followed by Japanese troops landings in order to encircle and capture Port Arthur. Though it would take nearly a year to accomplish, and various attempts were made unsuccessfully to break away and round the Korean Peninsula to

³⁵⁰ Eller, 79.

³⁵¹ Ibid.

³⁵² Ibid.

Vladivostok, the majority of the vessels of the Port Arthur squadron were destroyed not by torpedoes or mines, but by siege guns fired by the Japanese Army. The garrison surrendered on January 3, 1905.

Six months before the fall of Port Arthur, Czar Nicholas II, unwilling to accept the *fait accompli* that was playing out in Asia, played the only card he had: send naval reinforcements to the east. With the Black Sea Fleet bottled in due to Turkish control of the Straits, the task fell to the only remaining fleet:⁴³⁴³ the Baltic. Watson and Watson do an excellent job describing the seemingly impossible task at hand. Due to the dire state of Russian ground forces at Port Arthur, Czar Nicholas II was impelled to do something, even when no good options were open to the Russians. The best ships that the Baltic Fleet had to offer were selected for an expeditionary deployment and renamed the "Second Pacific Squadron." Their mission was simple: sail tens of thousands of miles around Africa, across the Indian Ocean, and up into the Sea of Japan, link up with the Port Arthur squadron, and defeat the Japanese, thereby cutting off the Japanese Army on the mainland of China. The problem was the state of the Baltic Fleet was poor and had no experience with blue-water operations. Furthermore, there were few experienced engineers to operate the modern destroyers and cruisers for such a voyage, and several of the ships were at various stages of completion. Officers had limited technical experience, and the crew were made up of peasants recently pressed into service. However, as Russian ground forces were at the time under siege by the Japanese at Port Arthur, time was of the essence. Therefore, even basic proficiency training would have to be conducted while underway and enroute to Asia.³⁵³

³⁵³ Watson, 12.

Though the Baltic squadron (renamed the “Second Pacific Squadron”) was initially scheduled to depart in mid-July, the ships needed extended amounts of time “to organize and take on supplies, to repair old ships, and to give some elementary training in navigation and gunnery.”³⁵⁴ The squadron finally departed on October 16, 1904. Following an international embarrassment at Dogger Bank (where the Russian ships opened fire on British vessels thinking they were Japanese torpedo boats), the squadron began circumnavigating Africa; Japan’s new ally England controlled the Suez Canal. The eventual transit from the Baltic to the Pacific became what Eller describes as the “greatest logistic feat of history up to that time:”

With no bases or coaling stations en route, Admiral Rozhdestvensky had immense problems and made creditable progress. German colliers, contracted for in advance, replenished fuel at various ports, much of the coaling being done at sea outside the three-mile limit. Coaling anywhere is a grueling, dirty job. In the tropics, where the temperature in the iron battleships might rise to over 120 degrees, coaling was murder.³⁵⁵

By the end of December, the squadron reached Madagascar, while there they learned of the demoralizing loss of Port Arthur (and the fleet) to the Japanese. Although their *raison d’etre* – relief of the Port Arthur fleet – no longer existed, they pressed on to their predictable doom at the hands of the Japanese in the Tsushima Straits. Their destruction on May 27, 1905, brought the war to an end, although the writing had been on the wall for some time.

6.2.2.2 Similarities to Russian Naval Involvement in the Syrian Civil War

The Baltic Fleet squadron, traveling 18,000 miles to engage the enemy, was most definitely not on a defensive mission. These were battleships and cruisers, not torpedo boats and submarines, designed for a great fleet engagement and shore bombardment, taking the fight to

³⁵⁴ D. Mitchell, 237.

³⁵⁵ Eller, 81.

the enemy. Unlike nearly every other naval operation in Russian history, Port Arthur was an outpost not contiguous to Russian territory, and thus could not be relieved by Russian ground forces. Like the 21st century support to Syria, Russian vessels had to transit a strategic chokepoint in order to bring these forces to the theater of operations (the Danish Straits in 1904 and the Turkish Straits in 2013). In both cases, the state that exercised control over the respective straits allowed the passage of Russian warships. Of note, if instead of the Syrian Civil War the comparison was with the Russo-Ukrainian War of 2022, another striking similarity would be evident: the fact that Russia was denied use of the Turkish Straits during wartime, and that this no doubt impacted their efforts in the war.

The missions in the Russo-Japanese War and the Syrian Civil War involved providing support to Russian ground forces involved in combat, on foreign soil. While this fact had changed by the time the Second Pacific Squadron finally arrived in the Far East, the operation began with that goal in mind. Finally, the underlying strategic purpose of both operations was to maintain a warm water naval base that Russia had secured with a 99-year lease. This basic fact about two unique missions in naval history separated by more than a century should leave no doubt as to how important this national security objective is to Russia, regardless of the type of government in power or the particular leader of the country.

6.2.2.3 Differences in Russian Naval Involvement in the Syrian Civil War

The most obvious difference between the two examples is a simple math problem: what is the difference between 18,000 miles (the distance from the Baltic to the Pacific via the Cape of Good Hope) and 1,500 miles (the distance from Novorossiysk, Russia, in the Black Sea to Tartus,

Syria)? The answer is 16,500 miles. Also, the straits the Russians in 1904 and 2013 had to transit were different – the Danish and the Turkish.

During the Russo-Japanese War, the Second Pacific Squadron was sent to wrest sea control from the Japanese; only then could they aid in providing support to ground forces ashore. In Syria, Russia has thus far not needed to fire a shot in order to establish sea control; this could be perceived as successful deterrence by RFN surface craft escorting sealift vessels. Unlike 1905, when Japan had a technologically superior fleet, the modern Russian Navy is fielding new anti-ship cruise missiles that outrange missiles on U.S. and NATO vessels in the Mediterranean. Both of these factors – smaller distances and the deterrent effect of superior technology – together led to the most important difference between the two: Russia failed remarkably in 1905. Thus far in Syria, Russian support to the Assad regime appears to have achieved success.

6.2.2.4 Lessons

The question, then, is: why was Russia successful in the 2010's, and not in the 1900's? No doubt it was reinforced in the Russian psyche that distance and lack of control over chokepoints is a recipe for disaster, but between the two, chokepoint control is the more dire. Had the Danish Straits been closed to them like the Turkish Straits and the Suez Canal, then even the 18,000-mile voyage would have been out of their reach.

A very Corbettian lesson the Russians would have learned was that the overall strength of a nation's navy is unimportant at the operational level; only the numbers that can be brought to bear in a given engagement. However, these numbers alone are not enough; the first and foremost requirement of the navy is to establish and maintain sea control. Only when this occurs

can the other expeditionary operations (landing troops, naval gunfire support, etc.) be accomplished.

Finally, we can apply Wegener's formula of sea power to the Russian position in the Russo-Japanese War. If sea power is the product of the fleet times the geographic position or $SP = F \times G$, where "SP" is "sea power," "F" is "fleet," and "G" is "geographic position, it is evident that, while Russia on paper enjoyed a sizeable fleet, their geographic position was untenable. If this geographic factor was zero, then regardless of the strength of their fleet, the resultant product would become zero.

6.2.3 The Russian Navy in World War I

As the country desperately tried to recuperate its losses, Europe descended into World War I, and familiar patterns reemerged. In the Baltic, the Navy was subordinated to the Army, "fighting a mine warfare campaign in defense of (St. Petersburg)...The Russian capital ships rarely ventured out of port."³⁵⁶ The Germans and Turks closed the Dardanelles and Bosphorus early in the war, once again containing the Russian Black Sea Fleet. Attempts to reopen the Turkish Straits resulted in some notable allied disasters, most notably the previously discussed Gallipoli campaign.

The Baltic Fleet, even a decade after the disaster in the Tsushima Strait, was still being rebuilt when the Great War began. For their part the German High Seas Fleet, attempting the Mahanian "decisive fleet engagement" with the British fleet stayed out of any such engagement with Russia in the Baltic. This relegated the Russian Baltic Fleet to gunboat and mine warfare,

³⁵⁶ Ibid, 33.

with little decisive effect. As Eric Morris put it in his 1971 book “The Russian Navy: Myth and Reality:”

*Thus in terms of capital ships and fleet engagements the Baltic presented a picture of stability through powerlessness throughout the long years of the First World War. The pattern of naval activity was dictated by the smaller units, destroyers and gunboats, which carried out infrequent raids against their opponent's bases or on the army's line of communication...both sides expended a lot of effort and showed considerable ingenuity in minelaying; the mine caused more casualties, both in ships and men, than any other in this theatre of operations.*³⁵⁷

Beyond the obvious geographic restraints imposed on the Baltic Fleet, there was also a systemic, cultural bias involved; Bruce and Susan Watson in their 1986 book “The Soviet Navy: Strengths and Liabilities” described “the privileged position of the army, often at the navy's expense.”³⁵⁸

The Watsons went on to detail the “debilitating” effect of:

...the fleet's subordination to the Russian Army – incredibly, the fleet was even subordinated to the Seventh Army, which was responsible for the protection of St. Petersburg! Only the tsar could authorize battleships to leave port for active operations against the enemy.³⁵⁹

This issue of Imperial Russian Navy subjugation under the Russian Army will have significant implications when analyzing how the modern Russian Federation Navy operations in the Mediterranean support overall military objectives in Syria.

The Russian Black Sea Fleet fared better; though penned in by the same basic geographic realities, two factors allowed them comparative success in relation to their compatriots in the Baltic. First, in 1904 the British ensured the Russians were not allowed to utilize the Turkish Straits to come to the aid of their forces in the Pacific (though they were much closer than the Baltic

³⁵⁷ Eric Morris, *The Russian Navy: Myth and Reality* (London, UK: H. Hamilton, 1977), 16 - 17.

³⁵⁸ Bruce W. Watson and Susan M. Watson, *The Soviet Navy: Strengths and Liabilities* (Boulder, CO: Westview Press, 1986), 10.

³⁵⁹ *Ibid*, 13.

Fleet). Of course, the war against Japan may have gone much differently had the Black Sea Fleet been able to participate; the world will never know. In any case, it was the Baltic Fleet that sailed away from Europe enroute to destruction in the Pacific; the Black Sea Fleet remained intact. The second factor favoring them in World War I was their opponent; instead of the German High Seas Fleet, the Russians faced off against the Turkish fleet. Although the Germans attempted to bolster the Ottoman forces with a “battle cruiser and a light cruiser,” these efforts:

...were insufficient to overcome the traditional imbalance between Turkish and Russian performance in this theater. The Black Sea Fleet actively sought enemy contact and usually got the better of it. It savaged Turkish shipping in support of Russia’s armies fighting in the Caucasus and also damaged the Turkish war economy, which depended on this traffic. Surprisingly, in light of the Russian fleet’s abilities and Russia’s ancient dream to control the straits, Russia’s efforts to support the Allies’ Dardanelles campaign were ineffectual.³⁶⁰

Russia’s military failure in World War I, perhaps more than any other nation involved, would have a sustained and deep impact on its future – and Russia was on the winning side. Russia’s 1.8 million war dead accounted for 30% of all Entente powers, more than France and more than Britain. More significant was their civilian casualties which approached their number of military killed at approximately 1.5 million dead. This raised their overall population deaths due to World War I to 3.3 million – more than France, the U.K. and the United States combined, and more than any other country in the war on any side, including Germany, the Ottoman Empire or Austria-Hungary.³⁶¹ This, and the economic devastation that accompanied, directly led to the successful

³⁶⁰ Ibid, 14.

³⁶¹ Nadege Mougel, “World War I Casualties - Centre-Robert-Schuman.org,” trans. Julie Gratz, REPERES - module 1-1-1 - explanatory notes - World War I casualties - EN.pdf (CVCE, 2011), <http://www.centre-robert-schuman.org/userfiles/files/REPERES%20%E2%80%93%20module%201-1-1%20-%20explanatory%20notes%20%E2%80%93%20World%20War%20I%20casualties%20%E2%80%93%20EN.pdf>.

overthrow of the government by the Bolsheviks in 1917 (Lenin's slogan upon returning to Russia from exile was "Peace, Land, Bread.")³⁶²

6.2.4 The Evolution of Soviet Naval Doctrine

During the Bolshevik revolution, Russia's former allies intervened on behalf of the counter-revolutionary forces. Although the Red Navy had their largest fleet in the Baltic Sea, "A force of British cruisers and destroyers sailed into the Baltic and contained the Red fleet forcing the Bolshevik naval force to cower in their ports on the Gulf of Finland."³⁶³ This was not the first time the Russians found their naval forces rendered useless through geography and a superior enemy, nor would it be the last.

There would be an even more insidious development during the revolution that would impact the navy for a generation: the mutiny at Kronshtadt naval base on March 1, 1921. Following the successful attack by the Red Army against the naval station, the mutineers surrendered: "The Soviet secret police, the dreaded Cheka, carried out summary executions of all who could found alive of the five to six thousand sailors and workers who had supported the mutiny."³⁶⁴ A cleansing ("chistka") occurred throughout the Red Fleet, with 15,000 personnel (about "one out of every six persons"³⁶⁵) eliminated from the Navy.

About a decade after those purges, and as the economy began to slowly crawl back from the devastation of the war, it became apparent that the Navy needed to be rebuilt. This began a debate that still continues today, as to what kind of fleet should be built. The "Old School"

³⁶² Patrick J. Kiger, "How World War I Fueled the Russian Revolution," History.com (A&E Television Networks, April 28, 2021), <https://www.history.com/news/world-war-i-russian-revolution#>.

³⁶³ Daniel, 41.

³⁶⁴ Herrick, 5.

³⁶⁵ Ibid, 6.

proponents, mostly former Imperial officers who had survived the “cleansings,” favored a traditional “Mahanian” force, albeit with “Russian characteristics” – aircraft carriers, large battleships and cruisers to compete on the high seas against other “great power” navies. The goal of such a fleet would be “Sea Control,” that is, command of the sea. The drawback of this force was obviously the cost, and the fact that their most likely adversaries, the British, already had quite a lead.

The other side of the debate would be referred to as the “Young School,” a much more revolutionary-minded “guerilla” fleet consisting of submarines and small, fast units such as torpedo boats, able to fight the larger navies asymmetrically. The purpose of this strategy would be “Sea Denial” vice control: “The basic tenet of the young school, when stripped of its Marxist theoretical baggage, was simply an assertion that the submarine had replaced the battleship as the main striking unit of the fleet.”³⁶⁶

Because the proponents of this strategy were able to couch their ideas in politically correct Revolutionary terms, disagreeing with them would open one up to accusations of counterrevolutionary ideas; some would pay for this with their lives. Furthermore, the fragile Russian economy really made building a modern fleet of battleships unrealistic in any case, at least without a large infusion of assistance from foreign powers; “it is not surprising that the Soviet Party and Army leaders who controlled the Navy succumbed to the attraction of the relative cheapness of submarines, PT boats, and destroyers.”³⁶⁷ Luckily for traditionalists in

³⁶⁶ Ibid, 22.

³⁶⁷ Ibid, 23.

Russia, of all people Josef Stalin would come to embrace the need for a more balanced fleet that would be able to compete on the high seas.

Though beginning his takeover of the reins of power in 1924, it was not until the peak of his purges in 1938 that Stalin began a turn toward a more balanced-fleet approach, regardless of the fact that the West was not aware of this at the time:

Although the fact was to be kept hidden from foreigners for several years, the naval program of the Second Five-Year Plan (1 January 1933 to 1 April 1937) was not limited to provisions for more submarines, naval aircraft, and light surface ships and craft. It also provided for modernization of the old battleships and construction of heavy cruisers.³⁶⁸

This did not mean the “Young School” had lost the battle; with the rearming of Great Powers in the 1930s, their arguments beyond geography driving a defensive mindset included the familiar refrain that the navy needed to play a supporting role to the army. As described by Gillete and Frank in “Sources of Soviet Naval Conduct,” “In the discussion of the 1930s, one side proceeded on the premise that, given the existing and foreseeable circumstances, the outcome of a war would be decided on land. Therefore, the navy must be assigned tasks that were rooted in the army’s mission.”³⁶⁹

Things took a turn for the worse for the “Young School” in the beginning of 1937 as “Stalin started a thorough reorganization of the naval command, eliminating step by step the supporters of a small-ship navy.”³⁷⁰ Interestingly, this came at roughly the same time that Russian involvement in the Spanish Civil War was at its peak. As will be discussed later, the lack of a true ocean-going naval fleet precluded the Soviets from protecting the resupplies to their ground

³⁶⁸ Ibid, 30.

³⁶⁹ Philip S. Gillette and Willard C. Frank, *The Sources of Soviet Naval Conduct* (Lexington, MA: Lexington Books, 1990), 103.

³⁷⁰ Ibid, 104.

units fighting in Spain. Becoming convinced that this difference in strategic philosophy represented “sabotage everywhere,” the purge transitioned from reassignment to arrest, to eventual state-sponsored murder:

The most prominent members of the small-ship navy group were arrested. Commander in Chief Orlov in July, Kozhanov in October, and their teachers at the academy led by Aleksandrov. At the same time, the Red Army high command was purged, and one of the charges against Marshal Tukhachevskii was that he had prevented new surface ships from being added to the navy.

Then Stalin’s delusion about sabotage everywhere reached even the successors and the remaining fleet commanders...All of these officers were liquidated from 1938 to 1940.³⁷¹

With the elimination of most of the admirals, Stalin had to turn to a relatively young though experienced officer to lead the Soviet Navy during a “massive expansion”³⁷² toward a balanced fleet of ships of the line and submarines, Nikolai Kuznetsov (namesake of the modern-day RFN’s only aircraft carrier). While this buildup of battleships, cruisers and submarines was underway, on September 30, 1940, Germany and Russia invaded Poland and the war in Europe was underway. Hitler’s breathtaking successes early in the war may have caused Stalin to have a premonition of the double-cross to come, however, and the resources for naval buildup were redirected to the army on October 19, 1940, when “the construction of all large ships was halted while the building of destroyers, submarines, and small combatants was accelerated.”³⁷³ Less than a year later, Germany invaded Russia.

Prior to this, the “big navy” 5-year programs included naval aircraft as a part of the massive buildup. By “naval aircraft,” however, the plan meant land-based naval air; no mention

³⁷¹ Ibid.

³⁷² Ibid, 105.

³⁷³ Ibid, 106.

of the construction of aircraft carriers was made. Later revelations by Admiral S. G. Gorshkov, the Soviet Navy's commander in chief during most of the Cold War, indicated that this was no accident, and that carrier-based aviation was underappreciated by Soviet theorists. Referring to Russian efforts in World War II, Gorshkov wrote in 1967 that:

We did not even have any fighter aviation which could provide cover for warships at sea far from our coasts...Thus even our big surface fleet, which began to be created on the eve of the war, actually was doomed to operating solely in our coastal waters, protected by fighter aviation from shore...This would not have had to happen if our military doctrine at the end of the 1930s had been directed to the full use of such qualities of a fleet as high mobility, continuous operational readiness, great striking power, and the capability over a protracted period of time for striking powerful blows at the enemy at a great distance from one's base.³⁷⁴

This is an important quote, as Gorshkov would run the Soviet Navy for thirty years, beginning under Nikita Khrushchev. Nearly half a century prior to supporting Russian ground forces in Syria, Gorshkov wrote of the need to strike “powerful blows at the enemy at a great distance from one's base” – though in 1967 the Russians were nowhere close to that ability.

6.2.5 The Spanish Civil War (1938-1939)

6.2.5.1 Conflict Overview

The ideological aspect of the Cold War found the Soviet Union involved in the internal affairs of what was then called the “Third World,” strengthening burgeoning socialist republics and fomenting communist revolutionaries in South America, Africa, and Asia. While these activities could be considered a form of “power projection,” in most cases Soviet units were not involved in actual large-scale combat operations. Instead, they supported revolutionaries or socialist government forces with supplies and training.

³⁷⁴ Herrick, 35.

The most obvious exception to this rule came prior to the Cold War, and even World War II: the Soviet ground force involvement in the Spanish Civil War during the mid-1930's. David Woodward explains in his 1966 book *"The Russians at Sea: The History of the Russian Navy"* the global nature of the Spanish Civil War. The fascists (Germany and Italy) were sending military support (including troops) to the insurgent Nationalist side, while the Russians (and an "International Brigade" of various other socialist governments) were supporting the elected Republican government. Meanwhile, the primary "great powers" of the day, Britain and France, proclaimed and attempted to practice a non-intervention policy.³⁷⁵

The Russians were by far the most important ally of the Republican government then under siege by the nationalists. As described in the dissertation *"Influence of Naval Power on the course of the Spanish Civil War"* by U.S. Army War College student CDR John Kersh, Jr.:

The Soviets played a major role in the Spanish Civil War. They massively supplied the Republican government. Supplies included 808 combat aircraft, 362 tanks, 120 armored reconnaissance vehicles, 15550 artillery pieces, hundreds of thousands of small arms, torpedo boats, torpedoes and fuel. The supplies that the Soviets provided kept the Republicans in the war. The supplies were not given freely to the Republic, but came with "strings attached," 2000 Soviet advisers.

The advisers played a key role in the war; at times they assumed direct control over the employment of the military.³⁷⁶

As with Assad's regime in Syria, the government forces of the Spanish Republic were on the ropes early on. However, as in Syria in 2015, the direct infusion of Soviet ground forces had a decisive effect.³⁷⁷ Unlike in Syria, Russia did not have the naval assets to protect their lines of communication in the Mediterranean:

³⁷⁵ David Woodward, *The Russians at Sea: A History of the Russian Navy* (F.A. Praeger, 1966), 204.

³⁷⁶ John M. Kersh, *Influence of Naval Power on the Course of the Spanish Civil War, 1936-1939* (Carlisle Barracks, PA: U.S. Army War College, 2001), 23.

³⁷⁷ *Ibid*, 24.

The Soviets advisers' success on land was not duplicated at sea...The material from the Soviet Union had to transit the Black Sea and the entire Mediterranean or be transported to France and cross the Pyrenees. Given that eighty to ninety percent of all supplies to participants in the war went by sea, anything that could be done to interdict the supply lines would have a significant impact on the war.³⁷⁸

Soviet sealift of armored units to the Republic began in October of 1936 and continued unabated for half a year. Eventually, however, the fascist Spanish Nationalists (primarily through the use of stealthy Italian submarine operations) would deny the Russians their sea lines of communication (SLOCs). In 1937 a Russian merchant vessel, the *Komsomol*, was sunk in the Mediterranean, resulting in the loss of a large number of fighter planes. Woodward points out that, since Russia did not have the ability to provide continuous escort for its merchant fleet through the Black Sea and Mediterranean Sea, they would no longer be able to match the support provided to Franco's forces from Germany and Italy.³⁷⁹

With the assistance of Germany and Italy, the Spanish Republican naval forces were eventually defeated, leaving it to the Soviets to protect their own lines of communication. Two decades of "Young School" influence following the October Revolution, however, had reduced the Soviet Navy to a coastal defense force; their ships capable of such a mission were antiquated and dilapidated. Faced with the inability to support what had been a successful effort by Soviet tank brigades in Spain, an initial plan to send marginal surface units to the western Mediterranean was put into place; however, this plan was cancelled due to the obviously poor condition of the fleet of destroyers and cruisers. As described by Kersh, the Young School's influence had reduced the Soviet Navy to a coastal defense force.³⁸⁰

³⁷⁸ Ibid.

³⁷⁹ Woodward, 204.

³⁸⁰ Kersh Jr., 27-28.

With France and Great Britain officially practicing non-interference, and the Soviet Union incapable of fielding an ocean-going fleet, the only “great powers” in the game were the Italians and the Germans. Following the decimation of the Spanish Republican navy, the fascists were able to conduct an anti-shipping campaign against the Republican resupply utilizing surface ships, submarines (clandestinely employed by the Italians), and aircraft throughout the Mediterranean.³⁸¹ The employment of unattributed submarine warfare (likened to piracy at the time) in the Mediterranean prompted Britain and France to finally become involved in anti-submarine operations. The effort was too little, too late for the Republican sealift operation, as the Soviets ended their arms shipments soon afterwards. Although they attempted to circumvent fascist sea control in the Mediterranean by using an overland route to French Atlantic ports, this effort achieved little effect, resulting in the eventual withdrawal of Soviet ground forces.³⁸² With the Soviet Union no longer in the game in a substantial way, the Republic fell to Generalissimo Francisco Franco.

6.2.5.2 Similarities to Russian Naval Involvement in the Syrian Civil War:

This example provides both the greatest similarity and the starkest contrast to Russia’s modern-day operations in Syria. Both involved the requirement to support ground forces in the Mediterranean, which thus depended on sea control to assure protection of the logistics operation. Both involved the potential prize of a warm-water port on the outside of the Turkish Straits. Both involved a civil war. Finally, both were seen at the time as an opportunity for the Soviets and Russians to “show off” new weapons systems, from tanks to aircraft.

³⁸¹ Willard C. Frank, “Did Naval Operations Have a Significant Effect upon the Course and Outcome of the Spanish Civil War?,” ed. Kenneth W. Estes and Daniel Kowalsky, *History in Dispute* 18 (2005): pp. 176-182, 179.

³⁸² Ibid.

As Kersh highlights, if not for the direct support of Soviet ground forces and equipment the Republic would most likely have been toppled early in the conflict; the same has been said about the Russian support to Syria's Assad regime. Unlike other examples in Russian and Soviet history, support to the Spanish Republicans was not a "proxy" war (though, as in Syria, it began that way). While some cursory analysis focuses on the "advisor" aspect of Soviet support to the Spanish Civil War, detailed sources reveal a much more direct role. The best example of this is a 1999 article in the "Journal of Slavic Military Studies" by Steven J. Zaloga, entitled "Soviet Tank Operations in the Spanish Civil War." According to Zaloga, at first the Soviets were going to provide only the tanks, not the crews, to the Spanish Republic, though they would train the Spaniards to operate the Soviet equipment.³⁸³

This would not last long. In late October 1936, two of three Soviet/Spanish mixed-manned tank platoons which had been sent to the front went into action, though with little effect. The third unit was a "partially formed" tank battalion under Latvian-born Soviet officer Kombat Paul Arman. This unit had been formed by Arman with a greater than 3:1 ratio of Soviet tank operators to Spanish operators (34 Soviets, 11 Spaniards).³⁸⁴ While the attack by the Republicans was successful, the Nationalist counterattack (utilizing artillery and Molotov cocktails) resulted in significant damage, including a half dozen destroyed or damaged tanks and more than a dozen Russian and Spanish tankers killed or wounded.³⁸⁵ In this opening engagement of Soviet tank operations in the Spanish Civil War, fully fifty percent of the casualties were Soviet. As discussed

³⁸³ Steven J. Zaloga, "Soviet Tank Operations in the Spanish Civil War," *The Journal of Slavic Military Studies* 12, no. 3 (1999): pp. 134-162, <https://doi.org/10.1080/13518049908430406>.

³⁸⁴ Ibid.

³⁸⁵ Ibid.

previously, Russian/Soviet ground operations do not typically occur away from the Motherland, putting the Spanish Civil War in a very small category that includes the Syrian Civil War.

While Italy and Germany ratcheted up their support to the Nationalists, Soviet tank support increased, the effort dependent on the secure sea lines of communication from the Black Sea through the Mediterranean:

*As Italy and Germany blatantly violated the non-intervention policy and sent more troops and weapons to Franco's forces, Stalin decided to reinforce the Spanish contingent. While the defense of Madrid was continuing, a second wave of about 200 Soviet tank crews and tank specialists arrived aboard the steamer Chicherin on 27 November 1956.*³⁸⁶

This support from the Soviet Union of some of the best tanks and crews in the world continued throughout their involvement of the war, all delivered by sea:

³⁸⁶ Ibid.

TABLE 2: SOVIET TANK DELIVERIES TO REPUBLICANS DURING SPANISH CIVIL WAR

Date of Arrival	Ship	Quantity	Type
12-Oct-36	Komsomol	50 T-26	light tank
25-Nov-36	Cabos Palos	37 T-27	light tank
30-Nov-36	Marc Caribo	19 T-26	light tank
6-Mar-37	Cabo Santo Tomas	60 T-26	light tank
8-Mar-37	Darro	40 T-26	light tank
7-May-37	Cabo Palos	50 T-26	light tank
10-Aug-37	Cabo San Agustin	50 BT-5	light tank
13-Mar-38	Gravelines	25 T-26	light tank

Source: “Soviet Tank Operations in the Spanish Civil War” (Zaloga)³⁸⁷

If Russia’s sealift to Assad was termed the “Syrian Express,” the 1930’s operation may have been called the “Iberian Highway.” The difference was, when that sea line of communication was threatened, the Soviet Navy had no navy to turn to; the Russian Federation Navy of the 2010’s did.

6.2.5.3 Differences to Syrian Civil War

In 1935 the Soviet Navy was ill-prepared to protect their Sea Lines of Communications (SLOCs), a lesson they may have taken to heart when rebuilding the modern Russian Federation Navy, a decision which may have eventually led to turning the tide for Russian forces in Syria. Like the Russo-Japanese War, the failure in Spain is what most starkly sets apart Russian efforts in the

³⁸⁷ Ibid.

Spanish Civil War over the success they would enjoy 80 years later in the Syrian Civil War. In the Russo-Japanese War, the Russians would attempt to gain local maritime superiority and fail. In 1935 the Russians did not even bother to try. As described by Michael Alpert in “A New International History of the Spanish Civil War,” the Soviet’s misadventure in Spain brought to light the impact that a weak military (and navy in particular) had on its ability to support its foreign policy goals.³⁸⁸ When the Republicans decided an international Naval Patrol was needed to be established to counter the threat from Nationalist maritime attacks, the Soviets at first demanded to be a participant. As particulars were decided upon, however, the Russians withdrew their support from the plan. According to German intelligence, the state of the Soviet fleet was so poor that Moscow felt putting their weakness on display internationally would have more drawbacks than benefits.³⁸⁹

6.2.5.4 Lessons

As Herrick writes in *Soviet Naval Strategy*, Stalin was greatly influenced by Russia’s failure to meet its foreign national objectives in the Spanish Civil War. Even in a primary land force conflict, the role of a competent naval capability could not be denied.³⁹⁰ Furthermore, numbers did not matter nearly as much as type of vessels; at the time of the Spanish Civil War, the Soviet Union boasted the largest force of submarines in the world. Stalin realized this was not sufficient to be respected as a naval power.³⁹¹ Soviet impotence in protecting its lines of communication outside of the Baltic and Black Seas made the outcome of the conflict a foregone conclusion. The

³⁸⁸ Michael Alpert, *A New International History of the Spanish Civil War* (Basingstoke, Hampshire u.a, UK: Palgrave Macmillan, 2005), 10.

³⁸⁹ Ibid, 113.

³⁹⁰ Robert Waring Herrick, *Soviet Naval Strategy* (Annapolis, MD: U.S. Naval Institute, 1968), 42-43.

³⁹¹ Ibid, 35.

Republicans may have still lost with continued Soviet support, but without that support their defeat was certain.

Going back to Wegener's hypothesis, if sea power is the product of the fleet times the geographic position or $SP = F \times G$ {where "SP" is "sea power," "F" is "fleet," and "G" is "geographic position"}, it is easy to ascertain what happened to Russia in the Spanish Civil War. While their geographic position (G) was tenable – they had no problems getting their merchant ships through the Turkish Straits and through the Mediterranean – their Fleet (F) was zero, or so small they didn't dare venture into the Mediterranean. Hence their geographic position did not matter.

The "zero property of multiplication" states that in any multiplication equation involving two factors, if either of the factors is zero, the resulting product is zero. Applying Wegener's equation to both the Russo-Japanese War and the Spanish Civil War, one of the two factors approached zero to the point that the product – the successful employment of expeditionary naval power – ended up being zero. In the former case (Russo-Japanese War), it was the "geographic position" factor that approached zero. In the latter (Spanish Civil War), it was the "fleet" that approached zero. In Syria in the 2010's, though not perfect, the RFN's geographic position was favorable, as was their fleet. The resulting success in Syria lends credence to Wegener's hypothesis.

At the end of Russia's failure in the Spanish Civil War, it was clear, at least to Stalin, that the ideas of the "Young School" were not appropriate for an erstwhile Great Power. Reflections by Stalin following the Spanish Civil War included the role of a navy:

During these years, Stalin was increasingly influenced by far-reaching ideas on the subject of sea power. Possibly the experiences of the Spanish Civil War played a role; for example, the sinking of Soviet merchant ships carrying arms to the Spanish Loyalists by Spanish Nationalist or Italian surface ships or submarines

made suddenly clear that the Soviet Union, with its coast defense navy, was not in a position to supply the side it supported in the civil war. Meanwhile, Italy and Germany sent weapons and munitions to Spain by sea unimpeded by any hostile naval forces. Stalin drew the conclusion that if the Soviet Union wanted to play the part of a major power, it must have a navy that could give credibility to its demands.³⁹²

The events of the late 1930's on the Iberian Peninsula would soon be overshadowed by the global conflict unfolding in Asia and Europe. However, Russia's maritime experience in the Spanish Civil War, like the Russo-Japanese War, had deep and long-lasting ramifications beyond the effects of losing a war.

6.2.6 The Russian Navy in World War II

While Stalin attempted to employ lessons learned short after the Spanish Civil War, by 1939 this effort was too little, too late. The German attack on the Soviets during Operation Barbarossa in June 1941 began with a covert mining campaign by Germany across chokepoints in the Baltic and Black Seas, followed by a rapid ground offensive in the southern Baltic and Gulf of Finland: "The Soviet Fleet attempted to leave ports but suffered greatly at the hands of the preemptively laid German minefields. Soviet naval forces were relegated to a purely defensive strategy..."³⁹³ Once again Russia relearned the painful lesson of maritime irrelevance when constrained by geography.

In the Baltic, Russian naval operations followed the pattern set in World War I when it came to subjugation to the Army. As recounted by Mitchell:

At the time of the German attack on Russia in June 1941, the main work of the Soviet Baltic Fleet was to help the army by bringing in supplies. Operations in the Baltic in the second world war were on the whole rather complementary to land warfare than distinct actions in sea warfare; the chief role of the fleet was to

³⁹² Gillette and Frank, 104.

³⁹³ Ibid, 47.

support the flank of the Red Army, and later it was to cover the retreat of the latter, and to help in the evacuation of Tallinn. But beyond those immediate tasks there was the duty of preventing the Germans from getting complete control of the Baltic, and also from making a seaward assault on Leningrad.³⁹⁴

This is not to say that the Soviet Baltic Fleet did not play an important role in the war effort economically, but also in diverting valuable German naval resources; Soviet submarines in particular succeeded in:

Making enough attacks on German shipping to force the enemy to adopt the convoy system for vessels sailing between Germany and Finland. "This in itself was an achievement for the Soviet navy, since it was wasteful both in men and escort ships which Admiral Doenitz so sorely needed elsewhere." Russian submarines were also reputed to have maintained a blockade of the Finnish shore of the Gulf of Bothnia...³⁹⁵

This highlights two aspects of Soviet naval employment of World War II that still hold true today: their emphasis on and effective use of submarines, and the navy's supporting role to ground forces in action along the littoral. The difference between these operations and Syria is the fact that in the Second World War they were defensive (attempting to repel an attacking Germany in Russian territory) as opposed to the expeditionary nature of their operations in the eastern Mediterranean. Additionally, the reported 1,700-km range of the *Kalibr* has expanded the concept of naval support to Army forces from the sea.

6.2.7 Soviet Navy Development in the post- World War II/Early Cold War Era

Following the cessation of hostilities in 1945, Stalin's "prewar big navy views and the old school views of the senior Soviet naval officers were confirmed and strengthened by the bitter World War II experience of the Soviet Navy."³⁹⁶ However, while a large "balanced" fleet was now

³⁹⁴ M. Mitchell, 382.

³⁹⁵ Ibid.

³⁹⁶ Herrick, 57.

avored, a new wrinkle in Soviet warfighting emerged that would come to dominate naval theory in both the East and West: the advent of nuclear weapons. Many analysts on both sides of the Cold War opined that naval operations such as the U.S. Navy's pacific campaign against Japan were no longer feasible in the nuclear era.

In addition, as it became apparent that the United States was now their primary threat, Moscow had to grapple with an uncomfortable truth: there had only been two world-class carrier-based navies in all of world history, and now one (the Imperial Japanese Navy) was at the bottom of the Pacific at the hands of the other (the U.S. Navy). As had been the case following World War I (and would be again at the end of the Cold War), the Russian economy was in a shambles. Should the ridiculously expensive aircraft carrier be the new principal ship of a great power, it would take a great deal of time to compete with the operational experience and equipment of the United States Navy. As such, "Stalin apparently was convinced that the correct naval strategy for the USSR was one of deterrence and defense."³⁹⁷ Thus, even though an "old school" balanced fleet (that included cruisers) was being assembled, a young school doctrine of "asymmetry" was still being pursued. As highlighted by Herrick, this doctrine would be focused on an active defense:

...no longer were the submarines, aviation, and light "mosquito" surface forces of young school theory considered adequate; rather the larger, more heavily gunned, surface ships then in vogue...were to be added to the other forces advocated by the young school to once again establish the "active" defense concepts..."³⁹⁸

³⁹⁷ Ibid, 60.

³⁹⁸ Ibid, 62.

Still, the Red Navy was on the verge of finally achieving a measure of success in the building of a large, balanced fleet when Stalin died in March 1953. With him died, for a generation, any hope at such a navy.

6.2.8 Soviet Naval Development Under Khrushchev

With the death of Stalin, Nikita Khrushchev inherited an “old school” building plan to accomplish the much cheaper “young school” naval strategy. The addition of nuclear warheads to the emerging guided missile technology emerging in the 1950’s convinced the new leader (and Marshal Zhukov, his defense minister) that the naval forces “need only comprise relatively inexpensive types, notably submarines, light surface craft, and land-based naval aircraft...Khrushchev (would) announce...that the Soviet Navy was scrapping 90 per cent of its cruisers...”³⁹⁹

The reversion was referred to historically as “neo-young school” – the “neo” referring to the addition of nuclear warheads to tactical naval forces, in addition to emphasizing submarines over large surface ships:

The shift from Stalin's neo-Old School to Khrushchev's neo-Young School was made in 1954. Khrushchev has related that it was decided that year to 'create a submarine fleet as the fundamental basis of our naval forces.' According to Khrushchev, this change of strategy was based on 'the necessity to transform the armaments of our Navy which was based in the main at that time on cruisers, destroyers and other surface ships' which 'largely had become obsolete for the conduct of war in contemporary conditions.’⁴⁰⁰

Khrushchev replaced Admiral Kuznetsov, the “old school” adherent favored by Stalin, with Admiral Sergei Gorshkov, “known to have a strong interest in naval applications of missile

³⁹⁹ Ibid, 67.

⁴⁰⁰ Ibid, 25.

technology...No more was to be heard for 12 years in favor of aircraft carriers.”⁴⁰¹ Admiral Gorshkov would oversee the building of the Soviet navy that, to a large extent, is still sailing today. This navy would become known for two things: a third leg of a strategic triad with ballistic missile-carrying submarines (adding to intercontinental ballistic nuclear missiles and long-range bomber aircraft) and a numerically superior surface, subsurface and aviation fleet armed with long-range anti-ship cruise missiles (ASCMs).⁴⁰²

The other aspect of the Soviet Navy of this era, which would remain consistent throughout the Cold War, was the nearly singular focus on the United States and NATO. Starting with the Cuban Missile Crisis and continuing with the Superpower confrontations in the Arab-Israeli conflicts of 1967 and 1973, the naval strategy assumed a worse-case scenario of general war with the United States and NATO. From the maritime perspective, the greatest threat was from the Polaris SSBNs and NATO’s aircraft carriers, which could employ nuclear weapons into Soviet territory. The strategy was still primarily a defensive one.

6.3 Technology in Naval Warfare and its Impact on Russian Naval History

The successful employment of Russian sea power in the Mediterranean during the Syrian Civil War is, among other things, the confluence of unchanging physical geography, principles of

⁴⁰¹ Ibid, 70.

⁴⁰² The term “missile” is often used generically, but to the naval analyst the word means very little without amplifying information. There are four basic types of missiles employed by naval forces: 1) the ballistic missile, almost exclusively nuclear-tipped and always carried by a submarine (in the U.S. and Russian navies – China has started placing ballistic missiles on surface ships); it is referred to by the acronym “SLBM,” for “Submarine-launched ballistic missile;” 2) the anti-ship cruise missile (ASCM); though typically carrying a conventional warhead, the Soviets employed large ASCMs capable of employing a nuclear warhead. When fired from a shore battery, they’re also referred to as “Coastal Defense Cruise Missiles,” or CDCMs. 3) Land Attack Cruise Missiles, or LACMs. First used by the United States in the form of the Tomahawk Land Attack Missile (TLAM), these can be armed with either a nuclear warhead or a conventional high explosive warhead. The LACM can be fired from surface ships and submarines (though not as prevalent, they can also be fired from aircraft). 4) Surface-to-air missiles, or SAMs, are usually fired from a surface unit or ground location. SAMs can be short range (providing point defense of a particular vessel), or longer range, able to provide for area defense of multiple vessels.

naval warfare, and a thousand years of Russian history driving 21st century political decisions. Another key factor, one that, unlike geography, is constantly changing (albeit in fits and starts) is the effect that technology has played on Soviet and Russian naval operations, most recently in the Black Sea and Mediterranean. Chapter 8 will delve into the specific technologies developed and currently employed by the RFN that have enabled their success in the battlefield. However, a short discussion of the role that technology has played in driving the course of history in naval warfare is appropriate here.

Forty years ago, Karl Lautenschlager wrote in *International Security* that:

In an age of systems analysis it may seem a florid diversion to review a century of history before assessing the present and speculating about the future. Yet, debate over naval policy is encumbered by fanciful history that is more popular than useful. Therefore, reconsideration of the long term could bring needed perspectives to the problem. The results are two: the historical review provides case studies in how technology can affect warfare, and the analysis highlights basic trends that could be useful in predicting future developments.⁴⁰³

This is in no small part what this dissertation is attempting to do: reviewing more than a century of Russian and Soviet naval history in order to assess the present and perhaps even predict the future. Indeed, this paper includes two specific historical examples (the Russo-Japanese War and the Spanish Civil War), though based not on technology but on mission (supporting ground forces from the sea). The end result is the same: to highlight “basic trends” that would be helpful in predicting future outcomes.

Russia’s ability to employ naval power from the sea to achieve their objectives in Syria was not the result of a single “breakthrough” technology that its adversaries were unprepared to

⁴⁰³ Karl Lautenschlager, “Technology and the Evolution of Naval Warfare,” *International Security* 8, no. 2 (1983): p. 3, <https://doi.org/10.2307/2538594>, 3.

face. Lautenschlager notes that such a radical deployment of new weaponry has not been the norm in history: “important advances in naval weaponry have not come with the introduction of spectacular new technology, but with the integration of several known, often rather mundane, inventions.”⁴⁰⁴ In Syria, Russia employed 60-year-old amphibious ships and 30-year old land attack cruise missile technology, but protected by cutting edge supersonic anti-ship cruise missiles on new, small ships that displayed modern endurance not available to their Cold War predecessors.

This last point – the ability of surface ships to deploy for extended periods of time – is of particular interest to Lautenschlager. Most histories count the Battle of Hampton Roads as the Dawn of the Age of Sail due to the fact that both sides only employed steam-powered warships (of course the combined order of battle on both sides consisted of only two ships). The important aspect from a technological revolution standpoint, according to Lautenschlager, is not the number of vessels involved but the distance away from base that they are able to effectively fight. Turning to the Battle of Hampton Roads, neither the *Monitor* nor the *Merrimack* would have been capable of operations on the “high seas,” or even transiting them in rough weather. This means that, while steam provided the important *tactical* mobility of the day (maneuvering into attack position independent of the wind), other technological advancements still needed to be made before navies could enjoy *strategic* mobility (moving a fleet across vast distances of ocean regardless of the wind conditions). Lautenschlager describes how steam created this differentiation between tactical and strategic mobility:

The new dimension of naval warfare was maneuver independent of the wind for extended periods. Steam completely changed fundamentals of battle tactics that

⁴⁰⁴ Ibid, 4.

had prevailed for two centuries. It made existing fleets of sailing battleships obsolete, and it introduced a basic characteristic to naval weapon platforms that persists to this day. Whether surface, subsurface, or airborne, their fuel-burning engines make tactical and strategic mobility two different problems. Since tactical mobility influences combat effectiveness, its critical elements are speed and maneuverability. Strategic mobility, on the other hand, determines the distance and duration that a force can be deployed from its base.⁴⁰⁵

Interestingly, it was this move away from a renewable energy source – wind – that would trigger the quest by nations with global aspirations for a requirement that continues to this day: overseas bases. This requirement began in the 1870's with the requirement for coaling stations to support a fleet moving away from its home base and continues to this day (with the exception of nuclear-powered vessels – submarines, U.S. and French aircraft carriers, and a single Russian cruiser). This explains both the significance of China's establishment of its first overseas base in Djibouti in 2017⁴⁰⁶ and Russian continued emphasis on protecting and expanding its base in Tartus, Syria.

It was nearly 1890 before entire squadrons of steam-powered *seagoing* monitors were being fielded.⁴⁰⁷ This would allow Russia to entertain the idea of, in 1904, sending a significant number of warships from the Baltic Fleet around Africa in an attempt to influence the outcome of the Russo-Japanese War (as previously discussed). Although Lautenschlager focuses a great deal of attention on this radical improvement in a warship's endurance (the number of days it remains underway without requiring refueling or other activities necessitating pulling into a

⁴⁰⁵ Ibid, 8.

⁴⁰⁶ "China Formally Opens First Overseas Military Base in Djibouti," Reuters (Thomson Reuters, August 1, 2017), <https://www.reuters.com/article/us-china-djibouti/china-formally-opens-first-overseas-military-base-in-djibouti-idUSKBN1AH3E3>.

⁴⁰⁷ Lautenschlager, 11.

port), this alone did not account for the transformation from 19th century naval warfare to what we might still consider “modern” warfare.

At the same time and based on the same basic advances brought about by the industrial revolution, monumental improvements were being realized in the area of naval firepower. One such example is a technology that had been realized more than a hundred years previously but applied on a grander scale in the 1850’s: rifling of artillery barrels. Utilizing the same theories that made a rifle vastly superior in range and accuracy to a musket, mid-19th century advances in metallurgy allowed for the move from smooth-bore cannons to rifled artillery, incorporating metals with the strength to be able to withstand the vastly higher internal pressures produced by a spinning shell.⁴⁰⁸ The range (up to 2,000 yards)⁴⁰⁹ and accuracy of the new rifled naval guns forced the innovation of more effective armoring. It also drove the need for advances in telescopic sighting. In addition, the need for smaller scout vessels to relay targeting information to principal ships resulted in the wartime employment of the new wireless telegraph technology. Add to these innovations the introduction of a novel threat from high-speed torpedo boats, and the late 1800’s must have presented a dizzying problem to naval strategists and operational planners.

While many of the 19th century wartime developments could have been considered evolutionary by themselves (with the exception of the wireless telegraph), taken together the world experienced a revolution in military affairs. It is no wonder that World War I became a testing ground for dozens of what are still considered cutting edge technologies: machine guns,

⁴⁰⁸ Ibid, 10.

⁴⁰⁹ Ibid.

chemical weapons, barbed wire, tanks, precision artillery, submarines, and aircraft. From a naval perspective, ironically it was the airplane that would have the greatest obvious impact leading into World War II. Less obviously but no less important was the introduction of electronics, particularly radar, into all aspects of naval warfare.⁴¹⁰

The move from the battleship as the principal ship of a world class navy to the aircraft carrier during the Second World War is a well-known story, if not without some fanciful lore. Though the *USS Langley* (CV-1), a collier converted to a floating flight deck, first landed a plane from Hampton Roads on its deck in 1922, it was advances in aircraft technology in the inter-war years that truly brought about this next revolution. In this area, the Japanese led the allies significantly throughout the early stages of the war, with the *Kate* torpedo-bomber and the *Zero* carrier-fighter terrorizing the Pacific from 1938 on. The *Kate*:

...had the combination of payload, range, and speed to make it a first-line offensive weapon. It could carry an 1,800-pound torpedo at 140 knots to a target 250 miles away and return to its carrier. Its top speed was 200 knots at sea level, only 38 knots slower than the best enemy land-based fighter until 1943. It was superior in speed to most carrier fighters for the next four years.⁴¹¹

These attributes of the *Kate* – speed, range, and payload capacity – are the same aspects of missiles (both anti-ship and land attack) that are sought after by modern navies today for both sea control and power projection missions. A fourth attribute is accuracy, and though the *Kate*'s primary weapon system, the Type 91 aerial torpedo, was unguided, it could be delivered at full speed heading into an allied target vessel, virtually guaranteeing a hit to a pilot with good training and steel nerves.

⁴¹⁰ Ibid, 31.

⁴¹¹ Ibid, 28.

Before World War II was over, the next evolution of lethality in naval platforms would take place and become the direct forerunners of the *Kalibr* and other precision weapons: adding guidance (both mechanical and electronic) to ordnance. Two instances can be identified. One such weapon was the torpedo, utilizing passive acoustic homing (guiding on the sound being emitted by an adversary vessel). The second were the forerunners to the antiship missiles in operation today, such as the German *Fritz-X*.⁴¹² These were typically fired from land-based aircraft, utilizing altitude to achieve standoff distance and speed. For guidance, the most successful and widely used were radio controlled by a bombardier in the release aircraft who directed the weapon into the target ship. Still, television and semi-active radar guidance was also experimented with during the course of the war.⁴¹³

While Russia was not a part of this technological explosion during World War II, they were able to make great strides in catching up due to their occupation of Germany at war's end. As described in his 1983 article in *Survival*, Joel Wit explains the foundation of Soviet cruise missile technology:

Almost the entire Soviet programme, like that of the US, was based on captured German technology embodied in the V-1 missile. Following the end of the war whole production facilities as well as missiles and their parts were shipped back to the Soviet Union. This process continued into the late 1940s as the USSR began to establish the production base as well as technical know-how to manufacture improved missiles.⁴¹⁴

The V-1 represented the precursor to modern cruise missiles (as the V-2 rocket was the forerunner to today's ballistic missiles). The V-1 was not a rocket but powered with an early

⁴¹² Ibid, 39.

⁴¹³ Delmar S Fahrney, "The Birth of Guided Missiles," *U.S. Naval Institute Proceedings* 106, no. 12 (December 1980).

⁴¹⁴ Joel Wit, "Soviet Cruise Missiles," *Survival* 25, no. 6 (1983): pp. 249-260, <https://doi.org/10.1080/00396338308442130>, 249.

version of a jet engine, a technology that was not yet in widespread use on aircraft. The V-1 was not guided, however – it was a “point and shoot” weapon that relied on estimated bearing and range, with the estimated range being calculated by the revolutions of a small propeller.⁴¹⁵ This resulted in significant inaccuracies, leading the Germans to employ the V-1 as a pure terror weapon against land targets – the first “land attack cruise missile.”

The principal differentiation between a cruise missile and a ballistic missile is the fact that the ballistic missile leaves the atmosphere (thus requiring rocket fuel), whereas the cruise missile is an “air-breathing” weapon (allowing for the use of a jet engine). This gives the ballistic missile the potential for much greater range but allows the cruise missile to be smaller and approach targets at low altitudes, allowing for less warning. Cruise missile development following the Second World War, both in the east and west, followed two paths: conventional or nuclear anti-ship weapons (ASCMs), and nuclear land attack missiles (LACMs). The Soviets led the way on the ASCM front, by necessity. The U.S. had just developed the world’s second premier aircraft carrier-based fleet and defeated the first during the crucible of the War in the Pacific. Their post-war economy in a shambles, it became clear to Russia that matching the United States Navy symmetrically would not be possible for quite some time. Thus, they turned to the ASCM, an asymmetric response to the aircraft carrier.

From the 1950’s until the early 1980’s, Russia’s design philosophy was to build extremely large, long range, very fast cruise missiles that could be launched from all domains – land, sea, air and underwater. These missiles became widely proliferated amongst Soviet client states

⁴¹⁵ “Strategic Missiles,” Encyclopædia Britannica (Encyclopædia Britannica, inc.), accessed June 8, 2022, <https://www.britannica.com/technology/rocket-and-missile-system/Strategic-missiles#ref57343>.

throughout the Cold War, starting with the SS-N-2 Styx⁴¹⁶ family of missiles. The Styx was very fast, but subsonic (.9 Mach), and cruised at a relatively high altitude (300 feet), making it vulnerable to air defense weapons which were also improving during this time. Compared to Western counterparts, the Styx (and follow-on missiles through the 1980's) were enormous, with either a 1,000-pound conventional warhead or a nuclear warhead. The active radar in the nose of the missile enabled a Soviet ship to point in the estimated direction of an enemy "over the horizon" and "fire and forget." At a predetermined distance the Styx would activate its radar and guide on the first object it located. While this radar guidance was effective – the Styx sunk the Israeli destroyer *Eilat* in the 1967 6-Day War and was employed successfully by India in its 1971 war with Pakistan – this technology was relatively simple to counter. Soon chaff (blooming bits of aluminum fired from the targeted ship to draw off the missile) and electronic countermeasures such as jamming of the Styx's radar were being developed and proliferated.

Incremental technological developments (such as solid-state electronics and solid rocket fuel) allowed the Soviets to improve missile performance by increasing speed, lowering flight altitudes, reducing platform size and incorporating electronic counter-countermeasures (such as counter-jamming technology). As the Cold War progressed, several new types of large Soviet ASCMs were designed for both surface and subsurface platforms, some still in use today. For

⁴¹⁶ This is the nomenclature used by NATO to identify Soviet (and now Russian) missiles development during the Cold War. The first letter reflects the medium the missile is fired from, the second where it is fired to. Thus "SS" means "surface-to-surface," "AS" means "air-to-surface," and "SA" means "surface-to-air." If the letter "N" follows the first dash, that means the weapon is fired from a ship or submarine; an "X" in the name means the Intelligence Community believes the missile is still under development (i.e., "experimental"). If there is only one dash, followed by numbers, then it is a land-launched missile. The number represents when it was identified by Western intelligence assets. Thus, the "SS-N-12" was the twelfth ship-based surface-to-surface missile identified by NATO during the Cold War. The "SS-18 Satan" was the eighteenth ballistic missile identified. There is no way just by looking at the naval variants to tell if the missile is of cruise or ballistic design; the SS-N-19 is a cruise missile, whereas the SS-N-20 is a ballistic missile.

example, the *SS-N-9 Siren* ASCM, designed for the now defunct *Charlie*-class nuclear-powered guided missile submarine (SSGN), is still used by small *Nanuchka* and *Tarantul*-class missile boats.⁴¹⁷ Russia reportedly used this missile to sink a Georgian patrol boat in 2008.⁴¹⁸ In 1973 the Soviets unveiled the *SS-N-12 Sandbox*, an enormous missile with a 2,000-pound warhead that could travel 300 nautical miles at two and a half times the speed of sound.⁴¹⁹ While this missile was designed for the decommissioned *Kiev*-class aircraft carriers, the *SS-N-12* remain the principal weapon of the two remaining *Slava*-class cruisers (the third, the *Moskva*, was sunk in 2022). The last of these large missiles was a follow-on and derivative of the *Sandbox*, the *SS-N-19 Shipwreck*. Smaller than the *SS-N-12*, this ASCM has the same range and speed and is currently found on Russia's only aircraft carrier (the *Kuznetsov*), their only nuclear-powered cruiser (the *Kirov*), and their few remaining Cold War-era SSGNs (the *Oscar*'s).⁴²⁰

One advent during the early Cold War was truly revolutionary: the conquering of space, and the military applications that soon followed. By the 1970's the Soviets were orbiting open-ocean reconnaissance satellites, utilizing space-based radar (RORSAT) and electronic intelligence sensors (EORSAT) that could provide targeting data to missile-shooting platforms.⁴²¹ This allowed shooting platforms to fire their missiles at significant standoff ranges, offering a measure of protection from carrier-based aircraft (the Soviet's most likely target).

⁴¹⁷ Mark Vermeylen, "P-120 Malakhit (SS-N-9 Siren)," Missile Defense Advocacy Alliance, May 2017, <https://missiledefenseadvocacy.org/missile-threat-and-proliferation/todays-missile-threat/russia/ss-n-9-siren/>.

⁴¹⁸ "Russian – Georgian War at Sea," Bosphorus Naval News, September 21, 2008, <https://turkishnavy.net/2008/09/21/russian-georgian-war-at-sea/>.

⁴¹⁹ John Pike et al., "SS-N-12 Sandbox - Russian / Soviet Nuclear Forces," FAS Weapons of Mass Destruction (Federation of American Scientists, August 15, 2000), <https://nuke.fas.org/guide/russia/theater/ss-n-12.htm>.

⁴²⁰ "P-700 Granit/SS-N-19 'Shipwreck,'" Missile Defense Advocacy Alliance, June 28, 2018, <https://missiledefenseadvocacy.org/missile-threat-and-proliferation/todays-missile-threat/russia/p-700-granit-ss-n-19-shipwreck/>.

⁴²¹ Lautenshlager, 46.

The West, meanwhile, developed smaller ASCMs (such as the U.S. – produced *Harpoon* and the French-made *Exocet*), which would not do as much damage as their Soviet counterparts, but had better electronics, flew lower, and thus were much more survivable. Even with their smaller warheads, limited wartime employment of Western missiles (particularly the *Exocet*) proved the smaller design's value. In the 1983 Falklands/Malvinas War, Argentina sank the modern British frigate *Sheffield* with an air-launched *Exocet*, and during the Iran-Iraq Tanker War of the late 1980's an Iraqi *Mirage* attack aircraft mistakenly attacked and severely damaged the *USS Stark*, a relatively new U.S. destroyer.

By the late 1970's advances in air defense technology convinced the Soviets that the design philosophy of large, easily defeatable anti-ship cruise missiles was untenable. Thus, in 1984, they unveiled the *SS-N-22 Sunburn*, the last ASCM of the Cold War, representing a significant upgrade in capability and presented a dire threat to NATO military planners. The *Sunburn* not only could reach supersonic speeds (up to Mach 3), but was sea-skimming and could conduct anti-defense maneuvers; this combination made it a much more formidable threat than its NATO counterparts, the *Exocet* and *Harpoon*, both subsonic weapons.⁴²² Its smaller size ensured it had a shorter range, meaning that carrier-based aircraft could still “shoot the archer,” but in a surface action the new Soviet *Sovremennyy*-class destroyers that carried the *Sunburn* could come out on top. Just as the *Sovremennyy-Sunburn* combination began to populate the Soviet fleet, causing great consternation to the U.S. military, the Soviet Union crumbled, along with a majority of its surface fleet. The new Russian Republic was so cash-strapped that they

⁴²² “P-270 Moskit/SS-n-22 Sunburn,” Missile Defense Advocacy Alliance, June 28, 2018, <https://missiledefenseadvocacy.org/missile-threat-and-proliferation/todays-missile-threat/russia/p-270-moskit-ss-n-22-sunburn/>.

began selling some of their newest and best weapon systems to countries like China, India and Vietnam. From 1999 thru 2006 China acquired four of the *Sovremennyy's*, along with their accompanying SS-N-22 missiles.⁴²³

While the Soviets poured a great deal of effort into developing cruise missiles for anti-ship missions, the same cannot be said about a land-attack role. Perhaps the leading reason for this is the lack of precision capability available for such missions; while a radar could locate and target a metal ship against an ocean, a similar technology was not yet capable for differentiating a particular building within a city. Thus, cruise missiles were seen as only potential strategic delivery systems (carrying nuclear warheads), since in that role precision was not as important. As cruise missiles and ballistic missiles were only capable of nuclear missions, and ballistic missiles enjoyed much longer ranges (and greater velocities), both U.S. and Soviet efforts were directed to ballistic missile programs.⁴²⁴

During the early decades of the Cold War the United States' cruise missile program followed a similar trajectory. This would change in the late 1970's with the development of the Tomahawk. Originally designed as a long range (several hundred miles) subsonic anti-ship weapon (called the *Tactical Anti-Ship Missile*, or *TASM*), it eventually lost that role to the shorter-range *Harpoon* ASCM. Instead, the *Tomahawk* would become operational as the *TLAM*, or *Tomahawk Land Attack Cruise Missile*, in 1984. Seven years later it would see its wartime debut in *Operation Desert Storm* against Iraq. While still initially utilizing inertial navigation to reach the

⁴²³ Paul J. Bolt and Sharyl Cross, *China, Russia, and Twenty-First Century Global Geopolitics* (Oxford, United Kingdom: Oxford University Press, 2018), 118.

⁴²⁴ Wit, 252.

enemy's coastline, Wit describes the technological breakthroughs in guidance that allowed it to perform a precision attack role:

The TLAM of 1991, after being launched from a surface ship or submerged submarine, initially was directed toward its target by an inertial-guidance system that used the Tomahawk's sensors and gyroscopes to measure acceleration and changes in direction. Once the missile crossed the shoreline, the more precise TERCOM (Terrain Contour Matching) guidance method took control, drawing information from the weapon's computerized contour maps and comparing it with what the missile "saw" as it flew toward its target.

Skimming at altitudes of 100 to 300 feet, the Tomahawk relied on a third guidance system as it neared the target: DSMAC (Digital Scene Matching Area Correlator), which compared the target to a "picture" in its computer memory and made final course changes for a precise hit. Published accounts credit the TLAM with an accuracy of about 12 feet with a range of approximately 1,000 miles.⁴²⁵

Initially Western intelligence analysts believed the Soviet Union did not have the technological prowess (nor the operational necessity) to match the development of a *Tomahawk*-type LACM.⁴²⁶ This assessment changed by the time the Reagan administration had taken office, as the Soviets began openly working on the *SS-NX-21 Sampson*:

In mid-1981, the Soviet Union began testing a new cruise missile with particular emphasis on the sea-launched version, code-named the SS-NX-21. Tests continued over the next year. By mid-1982, to the surprise of many US officials, it became apparent that the new Soviet cruise missile was small enough to be launched from the standard Russian torpedo tube, had a range comparable to US cruise missiles, and incorporated a turbofan engine as well as a guidance system which resembled TERCOM.⁴²⁷

While the Soviets were concurrently working on both land-based and air-launched cruise missiles, the *Sampson's* ability to be launched from any submarine with a torpedo tube (like the TLAM) made it a uniquely concerning threat, as it could be placed close to the coast of the United

⁴²⁵ Polmar and Allen.

⁴²⁶ Wit, 252.

⁴²⁷ Ibid, 253.

States surreptitiously. Also similar to the initial land-attack version of the *Tomahawk* (the *TLAM-N*), the *Sampson* was assessed to be a strategic (nuclear) weapon – while inertial navigation and TERCOM made it more accurate than a ballistic missile, the lack of DSMAC technology would not make it suitable for true precision attacks. However, just as the Soviets were likely nearing this capability, the U.S.S.R. fell.

6.3.1 The Kalibrization of the Russian Federation Navy

During Moscow's dark days of the 1990's following the collapse of the Soviet Union, Russia was willing to sell their most capable weapons systems in an effort to shore up their economy. In some cases, they could not afford to outfit their own military with new systems until they first exported them; such was the case with the *SS-N-27b Sizzler*. The export version of this next-generation anti-ship cruise missile, designated by Russia as the *Klub* (which was the name of the fire control system associated with the missile), was sold to India in 1996, five years before the non-export version became operational in Russia.⁴²⁸ Around the same time, China purchased four *Kilo* diesel-electric submarines; while the first two were the export (877) variant which did not include the *Klub* fire control system (and thus could not fire the *Sizzler*), the final two were 636 variants that were equipped with *Klub*. The *Kilo-Klub* combination would also be sold to Algeria, Indonesia and Vietnam.⁴²⁹

By the early 2000's Russia's economy had recovered to the point where it could begin outfitting its own navy with the non-export (and more capable) *SS-N-27a Sizzler*, utilizing the *Kalibr* fire control system. If the Cold War *Sunburn* was concerning to Western defense officials,

⁴²⁸ Masao Dahlgren, "3M-54 Kalibr/Club (SS-N-27)," *Missile Threat* (Center for Strategic and International Studies, March 31, 2022), <https://missilethreat.csis.org/missile/ss-n-27-sizzler/>.

⁴²⁹ "Russian Submarine Exports - Nti.org," NTI (Monterey Institute of International Studies, 2012), https://www.nti.org/wp-content/uploads/2021/09/russian_submarine_exports.pdf.

the *Sizzler* was downright frightening. As described in an article in *Military Watch Magazine* (referring to the anti-ship variant of the *Kalibr*):

the Kalibr is designed to maximize impact speeds and devastate enemy surface warships with a single strike - differing starkly from Western navies which rely on subsonic platforms...The Kalibr can skim water surfaces at extremely low altitudes, making difficult to detect and near impossible to intercept. Its impact speed can reach Mach 2.9 - enough to tear a medium sized warship in half with the sheer kinetic force imparted by its impact.⁴³⁰

Because of its proliferation to China, in the early 2000's U.S. Defense officials began to take notice of the *Sizzler*, highlighting the U.S. Navy's lack of a response to the threat, even though China operated the export (and thus shorter range) variant of the missile. A 2006 Bloomberg article described another troubling characteristic of the missile: its ability to perform terminal maneuvers that U.S. air defense systems would have difficulty in defeating:

Within 10 nautical miles of its target, a rocket-propelled warhead separates and accelerates to three times the speed of sound, flying no more than 10 meters (33 feet) above sea level...On final approach, the missile "has the potential to perform very high defensive maneuvers," including sharp-angled dodges, the Office of Naval Intelligence said in a manual on worldwide maritime threats.⁴³¹

At the time, the U.S. Navy was concerned with China's acquisition of the export version of *Sizzler*, as well as its potential sale to Iran. Today all new warships in the Russian Federation Navy – surface and subsurface – are equipped with a longer range variant of the *Sizzler* utilizing the *Kalibr* fire control system, and some of their older, larger vessels (such as the *Udaloy*-class

⁴³⁰ "Russian Navy to Keep Kalibr Cruise Missiles on Constant Standby in Syria, Enhanced Nuclear Capabilities," *Military Watch Magazine*, May 18, 2018, <https://militarywatchmagazine.com/article/russian-navy-to-keep-kalibr-cruise-missiles-on-constant-standby-in-syria-enhance-nuclear-capabilities>.

⁴³¹ Tony Capaccio, "Navy Lacks Plan to Defend Against 'Sizzler' Missile," March 23, 2007, <http://web.archive.org/web/20071119102801/http://www.bloomberg.com/apps/news?pid=20601070&sid=a5LkaU0wj714&refer=home>.

guided missile destroyer) have been upgraded to fire the *Kalibr*-family of missiles.⁴³² Thus many of the vessels protecting the *Syrian Express* sealift in the eastern Mediterranean – including the stealthy Kilo-class submarines operating out of the naval base at Tartus – are equipped with a potent anti-ship weapon, one that U.S. and NATO navies are thus far ill-equipped to deal with. This provides Russia with a potentially effective deterrent against its adversaries who otherwise might be inclined to attempt to halt their resupply of Russian and Syrian ground forces in the theater of operations.

In addition to the anti-ship (ASCM) variant of the *Kalibr*, Russian forces are also equipped with (and exhibiting wartime use of) the land-attack (LACM) version, or the *SS-N-30a Sagaris* missile. Although the official NATO designation of the *SS-N-30a* is *Sagaris*, most media reports, especially since the 2022 invasion of Ukraine, refer to the missile simply as the *Kalibr*, though this could refer to either the LACM or the ASCM.⁴³³ As this novel weapon system was actually used in both Syria and Ukraine, it has received a great deal of attention in the Western press, and with good reason: never before had Russia had the capability to project kinetic power from the sea at such long ranges, apart from submarine-launched nuclear ballistic missiles.

⁴³² Blair Shaw, “Russia’s Udaloy Class Destroyer,” Navy General Board, November 30, 2021, <https://www.navygeneralboard.com/russias-udaloy-class-destroyer/>.

⁴³³ Thomas Newdick, “These Are the Standoff Missiles Russia Used to Open Its War against Ukraine,” The Drive, February 24, 2022, <https://www.thedrive.com/the-war-zone/44443/these-are-the-standoff-missiles-russia-used-to-open-its-war-against-ukraine>.

CHAPTER 7

THE SOVIET NAVY AT THE END OF THE COLD WAR

7.1 Soviet Navy Vessels and Weapons Systems Near the End of the Cold War

A wartime strategy of defense was spelled out in the last classified Central Intelligence Agency appraisal of the Soviet Navy prior to the fall of the U.S.S.R., the now-declassified 1983 National Intelligence Estimate (NIE) titled *Soviet Naval Strategy and Programs Through the 1990s*. According to the assessment, the Red Navy's projected primary wartime tasks over the proceeding twenty years would continue to focus on the ability "to deploy and provide protection for ballistic missile submarines in preparation for and conduct of strategic and theater nuclear strikes," and "To defend the U.S.S.R. and its allies from strikes by enemy ballistic missile submarines and aircraft carriers."⁴³⁴

Neither the CIA nor the Soviets predicted the calamitous events that were to befall the USSR over the decade to follow, but there were essential elements that the NIE got correct, even if the timing was off. For example, it predicted the completion of a Soviet sea-based land attack cruise missile (SS-NX-21 *Samson*) as a counterpart to the newly unveiled U.S. Tomahawk Land Attack Missile (TLAM). Like the TLAM to the Soviets, the CIA's primary concern over the *Samson* was its nuclear warhead capability, converting any platform that carried it into a strategic asset. However, the Estimate also discussed the implications of a conventional warhead version, particularly when used as a submarine-launched cruise missile (SLCM):

⁴³⁴ United States, Central Intelligence Agency, *Soviet Naval Strategy and Programs Through the 1990s*, vol. NIE 11-15-82JD, National Intelligence Estimate (Washington, DC: Director of Central Intelligence, 1983), 5, accessed November 19, 2017, https://www.cia.gov/library/readingroom/docs/DOC_0000268225.pdf.

We do not know whether the Soviets are developing a version of the SS-NX-21⁴³⁵ with a nonnuclear warhead...[redacted]...SLCMs armed with nonnuclear warheads would be useful against theater targets (such as US SOSUS⁴³⁶ facilities) and for concentrated attacks on Iceland, the United Kingdom, Spain, the Philippines, Guam, and other important targets that would be difficult to reach and costly to attack with Soviet land-based aircraft.⁴³⁷

Note that even had the Soviets deployed a nonnuclear version of a LACM, the assessed strategy would be to employ them during the conventional portion of a general war with the United States and NATO.

The shift to kinetic power projection in the third world (as eventually demonstrated in Syria) would be alluded to in the 1983 CIA document, just through the utilization of developing carrier air power vice conventional-warhead cruise missiles. Unrelated to the discussion of the development of the SS-NX-21, the Estimate addressed a concept referred to as “distant-area projection.” While the Soviets would, as they had in the past, utilize naval assets as a “show of force” in support of allies in what was referred to at the time as the Third World, the amphibious lift capability of the Soviet Navy was specifically designed to support the maritime flank of any ground operations adjacent to their homeland. However, the report goes on to note that the Soviets:

...could undertake assault operations against limited opposition in many areas of the Third World. The amphibious exercises conducted on Socotra Island⁴³⁸ in May 1980 and in cooperation with the Syrians in July 1981 demonstrate an interest in and a modest capability for distant-area projection.⁴³⁹

⁴³⁵ The “NX” in the nomenclature stands for “Naval, Experimental” and refers to the fact that, at the time of the CIA assessment, the U.S. Intelligence Community had determined that the missile was not yet operational; hence still designated as “experimental.”

⁴³⁶ SOSUS stands for Sound Surveillance System and was the designation of the array of hydrophones operated by the U.S. and NATO during the Cold War to passively detect Soviet submarines.

⁴³⁷ CIA, 40.

⁴³⁸ Socotra is an island off of Yemen in the Indian Ocean.

⁴³⁹ Ibid, 24.

This idea of “distant-area projection” was only possible in a relatively benign environment due to “the lack of adequate tactical air support, either land- or sea-based.”⁴⁴⁰ It is interesting that an amphibious operation in conjunction with the Syrians was considered a “distant area operation” by CIA standards. However, the authors believed that the Russians would build and deploy their first “CTOL,” or “Conventional Takeoff and Landing,”⁴⁴¹ aircraft carrier during the time period, and perhaps several. This proved to be a correct assessment, although the failed economy put a halt to these plans. While the authors of the study felt, like most analysts at the time, that carrier air power would expand Russian ability to control the waters adjacent to the Soviet Union at a greater distance (still a defensive mindset), they went a step further:

The carriers will also give the Soviet Navy for the first time an ability to project power ashore effectively in distant areas in a limited war. Together with other force improvements, they will provide the Soviets the option of using naval force in a number of Third World situations against all but the most well-armed regional powers. We believe that major Soviet Navy task force participation in Third World conflicts would, however, be restricted to limited war situations in which the Soviets judged the risk of escalation to war with the United States or NATO to be small.⁴⁴²

This paragraph is striking in that, even apart from a large carrier fleet, in 2015 this prediction came true with the advent of a Russian precision land attack cruise missile (the *Kalibr*) and a permissive landing environment (i.e., friendly Assad government control of western Syria). Moreover, the judgement as to whether their actions would provoke conflict with the West was the key decision point by Moscow; this very well may still be Moscow’s decision-making process in the 2020’s.

⁴⁴⁰ Ibid.

⁴⁴¹ As opposed to the previously discussed *Kiev* and its “VSTOL” or “Vertical Takeoff and Landing” aircraft.

⁴⁴² CIA, 8.

7.2 U.S. Assessment While the Soviet Union Crumbles

In July 1991, the Chief of Naval Operations published the sixth (and final) edition of the Unclassified document *Understanding Soviet Naval Developments*; however, it wasn't released to the public until February of the following year, as the Soviet Union ceased to exist by January. In a letter of promulgation that accompanied the report, Rear Admiral Brent Baker, then-Chief of Information for the Navy, acknowledges "...most readers will recognize recent events in eastern Europe have made parts of its content obsolete almost overnight."⁴⁴³ It truly is a testament to how quickly the "world was turned upside down" that, even six months before the collapse of her sworn enemy, the United States intelligence community failed to foresee the events that were about to unfold.

Even had the Soviet regime survived, the 1991 *Understanding Soviet Naval Developments* suffered from a lack of imagination. While predicting the dawn of new Soviet CTOL aircraft carriers, the ONI document predicted that their use would be as an extension of the air defense umbrella away from their homeland, providing "further SSBN protection by giving the Soviet Navy additional air cover from hostile ASW [anti-submarine warfare] forces and defense for its own hunter-killer ASW groups."⁴⁴⁴ While near the beginning of the report the authors state that the carriers "also enable the Navy to range beyond its land-based air cover and improve Soviet ability to project power ashore in the Third World,"⁴⁴⁵ this concept is not expanded upon or addressed again throughout the rest of the 191-page document.

⁴⁴³ United States, Chief of Naval Operations, *Understanding Soviet Naval Developments*, 6th ed. (Washington, D.C.: Office of the Chief of Naval Operations, Dept. of the Navy, 1991), accessed October 15, 2017, <http://www.dtic.mil/dtic/tr/fulltext/u2/a248966.pdf>.

⁴⁴⁴ Ibid, 17.

⁴⁴⁵ Ibid.

Written just six months after the proven conventional success of the TLAM in *Operation Desert Storm*, and aware of the importance the Russians were placing on their own submarine-launched cruise missile (SLCM) development, the publication continued to look at the world through the eyes of World War III:

...the USSR is developing new SLCMs with the capability to conduct strategic offensive missions. The SS-N-21 is similar to the strategic version of the US TOMAHAWK. It is capable of being launched from a torpedo tube, has a 1,600 nautical-mile (2,965) range and carries a nuclear warhead...The Soviets have also worked on a larger, supersonic SLCM, the SS-NX-24...Both missiles are assessed to be intended primarily for theater targets on the Eurasian landmass, but they could also play a role in intercontinental strike.⁴⁴⁶

One interesting assessment, however, is provided by the report, regarding the importance the Soviets placed on foreign port facilities. In discussing the presence of the Soviet Mediterranean flotilla, the publication singles out the Syrian and Libyan regimes in particular: “Although the Soviet squadron is primarily supported and supplied at anchorages in international waters, access to Libyan and Syrian port facilities, among others, is important to sustaining Soviet naval operations in the Mediterranean.”⁴⁴⁷ As the 2011 Syrian Civil War threatened their friendly Assad regime in Syria, followed closely by the 2012 overthrow of the friendly Qaddafi regime in Libya, Russian efforts in Syria should not have been surprising to an analyst with an understanding of Russian maritime history.

7.3 Desert Storm and the Development of Russian Doctrine

Following the calamitous events of 1991-92, Russian leadership found itself, much as it did after World War I and World War II, with a challenge but also an opportunity. Their economy

⁴⁴⁶ Ibid, 24.

⁴⁴⁷ Ibid, 37.

was once again in shambles, but on the other hand, they were working with a blank slate. Therefore, Russian writings and debates leading up to and during this period are of particular interest in understanding the development of the Russian Navy that is being unveiled in the 2020's.

The 1993 product by the Center for Naval Analysis (CNA), *The Future Russian Navy: Interests of the Military* accomplished just that, beginning with the 1987 unveiling of Gorbachev's defensive doctrine of "reasonable sufficiency." This doctrine:

envisioned maintaining an equilibrium of conventional military forces at the lowest possible level and reducing military potentials to the limits of 'sufficiency' necessary for defense. The Warsaw Pact proposed reducing troops on the order of half a million men on both sides. It also proposed reducing conventional armed forces and armaments to the level at which neither side could launch a surprise attack or mount 'offensive operations in general.'⁴⁴⁸

As one can imagine, especially in an atmosphere of *glasnost* (openness), this sparked a debate within the defense establishment of Russia, even after the doctrine was formally adopted in 1990. The criticism of the concept, however, fundamentally changed in character following America's successful execution of Desert Storm. Writing in the November/December 1991 edition of *Military Thought*, Colonel I.V. Yerokhin stated bluntly that "the Gulf War should be viewed as the prototype of future wars."⁴⁴⁹ Not everyone agreed, however; writing at about the same time, K. Sorokin argued "against the Soviet conduct of an active naval policy in the American style...(as) such a policy does not favor the particular features of the Soviet geostrategic

⁴⁴⁸ Ibid, 3.

⁴⁴⁹ FitzGerald, 15.

situation,” and because the prospect would “require enormous expenditures that clearly exceed the capabilities of the dissolving Union.”⁴⁵⁰

Still, most believed that Desert Storm ushered in a new era, one that Russia needed to embrace sooner or later. Even prior to the dissolution, the Soviets envisioned this new type of warfare; in the early 1980’s, Marshall Igorkov “began to stress that the emergence of advanced non-nuclear technologies was engendering a new ‘revolution’ in military affairs.”⁴⁵¹ Desert Storm, a clash between the “the past (Iraq) and the future (the U.S.-led coalition)”⁴⁵² was a vindication of these theories, and represented “a new type of military operation: the ‘strike operation.’”⁴⁵³

Of perhaps greater importance is the understanding by the Soviet and Russian doctrinaires that *Desert Storm* not only changed the *method* that wars would be fought, but the *types* of conflicts that could now be waged:

...military experts asserted that the war portends a new type of arms race – a race in capabilities for implementing strategic mobilization and deployment in theaters remote from the homeland. Observers thus stressed the U.S. ability to move a sizeable force and conduct an impressive logistical build-up in a distant region that lacked a well-developed communications infrastructure.⁴⁵⁴

Thus, although part of the challenge the Russians struggled with was the prospect of facing an enemy with the capabilities of the United States, it was also apparent that they envisioned, once their economy recovered, an opportunity to employ such tactics themselves. The future was one of precision weapon enabled power projection (to include expeditionary

⁴⁵⁰ Ibid, 20.

⁴⁵¹ Ibid, 26.

⁴⁵² Ibid, 32.

⁴⁵³ Ibid, 35.

⁴⁵⁴ Ibid, 41.

forces), on distant shores, which meant the Russian Navy (even more than the Army or Air Force) would have to be at the vanguard of military development.

Looking back, the Soviet and Russian thinkers were correct on the nature of warfare – the use of precision guided munitions in Desert Storm was indeed a harbinger of things to come. As alluded to earlier, the United States and Great Britain have fired a total of 2,205 TLAMs as a part of fifteen different operations against ten different countries during five different U.S. presidential administrations.⁴⁵⁵ Probably not lost on the Russians was the fact that those eight countries comprised nations that were either at one time supported by the Soviet Union (Iraq, Sudan, Somalia), former Communist allies (former Yugoslavia and Yemen), provided key bases of support to the Soviet Navy and Air Force (Libya and Syria), or was the location of large scale Soviet combat operations (Afghanistan).

The most recent use of TLAM against Syria by the Trump administration in April 2017, following the apparent use of sarin nerve gas by the Assad regime, caused Norman Friedman to remark that the “strike illustrated the strengths and weaknesses of cruise missiles, which have come to be a weapon of choice for the United States.”⁴⁵⁶ The recent employment of the Russian Navy’s version of TLAM, then, should come as no surprise to those who understand Vladimir Putin’s desire to have Russia become a major player on the world stage – in many ways it has now become Russia’s “weapon of choice.”

⁴⁵⁵ McCarthy.

⁴⁵⁶ Norman Friedman, "Tomahawks Did Their Job," *Proceedings* 143, no. 6 (June 2017), accessed September 03, 2017, <https://www.usni.org/magazines/proceedings/2017-06/world-naval-developments%E2%80%94tomahawks-did-their-job>.

CHAPTER 8

RESEARCH QUESTIONS REVISITED: RUSSIA'S NAVY IN SYRIA

The sudden and complete demise of the Soviet Navy following 1990 brought about a complacency in the West when it came to the study and appreciation of its successor, the Russian Federation Navy. The 2008 conflict with Georgia, though highlighting Putin's willingness to go to war, did little to change the concern in the West over Russian military capabilities, as "the war revealed profound deficiencies in the Russian armed forces."⁴⁵⁷ Actions in Syria, then in Crimea, finally woke the intelligence community up to need to study the Russians again, as evidenced by the 2015 publication of the first publicly available study on the Russian navy since the Soviet era, *The Russian Navy: An Historic Transition*.

Still, this report was much less detailed than its predecessors. The public still does not have access to the in-depth U.S. Intelligence Community analysis of Russian at-sea steaming days, port visits, and naval combatant weapons capabilities that were available during the Cold War's publication of the annual *Understanding Soviet Naval Capabilities* reports. However, by utilizing ONI's *The Russian Navy: An Historic Transition*, combined with data from a wide variety of open-source think tanks, a fairly accurate picture of the Russian Federation Navy in the 2020's can be painted. The force that is revealed is a quickly modernizing, technologically competitive Russian navy with a significant (and growing) amount of real-world combat experience that continues to

⁴⁵⁷ Michael Kofman, "Russian Performance in the Russo-Georgian War Revisited," War on the Rocks, September 3, 2018, <https://warontherocks.com/2018/09/russian-performance-in-the-russo-georgian-war-revisited/>.

conduct operations away from its coastline; a force that has accomplished in Syria what its predecessors failed to achieve in Spain or the Far East.

8.1 Makeup and Capabilities of Today's Russian Federation Navy

Dr. Richard Connolly, director of the Centre for Russian, European and Eurasian Studies (CREES) at the University of Birmingham, generally characterizes the modern Russian surface fleet as such:

On the one hand, the blue water, Soviet legacy fleet constructed largely before the early 1990s is being refurbished and tasked with performing the sort of out of area missions (whether combat operations or flying the flag missions) currently underway in the eastern Mediterranean...This legacy fleet will sit alongside a shorter-range 'mosquito' navy in which smaller and more modern multipurpose ships equipped with long-range missiles perform missions closer to home shores.⁴⁵⁸

If the preceding quote sounds familiar, it is because the term "mosquito fleet" was also used by Robert Herring in 1968 when referring to the makeup of the "Young School" view of the Soviet Navy; the legacy fleet resembles the strengths (blue water) and weaknesses (cost) of the "Old School" force structure. A century after the Bolshevik Revolution, the Russian Federation Navy is still very much grappling with the same debate (including the challenging economic conditions). The main difference is, of course, technology, not only in armament, but in the seaworthiness of modern surface vessels.

The 2015 Office of Naval Intelligence report on the transitioning Russian Navy lists 186 total ships in the Russian Navy's order of battle: 31 major combatants (frigates, destroyers, cruisers and an aircraft carrier), 99 minor combatants (corvettes, patrol craft, and amphibious lift

⁴⁵⁸ Connolly, 10.

vessels), and 56 submarines (ballistic missile-firing, nuclear powered submarines and cruise-missile firing, nuclear- and conventionally powered attack submarines).⁴⁵⁹

8.1.1 Large Major Combatants

As Connolly noted in his article for the NATO Defense College *Toward a Dual Fleet*, the Russian surface fleet can be generally grouped into two categories: major combatants (the carrier, cruisers, and destroyers), and minor combatants (frigates, corvettes, missile boats and amphibious ships).⁴⁶⁰ The major combatants only consist of five separate classes of vessels: a single aircraft carrier (CV), the *Admiral Kuznetsov*-class; one class of nuclear-powered cruiser (CGN), the *Kirov*-class, consisting of two units; one class of conventionally-powered cruisers (CG), the *Slava*-class, consisting of three units; and finally two classes of destroyers (DDG), approximately eight *Udaloy*-class anti-submarine destroyers, and about the same number of *Sovremennyy*-class anti-ship destroyers. Besides the aircraft carrier, all of these classes were initially produced at least 30 years ago; the *Kuznetsov* came online 25 years ago.^{461 462}

The cruisers were designed to kill carriers, with long-range, supersonic anti-ship cruise missiles. Though the Soviet missiles had impressively long ranges, aircraft from the American carriers could reach farther. Therefore, the cruisers also carry state-of-the-art (at the time) surface-to-air missiles, or SAMs. Unless the *Kuznetsov* is fulfilling the role, these cruisers are the

⁴⁵⁹ *The Russian Navy: A Historic Transition* (Washington, DC: Office of Naval Intelligence, 2015), 16.

⁴⁶⁰ Note that for purposes of this study, “frigates” will be counted as “minor combatants” vice “major combatants,” which is the opposite of how the 2015 ONI study groups them. Even based on tonnage, such divisions are increasingly becoming meaningless apart from being able to more easily discuss them. For example, the Steregushchiy-class frigate, which ONI would count as a “major combatant,” displaces 2,200 tons, whereas the Gepard-class “light” frigate (also known as “corvette”), would be labeled a “minor combatant” by ONI, even though it displaces 2,000 tons. From a mission standpoint, since the Gepard is newer, it has the ability to fire all of the most modern KALIBR-class missile systems, and indeed did so in wartime during the 2015 LACM attack on Syria.

⁴⁶¹ R. Sharpe, *Janes Fighting Ships 92-93* (London: Janes Information Group, 1992).

⁴⁶² John Moore, *Janes fighting ships 1985-86* (London: Janes Fighting Ships Publishing, 1985).

flagships of the fleet commander where they are stationed. While they are old and few in number, they have thus far not been relegated to the trash-heap of history; at the time of Russia's invasion of Ukraine, all of the cruisers and the aircraft carrier have deployed in the past five years as part of the newly established eastern Mediterranean squadron. As previously discussed, one of those cruisers – the *Moskva*, flagship of the Black Sea Fleet – was sunk during operations against Ukraine.

There are two classes of cruisers in Russia's inventory – the *Kirov*, a class of two (though one of the two has been undergoing overhaul at any given time since the fall of the Soviet Union), which is the world's only nuclear-powered cruiser (CGN), and the *Slava* CG, now also a class of two (following the sinking of the *Moskva*). Both classes of Russian cruisers were designed in the 1970's and commissioned in the 1980's or 1990's. Built with the most formidable anti-ship and anti-air capabilities of the era, the *Slava*'s were designed to employ the largest anti-ship cruise missile ever built, the *SS-N-12 Sandbox*, a 300 nautical mile, supersonic missile with a 2,000-pound warhead. On the day of Russia's invasion of Ukraine in February 2022, all three of Russia's *Slava* cruisers were in the area of interest – one in the Black Sea, the other two (including the Pacific Fleet's *Varyag* and the Northern Fleet's *Marshall Ustinov*) in the Mediterranean, keeping a watch over a 3-carrier NATO presence in the region. As reported by *Politico* two weeks before the invasion:

Over the past week, the flagships of the Northern and Pacific fleets, missile cruisers Marshal Ustinov and Varyag — sister ships to the Moskva — have arrived in the Mediterranean. There, they will operate close to the U.S. Navy's Harry S.

Truman Carrier Strike Group, which has been exercising with two other carriers, France's Charles de Gaulle and Italy's Cavour.⁴⁶³

For its part, the only active *Kirov*, the *Pyotr Velikiy* ("Peter the Great") last deployed to the Mediterranean in 2016 in conjunction with the Russia's first (and only) wartime employment of an aircraft carrier (the *Kuznetsov*).⁴⁶⁴ In mid-February 2022, the *Pyotr Velikiy* was conducting drills in the Barents Sea, leading some to speculate that it was preparing for deployment to the Mediterranean in the near future. The only other *Kirov*-class vessel that could potentially pose a threat to NATO in the Mediterranean is the 35-year-old *Admiral Nakhimov*, currently undergoing a \$1 billion upgrade in the Northern Fleet. This upgrade, expected to be completed in 2023, will perhaps make it the most lethal warship ever built (and giving the Russian Federation Navy a surface force capable of employing a large number of land attack cruise missiles):

Some of the lighter new cruise missile types the Admiral Nakhimov will deploy include the P-800 Oniks, a ramjet powered platform with a 600km range capable of Mach 3 speeds, and two variants of the 3M-54 Kalibr missile family. For an anti ship role the warship can rely on the 3M54T, which carries a relatively small 200kg warhead but is extremely difficult to intercept due to its maneuvering thrust vectoring booster, its Mach 2.9 speeds and its sea skimming trajectory. The 3M14T missile, with advanced inertial guidance systems, provides an effective land attack capability - which while subsonic carries a hefty 450kg warhead and retains a formidable range of 2500km. Perhaps the P-700's most formidable replacement however will be the 3M22 Zircon, which the Admiral Nakhimov is expected to be the first Russian surface ship to deploy.⁴⁶⁵

⁴⁶³ Paul McLeary, "'Dangerous Moment': Russian Naval Buildup near Ukraine Hits Cold War Levels," POLITICO, February 10, 2022, <https://www.politico.com/news/2022/02/10/russian-naval-buildup-ukraine-cold-war-levels-00007986>.

⁴⁶⁴ Jonathan Marcus, "Russia's Naval Task Force: Power Play or Just Theatre?," BBC News (BBC, October 19, 2016), <https://www.bbc.com/news/world-europe-37704028>.

⁴⁶⁵ "Russian Superheavy Nuclear Battlecruiser Being Fitted with Hypersonic Missiles, S-400s, for Unrivalled Firepower Superiority," Military Watch Magazine, May 2, 2019, <https://militarywatchmagazine.com/article/russian-superheavy-nuclear-battlecruiser-being-fitted-with-hypersonic-missiles-s-400s>.

The two classes of Russian destroyers still in existence were both designed and commissioned in the early 1980's and were eventually intended to be the backbone of the modern Soviet navy. The *Udaloy* was built primarily as an anti-submarine warfare platform, a counterpart to the American *Spruance*-class destroyer (DD). The *Sovremennyy* guided-missile destroyer (DDG), on the other hand, was designed as a ship-killer, reaching initial operational capability along with a new anti-ship cruise missile (ASCM), the SS-N-22 *Sunburn*. The *Sunburn* caused great angst in the West, as it was the world's first truly supersonic, sea skimming ASCM. Prior to the *Sunburn*, Russian missiles were very large (in order to accommodate potential nuclear warheads) and easy to defeat. The *Sunburn* was a change in Russian missile design emphasis to a smaller, faster, more survivable missile, and this caused genuine fear within the naval establishment of NATO nations.

8.1.2 Newer Minor Combatants

The remaining surface vessels of today's Russian Federation Navy are smaller, and with the exception of the amphibious vessels, are quite new (especially by U.S. standards); many have just come online or are going to do so in the near future, and are equipped with the state-of-the-art missiles, electronics, and communications gear. They are also making news, as several have been reported to have fired land-attack cruise missiles from positions in the Caspian Sea and Mediterranean Sea at Islamic State positions in Syria.

Like the major combatants, there are six separate classes of new minor combatants: the *Gorshkov* (4,500-ton displacement), the *Grigorovich* (4,000-ton displacement), the *Stereguchshiy* (2,200-ton displacement)-class frigates (FFGs), the *Stereguchshiy*'s previously mentioned improved class *Gremyashchiy* (equipped with the *Zircon* hypersonic missile), the *Gepard* (2,000

ton)-class corvette (FFL), and the *Buyan-M* (950-ton displacement)-class guided missile patrol boat (PTG).⁴⁶⁶ While these vessels are smaller than their American counterparts, the weapons they field are brand new and more advanced; the U.S. LACM, the Tomahawk, reached operational capability in the 1980's, and the primary anti-ship cruise missile, the Harpoon, was first fielded in the 1970's.

Although the smaller vessels are much more economical to produce than a cruiser or destroyer, the major drawback of these vessels is their lack of "blue water" capability. In reviewing western analysis about Russia's new naval doctrine, this appeared to be a common criticism. Even Connolly's discussion of a "dual fleet" juxtaposed these new units with "the blue water, Soviet legacy fleet...tasked with performing the sort of out of area missions."⁴⁶⁷ There are three reasons why this line of criticism may not hold water.

First is the fact that these ships are being deployed outside of what historically has been considered "home waters" – namely, the Mediterranean Sea. According to *Turkishnavy.net*, a website that tracks foreign warships transiting the Turkish Straits (and thus required by the Montreux Convention to announce ahead of time which vessel is transiting, and in which direction), over the past two years *Admiral Gorshkov*, *Admiral Grigorovich*, and even the small *Buyan-M* class vessels have made the 1,500 nautical mile trek from the Black Sea into the eastern Mediterranean and back.⁴⁶⁸

⁴⁶⁶ Thomassen, Daniel. "Russian Blue-Water Navy is a Pipe Dream." *Proceedings* 142, no. 11 (November 2016): 22-26. Accessed November 26, 2017. <https://www.usni.org/magazines/proceedings/2016-11/russian-blue-water-navy-pipe-dream>, 25.

⁴⁶⁷ Connolly, 10.

⁴⁶⁸ "Foreign Warship on Bosphorus in 2017," Foreign Warship On Bosphorus in 2017 |, December 5, 2017, accessed December 5, 2017, <https://turkishnavy.net/foreign-warship-on-bosphorus/foreign-warship-on-bosphorus-in-2017/>.

Additionally, range and sophistication of the primary weapons employed by these vessels is starting to negate the potential endurance limitations of the vessels themselves. What matters when it comes to Strike Warfare is the ability to accurately place lethal munitions on a desired impact area in a timely manner; it doesn't matter if it's fired from 10 or 500 miles away. Indeed, the first use of the *Kalibr* in October 2015 were fired from an assessed 1,500 kilometers away, from the Caspian Sea, flying a route that passed through Iranian and Iraqi airspace. While most Western analysts believed at the time that this was the maximum range of the missiles,⁴⁶⁹ Russian media has consistently claimed a range of 2,500 kilometers.⁴⁷⁰ From even the shorter range, a small Russian Buyan-M could remain in the Black Sea and attack targets in, for example, Benghazi, Libya, 1,150 miles away.

Finally, there is a danger in underestimating the seaworthiness of modern small warships. An excellent case study is the Chinese Type 054A *Jiangkai II*-class FFG (guided missile frigate). Entering service in 2007, this class of warship is widely acknowledged to be the workhorse of the Chinese Navy⁴⁷¹ and deploys great distances from home on a consistent basis. Besides regular voyages to the Gulf of Aden for counter-piracy operations (5,500 nautical miles), *Jiangkai II*'s have also taken part in a Mediterranean-based operation to assist in the destruction of Syrian chemical weapons⁴⁷² (7,252 nautical miles), conducted a non-combatant evacuation operation off of

⁴⁶⁹ Robin Hughes, Reuben F. Johnson, and Neil Gibson, "Russia reveals 3M-14T cruise missile range," Russia reveals 3M-14T cruise missile range | Jane's 360, October 21, 2015, accessed October 11, 2017, <http://www.janes.com/article/55412/russia-reveals-3m-14t-cruise-missile-range>.

⁴⁷⁰ "4 Russian warships launch 26 missiles against ISIS from Caspian Sea"

⁴⁷¹ Jessie L. Karotkin, "US China Economic and Security Review Commission Testimony - USCC.GOV," TRENDS IN CHINA'S NAVAL MODERNIZATION (U.S. - China Economic and Security Review Commission, January 30, 2014), https://www.uscc.gov/sites/default/files/Karotkin_Testimony1.30.14.pdf.

⁴⁷² "China Defense Blog." Drum roll please.....The China Navy warship assigned to help guard Syria chemical weapons destruction is Type054A FFG 546 "Yancheng". January 01, 2014. Accessed November 12, 2017. <http://china-defense.blogspot.com/2014/01/ddrum-roll-pleasethat-china-navy.html>.

Libya⁴⁷³ (7,641 nautical miles), and even took part in joint naval exercises with the Russian Federation Navy...in the Baltic Sea⁴⁷⁴ (11,791 nautical miles)!

The significant aspect of these examples is that the *Jiangkai II* FFG displaces 4,000 tons, significantly less than the *Gorshkov*, and about the same as the *Grigorovich* yet are regularly conducting missions thousands of miles away from Chinese home waters. They often travel with an oiler; otherwise, they make port visits when necessary. The Chinese are showing the world that the definition of a “blue-water navy” is changing with 21st-century naval engineering. Since they have also been exercising regularly with the Russian Navy, no doubt these lessons have not been lost on Moscow.

In 2019, this theoretical capability of newer classes of Russian frigates to conduct long-distance voyages became a reality, as the Project 22350 *Admiral Gorshkov* FFG conducted a 33,000-mile round-the-world cruise. Departing in February, the guided-missile frigate where Vladimir Putin announced Russia’s 2015 maritime strategy from conducted a historic voyage. Sailing through the Mediterranean, it stopped at China’s naval base in Djibouti, entered the Indian Ocean and pulled into Sri Lanka, transited the Strait of Malacca and participated in the Chinese Navy’s 70th anniversary celebrations.⁴⁷⁵ From there it sailed southeast, conducting anti-

⁴⁷³ "What Does the PLAN's Evacuation of Chinese Nationals From Libya Mean?" Defensetech, June 07, 2016, accessed December 1, 2017, <https://www.defensetech.org/2011/02/27/what-does-the-plans-evacuation-of-chinese-nationals-from-libya-mean/>.

⁴⁷⁴ Sebastian Bruns and Sarah Kirchberger, "The PLA Navy in the Baltic Sea: A View from Kiel," Center for International Maritime Security, August 16, 2017, accessed November 14, 2017, <http://cimsec.org/pla-navy-baltic-sea-view-kiel/33526>.

⁴⁷⁵ Joseph Trevithick, "Russia's Most Modern Warship and Its Escorts Have Entered the Caribbean Sea," The Drive, June 19, 2019, <https://www.thedrive.com/the-war-zone/28591/russias-most-modern-warship-and-its-escorts-have-entered-the-caribbean-sea>.

submarine training in the vicinity of Hawaii.⁴⁷⁶ Following a transit of the Panama Canal, it paid a port visit to Havana, Cuba prior to returning to its base in the Northern Fleet, prompting U.S. military officials to track its progression:

In a statement provided to USNI News on Wednesday morning, NORTHCOM said, “We are aware of the deployment of the Russian ship Gorshkov and are taking steps to actively track it. We won’t discuss all measures being taken, but NORAD is conducting air operations in defense of the U.S. and Canada and USNORTHCOM has deployed maritime assets to track Gorshkov.”⁴⁷⁷

While it may seem odd the North American Aerospace Defense Command would be involved, in 2006 NORAD “added a maritime warning mission, which entails a shared awareness and understanding of the activities conducted in U.S. and Canadian maritime approaches, maritime areas and internal waterways.”⁴⁷⁸ Still, unlike any Russian surface ship *ever* operating off the coast of the United States, the *Gorshkov* – as a result of its SS-N-30a *Kalibr* land attack cruise missiles – presented a clear and present air defense problem to the eastern seaboard. From a seaworthiness standpoint, it is a testament to the modern era of shipbuilding that this threat sailed tens of thousands of miles to get there.

8.1.3 Submarines

Even during Russia’s lowest point, following the collapse of the Soviet Union and while Soviet surface ships rusted away at their piers, the Russians put what meager resources they had into a submarine modernization program, specifically the *Borei*-class nuclear-powered ballistic missile submarine (NATO-designated *Yury Dolgorukiy* SSBN). A mainstay of the “Young School”

⁴⁷⁶ “Admiral Gorshkov Frigate Trains Antisubmarine Warfare in Pacific,” Navy Recognition, May 28, 2019, <https://www.navyrecognition.com/index.php/naval-news/naval-news-archive/2019/may/7145-admiral-gorshkov-frigate-trains-antisubmarine-warfare-in-pacific.html>.

⁴⁷⁷ Ben Werner, “U.S. Warship Shadowing High-End Russian Frigate near Cuba,” USNI News (U.S. Naval Institute, June 26, 2019), <https://news.usni.org/2019/06/25/u-s-warship-shadowing-high-end-russian-frigate-near-cuba>.

⁴⁷⁸ About NORAD, accessed June 3, 2022, <https://www.norad.mil/About-NORAD>.

proponents, the submarine, as an obvious weapon of a weaker navy, has since its invention received the Soviet and now Russian Navy's principal focus. Unlike the surface fleet, the Russian submarine force has been upgraded across the board, with all classes of units now being capable of employing their most modern weapons.

All of Russia's SSBN's (which includes two Cold War-era classes besides the *Dolgorukiy* – the *Delta-III* and *Delta-IV* class) are based in the Northern Fleet and the Pacific Fleet, due to the strategic protection offered by the G-I-UK gap and the Sea of Okhotsk. The same can be said thus far of their nuclear-powered guided missile-carrying submarines, or SSGN's. This mission is filled primarily by another Cold War submarine, the *Oscar II* SSGN, an enormous vessel at 24,000 tons⁴⁷⁹ – by comparison, the largest U.S. submarine, the *Ohio*-class SSBN, displaces about 17,000 tons. The *Oscar-II*'s large size allows it to carry two dozen of the venerable *SS-N-19 Shipwreck* anti-ship cruise missiles, four more than the largest (non-aircraft carrier) surface ship in the Russian navy, the *Kirov* nuclear-powered cruiser (CGN). The *Shipwreck* can travel at two and a half times the speed of sound for 300 nautical miles with the ability to receive targeting data from a number of sources:

The missiles were very advanced for their time, integrating networking and automated cooperative “swarm” tactics. They were launched at a target (or targets) usually based on third party data, such as coordinates derived by a scout ship, a maritime patrol aircraft, or even a submarine. They would fly toward their targets from over 350 miles away on inertial navigation, then as they approached the suspected target area, one missile out of the swarm would “pop up” to higher altitude to use its own active radar and anti-radiation sensors to obtain updated targeting info. It would then classify these targets and assign them to missiles in the swarm below.⁴⁸⁰

⁴⁷⁹ “SSGN Oscar II Class (Project 949.A) (Kursk),” SSGN Oscar II Class (Project 949.A) (Kursk) (Naval Technology, January 29, 2021), <https://www.naval-technology.com/projects/oscar-submarine/>.

⁴⁸⁰ Tyler Rogoway, “Russia's Carrier Was Designed to Be Heavily Armed Even without Its Air Wing,” The Drive, July 2, 2020, <https://www.thedrive.com/the-war-zone/5700/russias-carrier-was-designed-to-be-heavily-armed-even-without-its-air-wing?iid=sr-link10>.

Like much of the former Soviet navy, the *Oscar II*'s were believed to be headed to the scrap heap of Cold War history, especially following the August 12, 2000, disaster onboard the *Kursk*, resulting in the loss of all hands. Instead, the submarine class received new life, both operationally and technologically. In late 2016 – with the *Syrian Express* sealift from the Black Sea well underway – there were unconfirmed reports that NATO naval forces were attempting to track one, and possibly two, of the *Oscar II* SSGN's in the Mediterranean. Reminiscent of the Cold War, while American maritime patrol aircraft were fervently attempting to locate the submarines, two NATO supercarriers were in the vicinity at the time:

According to David Cenciotti—who founded The Aviationist blog—a number of U.S. Navy and NATO maritime patrol aircraft including Boeing P-8 Poseidon are trying to track down the Russian vessels. “What makes the news even more interesting is the fact that the Russian Navy submarine would be an Oscar II Class, that is to say a ‘carrier killer’ sub, designed with the primary mission of countering aircraft carrier battlegroups. Among the NATO vessels in proximity of the Oscar II there is also the French Charles De Gaulle nuclear-powered aircraft carrier and the USS Eisenhower is not too far away either,” Cenciotti writes. “Therefore a massive Cold War-style hide-and-seek is underway, keeping both sides quite busy.”⁴⁸¹

In addition to recent employment of the *Oscar II*, the remaining vessels in the class are reportedly being upgraded to carry the *Kalibr*-class of missiles:

The Pacific Fleet is set to upgrade four Oscar II submarines with 3M-54 Kalibr family of cruise missiles by 2021 as part of a multi-year programme. The submarines can also be fitted with other cruise missiles, including 3M-54 anti-ship, 3M-14 land-attack missiles, and PT91 anti-submarine warfare (ASW) torpedoes.⁴⁸²

⁴⁸¹ Dave Majumdar, “The U.S. Navy Is Trying to Track down ‘Carrier-Killer’ Russian Nuclear Submarines in Mediterranean,” The National Interest (The Center for the National Interest, December 11, 2016), <https://nationalinterest.org/blog/the-buzz/the-us-navy-trying-track-down-%E2%80%98carrier-killer%E2%80%99-russian-18704>.

⁴⁸² “SSGN Oscar II Class (Project 949.A) (*Kursk*),” SSGN Oscar II Class (Project 949.A) (*Kursk*) (Naval Technology, January 29, 2021), <https://www.naval-technology.com/projects/oscar-submarine/>.

With the aforementioned upgrades to the *Kirov CGN*, this will mean the largest classes of surface ships and submarines in the Russian Navy will soon have land attack missiles as well as the potential for hypersonic anti-ship cruise missiles.

Even more troubling for NATO is the development and fielding of the follow-on to the *Oscar*-class, the *Yasen* (NATO designator *Severodvinsk*) SSGN. While there is reportedly only two operational vessels in the *Severodvinsk* class (the second, *Kazan*, having achieved combat readiness in 2021), the improvements in quieting and weaponry appear to be significant, according to a report by the Royal United Services Institute (RUSI): “From a planning standpoint, the most notable feature of the *Kazan* – one which it shares with the *Severodvinsk* – is its capacity to launch a range of anti-ship and land attack missiles, including the hypersonic 3M22 Zircon.”⁴⁸³ Because those land attack missiles could include a nuclear-tipped warhead version of the *Kalibr*,⁴⁸⁴ these boats present a clear and present danger to the United States in times of increased tension with Russia. Furthermore, the Russians appear to be putting a great deal of resources towards building up this fleet, according to a June 2021 Capital Hill hearing with the head of U.S. Northern Command and NORAD, General Glenn VanHerck (referring colloquially to the *Yasen* as the “Sev”:

"Russia just fielded their second Sev class [submarine], which is on par with ours," VanHerck said at one point, as part of a response to a question about threats that fall below the nuclear threshold that potential adversaries pose to the United States. "Within a five-year period, they'll have eight to nine of those submarines, which will be a persistent proximate threat off of our east and west coasts that we haven't had ever in the past."

⁴⁸³ Sidharth Kaushal et al., “The *Yasen-M* and the Future of Russian Submarine Forces,” Royal United Services Institute, May 28, 2021, <https://rusi.org/explore-our-research/publications/rusi-defence-systems/yasen-m-and-future-russian-submarine-forces/>.

⁴⁸⁴ Hans M. Kristensen and Matt Korda, “Nuclear Notebook: Russian Nuclear Forces, 2020,” Bulletin of the Atomic Scientists (Routledge, March 9, 2020), <https://thebulletin.org/premium/2020-03/nuclear-notebook-russian-nuclear-forces-2020/>.

The move of SSGN's from a purely anti-ship role to one of dual use, to include land attack, is only one example of the muddying of mission sets within the Russian submarine fleet. According to *The Military Balance 2021* by the International Institute for Strategic Studies (IISS), there are a handful of nuclear-powered attack submarines, all designed during the Cold War, that are still active: the *Sierra II*-class (2 total hulls), the *Victor-III* class (3 total hulls), and the *Akula-I* and *II* classes (3 and 2 total hulls, respectively).⁴⁸⁵ Though louder than their diesel-electric counterparts, their nuclear propulsion allow these boats to travel farther and at higher speeds. Primarily intended as hunter-killer submarines designed to track and destroy NATO surface vessels and submarines with torpedoes, there was the potential for any of these vessels to be equipped with the *SS-NX-21 Sampson* land attack cruise missile, a non-precision Cold War-era nuclear weapon (which was possibly decommissioned in the late 1980's).⁴⁸⁶ Since the *Sampson* was designed to be launched from torpedo tubes, like the *Kalibr* fired from *Kilo*-class submarines, the decision to arm the older SSN's with modern missiles was made. An *Akula-II*, laid up since 2012 while its reactor was refueled, reportedly received the upgrade to *Kalibr* during the process.⁴⁸⁷

The upgrade, deployment and usage of the diesel-electric *Kilo*-class has been previously discussed. There is a follow-on class to the *Kilo*, named the *Lada* (NATO-designated *St. Petersburg SS*), based on the *Kilo* design but with reportedly "much quieter, powerful propulsion and new

⁴⁸⁵ *The Military Balance 2021* (London, UK: Routledge, 2021).

⁴⁸⁶ Xavier Vavasseur, "Russia's Akula-Class Submarines to Fire Kalibr Cruise Missiles Following Upgrade," *Naval News*, March 30, 2020, <https://www.navalnews.com/naval-news/2020/03/russias-akula-class-submarines-to-fire-kalibr-cruise-missiles-following-upgrade/>.

⁴⁸⁷ *Ibid.*

combat systems,”⁴⁸⁸ including anti-ship and land attack cruise missiles. Thus, all current and future Russian submarines of all types (with the exception of SSBNs) either have or will have the *Kalibr*-family (if the not the *Zircon*) as its primary weapons system. This had been forecast by a senior Russian defense industry official in 2011, as quoted in the 2015 Office of Naval Intelligence unclassified report on the Russian Navy:

KALIBR provides even modest platforms, such as corvettes, with significant offensive capability and, with the use of the land attack missile, all platforms have a significant ability to hold distant fixed ground targets at risk using conventional warheads. The proliferation of this capability within the new Russian Navy is profoundly changing its ability to deter, threaten or destroy adversary targets. It can be logically assumed that KALIBR capability will be retrofitted on those larger Soviet legacy ships and submarines that undergo major overhauls and/or modernization.⁴⁸⁹

8.2 Operations of Today’s Russian Navy, Particularly in the Mediterranean and Black Seas

Many experts, particularly in the West, continue to minimize the threat posed by the revanchist Russian navy to achieve Vego’s idea of “sea control.” Typically, these arguments follow two avenues. The first argument against worrying about the RFN focuses on extreme examples of outdated Russian equipment, such as their aging aircraft carrier *Admiral Kuznetsov*:

But while Russia is maintaining a formidable submarine force, most of Moscow’s surface fleet is composed of aging Soviet-era ships. Those ships are not properly upgraded, maintained or manned and don’t sail very often. Perhaps the best example is Russia’s lone carrier—*Admiral Kuznetsov*—which is prone to breaking down at inopportune times during deployments. It actually sails with an ocean-going tug to haul it back to port—just in case. Russia is building new ships, but the pace of modernization is ponderously slow.⁴⁹⁰

⁴⁸⁸ Liam Stoker, “Project 677 Lada Class / Project 1650 Amur Class Submarines,” *Naval Technology*, September 11, 2020, <https://www.naval-technology.com/projects/project-677-lada-class-project-1650-amur-class-submarines/>.

⁴⁸⁹ *The Russian Navy: A Historic Transition* (Washington, DC: Office of Naval Intelligence, 2015), 34.

⁴⁹⁰ Dave Majumdar, “Not so Scary: This Is Why Russia’s Military Is a Paper Tiger,” *The National Interest* (The Center for the National Interest, October 21, 2015), <https://nationalinterest.org/blog/the-buzz/not-so-scary-why-russias-military-paper-tiger-14136>.

Up to a point these arguments are indeed true – all of Russia’s “large” ships (destroyer and heavier) were designed during the Cold War. Indeed, the *Kuznetsov* has had a string of bad luck, even following their problematic⁴⁹¹ 2016-2017 Mediterranean voyage (when two Russian fighter jets crashed during carrier operations): a massive crane crashed into their deck a year after their return, and a fire struck the vessel the following year.⁴⁹² The *Kuznetsov* aside, however, Russia’s other Cold War-era behemoths by all accounts appear to be holding their own, even in the face of a wartime operational tempo. During Russia’s 2022 invasion of Ukraine, all three of their conventionally-powered cruisers – NATO code-named *Slava*-class, the *Moskva*, the *Marshall Ustinov*, and the *Varyag* – were positioned in the Black Sea and the Mediterranean Sea, ostensibly as operational deterrence against the three NATO aircraft carriers (one US, one French and one Italian) sitting the central Mediterranean.

The *Slava*’s primary weapon system, the SS-N-22 *Sandbox* anti-ship cruise missile (ASCM), designed in 1973, is still faster (Mach 2.5), longer range (550 kilometers), and more destructive (1,000 kilogram high explosive or 350 kiloton nuclear)⁴⁹³ than NATO’s workhorse ASCMs, the U.S.-produced *Harpoon* (Mach 0.85, 240 kilometer range, 224 kilogram warhead)⁴⁹⁴ and the French-made *Exocet* (Mach 0.9, 180 kilometer range, 165 kilogram warhead).⁴⁹⁵ In addition to a

⁴⁹¹ Kyle Mizokami, “Russia’s Sad, Smokey Aircraft Carrier Loses Second Fighter in Two Weeks,” *Popular Mechanics* (Popular Mechanics, February 15, 2018), <https://www.popularmechanics.com/military/navy-ships/a24155/kuznetsov-second-crash-in-three-weeks/>.

⁴⁹² Xavier Vavasseur, “Fire Damage to Russian Aircraft Carrier Admiral Kuznetsov Estimated at 350 Mln Rubles,” *Naval News*, August 24, 2020, <https://www.navalnews.com/naval-news/2020/08/fire-damage-to-russian-aircraft-carrier-admiral-kuznetsov-estimated-at-350-mln-rubles/>.

⁴⁹³ “SS-N-12 Sandbox - Russian / Soviet Nuclear Forces,” SS-N-12 Sandbox (Federation of American Scientists, August 15, 2000), <https://nuke.fas.org/guide/russia/theater/ss-n-12.htm>.

⁴⁹⁴ Shaan Shaikh, Masao Dahlgren and Shaan Shaikh, and Masao Dahlgren, “Harpoon,” *Missile Threat* (Center for Strategic and International Studies, July 31, 2021), <https://missilethreat.csis.org/missile/harpoon/>.

⁴⁹⁵ Masao Dahlgren and Jeremy Chin, “Exocet,” *Missile Threat* (Center for Strategic and International Studies, August 2, 2021), <https://missilethreat.csis.org/missile/exocet/>.

superior anti-ship missile, the *Slava* is equipped with a potent air defense system with the S-300 (NATO-designated SA-N-6 *Grumble*),⁴⁹⁶ a 150-kilometer range surface-to-air missile (SAM) deployed near the end of the Cold War. With these long-range anti-ship and anti-air missiles, the *Slava*-class was designed to hold its own against a NATO strike group in the open ocean; it is interesting that the *Moskva* was sunk reportedly by land-based missiles while operating in the constrained waters of the northern Black Sea.

During a World War III-style all-out war with Russia, as with the Soviet Union, the anti-ship capabilities of the aircraft from the Western carriers would of course outrange even the *Slava*-class's impressive missiles. However, in Mediterranean in 2022, simply the presence of the carrier-killing SS-N-12's may have been enough to act as a deterrent; the Russians achieved sea control through a Corbettian "fleet-in-being," not as strong as the 3 western air wings arrayed against them, but formidable enough to freeze the aircraft carriers in place. Of note, the Cold War relics of the Russian Federation Navy did not act alone in the Mediterranean in 2012 (nor in 2022). They were accompanied by newer, smaller vessels (frigates and patrol craft) armed with formidable weaponry that makes them a credible threat to any challengers, including the United States Navy.

The second point typically attempts to compare absolute U.S. military (or naval) strength against Russian strength, the latter of which comes up wanting. For example, a popular argument

⁴⁹⁶ "Slava Class Guided Missile Cruiser," Naval Technology, June 13, 2010, <https://www.naval-technology.com/projects/slava-class-guided-missile/>.

is that the United States spends more on its defense budget than the next ten⁴⁹⁷ (or nine,⁴⁹⁸ or twelve⁴⁹⁹) countries combined. The naval version of this argument involves “bean counting” – the United States is numerically far superior to the RFN: “Based upon 2021 assessments available by Globalfirepower.com, the United States operates as many as ninety-two destroyers, compared with Russia’s fifteen destroyers. By contrast, Russia operates eighty-five corvettes, and the United States is listed as only having twenty-one. This is a massive difference...”⁵⁰⁰

Again, these arguments are not incorrect; in real terms, the United States military outspends Russia’s military on an order of magnitude, and on paper the U.S. Navy could overmatch the RFN in sheer numbers by 30%. However, when it comes to the specific threat posed by Russia in the Mediterranean, such arguments ring hollow. In terms of purchasing power parity, the United States is hamstrung by exchange rates and a relatively high quality of life. As a 2021 article points out, “Soldiers in the Chinese People’s Liberation Army (PLA), for example, receive far lower salaries than the equivalent US personnel (The Economist 2021). Thus, the PLA’s salary budget, if converted to US dollars at the market exchange rate, would pay for far fewer US army personnel than what it actually pays for in China.”⁵⁰¹

⁴⁹⁷ “The U.S. Spends More on Its Military than the next 10 Countries Combined,” National Priorities Project, April 30, 2020, <https://www.nationalpriorities.org/blog/2020/04/30/us-spends-military-spending-next-10-countries-combined/>.

⁴⁹⁸ Koop, Avery. “U.S. Military Spending vs Other Top Countries.” Visual Capitalist, August 3, 2021. <https://www.visualcapitalist.com/u-s-military-spending-vs-other-top-countries/>.

⁴⁹⁹ Specht, Paul. “Politifact - Bernie Sanders Says US Military Spending Is Bigger than the next 12 Nations Combined.” Bernie Sanders says US military spending is bigger than the next 12 nations combined. www.politifact.com, April 24, 2018. <https://www.politifact.com/factchecks/2018/apr/24/bernie-sanders/sanders-says-us-military-spending-bigger-next-12-n/>.

⁵⁰⁰ Kris Osborn, “Russia’s Master Plan to Confront the U.S. Navy,” The National Interest (The Center for the National Interest, May 28, 2021), <https://nationalinterest.org/blog/buzz/russia%E2%80%99s-master-plan-confront-us-navy-186389>.

⁵⁰¹ Peter Robertson, “Why Military Purchasing Power Parity Matters,” VOX, CEPR Policy Portal, October 9, 2021, <https://voxeu.org/article/why-military-purchasing-power-parity-matters>.

When this is combined with America's global commitments, it becomes apparent that simply comparing "orders of battle" (numbers of operational naval units) provides a poor understanding of the ability of one nation to achieve Vego's concept of "sea control" over another. While by law the United States is required to have more fixed-wing aircraft carriers (eleven) than every other country on earth combined, global commitments and operational realities paint a starkly different picture. The newest U.S. carrier, the USS *Gerald R. Ford*, originally scheduled for a 2018 maiden deployment, may not be ready to deploy until 2024 "due largely to developmental delays in the new technologies that were included aboard the first-in-class nuclear aircraft carrier."⁵⁰² This means that currently the United States only has 10 total aircraft carriers in its operational inventory.

Global security commitments, however, paint an even starker picture for deployed U.S. naval assets:

If you have 10 aircraft carriers, that doesn't mean you have 10 aircraft carriers that are ready for action at all times. Carriers typically abide by the one-third rule that governs most fleets: At any one given time, one-third of ships are on patrol, one third are preparing for or just coming off patrol, and another third are in maintenance at the shipyard.

In emergencies, many (but not all) ships preparing for patrol can be surged early and ships returning can delay their returns. So, at any one given time, four out of 11 carriers might be available for operations, and up to five or six in emergencies.⁵⁰³

Taking the preceding assumptions into consideration, during normal peacetime operations, at any given time the U.S. can count on four aircraft carriers – worldwide – to be

⁵⁰² Sam LaGrone, "Carrier Ford May Not Deploy until 2024, 3rd Weapons Elevator Certified," USNI News, October 23, 2019, <https://news.usni.org/2019/10/22/carrier-ford-may-not-deploy-until-2024-3rd-weapons-elevator-certified>.

⁵⁰³ Kyle Mizokami, "11 Navy Aircraft Carriers Simply Aren't Enough," Popular Mechanics (Popular Mechanics, November 2, 2021), <https://www.popularmechanics.com/military/navy-ships/a35928241/navy-aircraft-carriers/>.

deployed (or ready to deploy). However, unlike Russia, the U.S. has global security commitments and concerns, from the Far North of the Atlantic, to the Black and Mediterranean Sea, to the Persian Gulf, to the South and East China Seas and the Sea of Japan. Conversely, Russian naval forces in the eastern Mediterranean or Black Sea do not need to maintain half their deployable striking fleet to the Pacific to react to a potential invasion of Taiwan,⁵⁰⁴ nor send seventy-five percent of their operational naval striking power to the Sea of Japan due to threatening moves by North Korea,⁵⁰⁵ nor leave one of its valuable flattops in the Persian Gulf over potential threatening moves by Iran.⁵⁰⁶

Therefore, while the U.S. in peacetime might be able to get 4 or 5 carriers underway at any given time, it would be unrealistic to expect them all to be in the eastern Mediterranean simultaneously – especially since the Russian Pacific Fleet (or their friends in the Chinese Navy) could be expected to tie the U.S. Seventh Fleet to the Indo-Pacific theater. While during heightened tensions a limited number of allies (such as the French, Italians or British) might be able to tip the balance of naval air forces in favor of NATO, allied aircraft carriers do not have the airwing capacity that the U.S. Navy boasts. France and Italy both augmented the sole U.S. aircraft carrier in the Mediterranean with carriers of their own during the 2022 invasion of the Ukraine,⁵⁰⁷

⁵⁰⁴ Dzirhan Mahadzir, “2 U.S. Aircraft Carriers Now in South China Sea as Chinese Air Force Flies 39 Aircraft near Taiwan,” USNI News, January 24, 2022, <https://news.usni.org/2022/01/24/2-u-s-aircraft-carriers-now-in-south-china-sea-as-chinese-air-force-flies-39-aircraft-near-taiwan>.

⁵⁰⁵ Brad Lendon, “North Korea: 3 US Aircraft Carriers Creating 'Worst Ever' Situation | CNN Politics,” CNN (Cable News Network, November 20, 2017), <https://www.cnn.com/2017/11/12/politics/us-navy-three-carrier-exercise-pacific/index.html>.

⁵⁰⁶ Rfe/rl, “U.S. Aircraft Carrier to Remain in Gulf Due to 'Threats' by Iran, Pentagon Says,” RadioFreeEurope/RadioLiberty (U.S. Aircraft Carrier To Remain In Gulf Due To 'Threats' By Iran, Pentagon Says, January 4, 2021), <https://www.rferl.org/a/u-s--aircraft-carrier-nimitz-persian-gulf-iran/31032316.html>.

⁵⁰⁷ Sam LaGrone, “Updated: Russian Navy Cruisers Positioned to Counter U.S., French and Italian Carrier Groups in the Mediterranean,” USNI News, February 24, 2022, <https://news.usni.org/2022/02/22/russian-navy-cruisers-positioned-to-counter-u-s-french-and-italian-carrier-groups-in-the-mediterranean>.

however both ships combined were able to launch fewer aircraft than the American aircraft carrier (USS Harry S. Truman) that was on station at the time.

With this as a backdrop, Vego's focus on Sea Control as local and temporary is of particular significance:

In its simplest definition, sea control can be described as one's ability to use a given part of the ocean/sea and associated air (space) for military and nonmilitary purposes and to deny the same to the enemy in a time of open hostilities...Sea control...does not mean that all hostile ships, submarines, or aircraft are unable to operate. It means only that the enemy does not have significant capabilities to seriously interfere with one's use of the sea for military and nonmilitary purposes.⁵⁰⁸

In other words, the total military expenditures or respective naval orders of battle of the respective Russian and U.S. fleets are not what is important. What matters, according to Vego, is the number of operational forces that the U.S. and Russia can muster in the eastern Mediterranean, during a specified timeframe (and their capabilities, but that will be covered later). Utilizing both legacy, Cold War-era anti-surface and anti-submarine weapons as well as modern anti-ship supersonic cruise missiles, Russia achieved (and continues to exercise) local sea control in the Black and Mediterranean Seas, at least to a level where military leaders are able to assume an acceptable level of risk while conducting power projection operations against Syria and Ukraine.

8.3 Stated Russian Maritime Doctrine

Now that a baseline has been formed regarding the state of the Imperial Russian and Soviet navies, constrained by geography, political considerations, and threat, the modern "case study" of Russian Federation Navy operations in support of the Syrian Civil War can be analyzed

⁵⁰⁸ Vego, 24.

in context. In Syria, Russia has employed two tools of modern naval power projection that had been heretofore reserved for Western militaries: aircraft carriers and land-attack cruise missiles, both supporting sealift operations utilizing (to a large extent) naval amphibious ships. However, capabilities alone cannot explain modern Russian naval operations; President Putin's stated (and demonstrated) military strategy must also be examined. When taken in a historic context, it will become apparent that while the success of these operations is unique for Russia, they represent a logical evolutionary step for the employment of the Navy, one that they have aspired to for centuries (and particularly near the end of the Cold War) but are just now realizing.

On July 26, 2015, during Russian Navy Day celebrations, President Putin stepped onto what was then the most modern warship in Russia's inventory, the appropriately named guided-missile frigate *Admiral Gorshkov*, and with his defense minister at his side, personally unveiled the newest Navy strategy, "Maritime Doctrine of the Russian Federation 2015." Replacing a 2001 document of the same name, this doctrine included several significant changes from its predecessor. While the 2001 version truly was a "maritime" strategy, emphasizing non-military actions involving trade, science and the environment, nearly half of the 2015 document was focused on naval affairs.

Of course, the actual words of new doctrine matter, but sometimes the manner in which the doctrine is delivered can say nearly as much. In this case, the delivery spoke volumes. There was no public unveiling in 2001; by contrast President Putin was flanked by the head of Russia's Navy as well as his defense minister – Russia's equivalent of the Secretary of Defense. The vessel chosen for the announcement had sailed from the Northern Fleet to the Baltic Sea for Russia's Navy Day celebration. The *Admiral Gorshkov*, named after perhaps the most famous admiral in

the history of Russia, would itself make history over the next few years, as its operations became a microcosm of both Russian naval capability and strategy.

In 2018 the *Gorshkov* became the first Northern Fleet-based vessel to be armed with the *Kalibr* cruise missile, conducting a live fire of (most likely) the land attack variant against a training range near the Barents Sea.⁵⁰⁹ The following year it would complete a circumnavigation of the globe, the first time since Admiral Stepan Makarov – probably Russia’s second most famous admiral in history – completed the only other such feat in the 1880’s⁵¹⁰ (Admiral Makarov, at the time the Czarist Navy’s best officer, was killed in the early stages of the Russo-Japanese war when his flagship hit a mine. The new *Grigorovich*-class frigate *Admiral Makarov* recently became the flagship of the Black Sea Fleet following the sinking of that fleet’s flagship, the *Slava*-class cruiser *Moskva*.⁵¹¹) The fact that the *Gorshkov* had a demonstrated land-attack cruise missile capability as it passed from the Caribbean Sea up the eastern seaboard of the U.S. no doubt caused consternation among American defense officials. A year later the *Gorshkov* FFG would once again make history, becoming the first Russian surface warship to live-fire hypersonic cruise missiles, specifically the *Zircon* (a follow on to the *Kalibr*.)⁵¹² Putin would personally mention the Mach-9,

⁵⁰⁹ Vadim Savitsky, “Russian Cutting-Edge Frigate Live-Fires Cruise Missiles in Barents Sea Drills,” Tass.com (Russian Defense Ministry Press Office, December 6, 2018), <https://tass.com/defense/1034730>.

⁵¹⁰ Alexander Shishkin, “ВМФ Повторил Историческое Достижение Царского Флота (The Navy Repeated the Historic Achievement of the Tsarist Navy),” ВЗГЛЯД.РУ (VZGLYAD.RU), August 19, 2019, <https://vz.ru/society/2019/8/19/991302.html>.

⁵¹¹ “Admiral Makarov to Assume the New Flagship of Russian Black Sea Fleet,” Naval News, May 19, 2022, <https://www.navalnews.com/naval-news/2022/05/admiral-makarov-to-assume-the-new-flagship-of-russian-black-sea-fleet/>.

⁵¹² Peter Kovalev, “Russia Test-Launches Tsirkon Hypersonic Missile from Ship for First Time,” Tass.com, February 27, 2020, <https://tass.com/defense/1124339>.

1000-kilometer capable *Zircon* during his 2019 and 2021 state-of-the-nation addresses.^{513 514} In the 2019 speech, Putin revealed that the *Zircon* will have both an anti-ship and land attack variant, a fact not readily known at the time. Furthermore, he stated that any ship or submarine capable of firing the *Kalibr* (which is increasingly becoming the majority of their combatant fleet) will also be capable of firing the *Zircon*.⁵¹⁵

After the unveiling of the 2015 Maritime Doctrine, many Western analysts focused on the stated Russian requirement for a “significant presence” in the Arctic, with a Unified Strategic Command North “charged with restricting foreign naval activities in the Arctic.”⁵¹⁶ While this development is worthy of consideration, the more immediate threat to U.S. operating forces was the announcement of “The creation of a permanent Mediterranean flotilla...predicated exclusively on the NATO threat.”⁵¹⁷

Instead of focusing on the permanent forward deployment of naval forces to a warzone, or perhaps the fact that more than a quarter century after the supposed end of the Cold War the strongman leader of Russia referred to NATO as a “threat,” many western analysts chose to belittle the effort. Headlines like “Russia’s New and Unrealistic Naval Doctrine”⁵¹⁸ and “Russian Blue-Water Navy is a Pipe Dream”⁵¹⁹ highlighted problems in Russia’s shipbuilding industry and

⁵¹³ Vladimir Putin, “Presidential Address to Federal Assembly,” President of Russia, February 20, 2019, <http://en.kremlin.ru/events/president/news/59863>.

⁵¹⁴ Vladimir Putin, “Presidential Address to the Federal Assembly,” President of Russia, April 21, 2021, <http://en.kremlin.ru/events/president/news/65418>.

⁵¹⁵ Putin, 2019.

⁵¹⁶ Thomas R. Fedyszyn, “Putin’s ‘Potemkin-Plus’ Navy,” *Proceedings* 142, no. 5 (May 2016), accessed October 12, 2017, <https://www.usni.org/magazines/proceedings/2016-05/putins-potemkin-plus-navy>.

⁵¹⁷ Ibid.

⁵¹⁸ Dmitry Gorenburg, “Russia’s New and Unrealistic Naval Doctrine,” *War on the Rocks*, July 25, 2017, accessed November 10, 2017, <https://warontherocks.com/2017/07/russias-new-and-unrealistic-naval-doctrine/>.

⁵¹⁹ Thomassen.

the effect of sanctions, relegating the strategy to the category of “unfulfilled aspirational documents.”⁵²⁰

Not all writers offered such a bleak appraisal (from Russia’s perspective) of the new doctrine. Writing for the NATO Defense College two years after its release, Dr. Richard Connelly acknowledged the difficulties in procurement and shipbuilding, but believes these realities would not negate the strategy. While many naysayers point to the global nature of the doctrine, Connelly highlights that “there is a clear sense of priority contained throughout the doctrine.”⁵²¹ For instance, he points out that only the eastern Mediterranean is mentioned in the doctrine as a region outside of Russia requiring a permanent military presence.⁵²²

While the Russians are acutely aware of their handicaps, having these priorities allow the Russian Federation Navy to focus on what is most important, namely being able “to perform its core missions closer to home.”⁵²³ These will be accomplished with an already impressive fleet of modern conventional submarines and a growing number of smaller, LACM-laden vessels (frigates, corvettes, and patrol craft). Meanwhile, older, larger, “blue-water” vessels will be refurbished, upgraded and utilized vice added to. This leads Connolly to his theory that Russia is developing a “dual naval structure.”

While Connelly reaches sound conclusions that short-term history has to a large extent confirmed, he also ascertains that the smaller vessels – which he even refers to as a “mosquito fleet” – will be used in the historical short-range, self-defense role. If this were the case and given

⁵²⁰ Gorenburg, *Unrealistic*.

⁵²¹ Richard Connelly, "Towards a Dual Fleet? The Maritime Doctrine of the Russian Federation and the Modernisation of Russian Naval Capabilities," *Russian Studies*, 17th ser., no. 2 (June 2017): 6, accessed October 3, 2017.

⁵²² *Ibid*, 4.

⁵²³ *Ibid*, 11.

the limited number of legacy blue-water (destroyer and larger) platforms available, Russia's doctrine would indeed by necessity be more of self-defensive in nature. However, the RFN's support to ground forces in Syria reflects that this paradigm no longer holds, as much smaller vessels (including submarines) have conducted both escort and power projection missions, roles that typically have been filled by larger ships (destroyer-sized and above).

In May of 2020, the Center for Strategic and International Studies (CSIS) published "Moscow's War in Syria," a comprehensive retrospective of the Russian campaign to save the Assad regime. The only appendix to the document is titled "Russian Force Composition in Syria," and includes a table of Russian naval vessels supporting the effort.⁵²⁴ This list was supplemented for this dissertation by an analysis of the open-source information available on Russian warship transits of the Turkish Straits from the website "turkishnavy.net," a more detailed but less accurate compilation of Bosphorus Strait transits from 2013 – 2022.⁵²⁵

As can be expected, by the far the most active RFN vessels were amphibious ships providing the sealift to the ongoing ground and air operations in Syria. Two classes of "LST" (or "Landing Ship – Tank") were utilized, the larger *Alligator*-class and the ubiquitous *Ropucha*-class. Between 2013 and 2022, these vessels provided the sealift of Syria at a breakneck pace, conducting over 650 transits of the Turkish Straits during that period. While the majority of the effort came from ships stationed in the Black Sea, Russia tapped into amphibious vessels from all four of their primary fleets, including the Pacific Fleet, 11,000 nautical miles away. This pace meant that typically four LST's were underway or in port Tartus, Syria, at any given time – two

⁵²⁴ Seth G. Jones, ed., "Moscow's War in Syria," Moscow's War in Syria | Center for Strategic and International Studies (CSIS Transnational Threats Project, May 2020), <https://www.csis.org/analysis/moscows-war-syria>.

⁵²⁵ "Foreign Warships on Bosphorus in 2016," Foreign Warships On Bosphorus in 2016 |, February 22, 2021, <https://turkishnavy.net/foreign-warship-on-bosphorus/foreign-warship-on-bosphorus-in-2016/>.

inbound, two outbound. This continued right up until Turkey closed the Straits to foreign warships upon Russia's invasion of Ukraine in February 2022.

TABLE 3: RUSSIAN AMPHIBIOUS SHIP TRANSITS OF TURKISH STRAITS, 2013-2022

<u>Ship</u>	<u>Class</u>	<u>Type</u>	<u>Comm</u>	<u>Displ</u>	<u>Armament</u>	<u>Transits</u>	<u>Fleet</u>	<u>Notes</u>
<u>Amphib Lift</u>								
Filchenkov	Alligator	LPD	1975	4,700 T	Guns	62	Black	
Saratov	"	LPD	1966	"	"	58	Black	Sunk
Orsk	"	LPD	1968	"	"	40	Black	
Azov	Ropucha	LPD	1990	4,000 T	Guns	82	Black	
Tsezar Kunikov	"	LPD	1986	"	"	82	Black	
Yamal	"	LPD	1988	"	"	65	Black	Damaged
Otrakovsky	"	LPD	1978	"	"	44	Northern	
Novocharkassk	"	LPD	1987	"	"	43	Black	
Minsk	"	LPD	1983	"	"	42	Baltic	
Shabalin	"	LPD	1985	"	"	35	Baltic	
Pobedonsek	"	LPD	1985	"	"	33	Northern	
Korolev	"	LPD	1991	"	"	32	Baltic	
Kaliningrad	"	LPD	1984	"	"	26	Baltic	
Gorniak	"	LPD	1976	"	"	5	Northern	
Peresvet	"	LPD	1991	"	"	3	Pacific	
Nevelskoy	"	LPD	1982	"	"	2	Pacific	
Kondopoga	"	LPD	1976	"	"	2	Northern	
Total Amphibs	17					656		

Source: Turkishnavy.net, various internet sources

The use of naval amphibious vessels (vice commercial transport) to ship troops and weapons systems began after the 2012 *M/V Alaed* incident, when British insurers disallowed Russian merchant shipping from taking part in the sealift effort. Due to Russian concerns over potential further NATO interference in the operation, the amphibys were augmented with escorts providing sea lines of communication (SLOC) control from the Aegean to Tartus and back. As can

be seen by the following charts, large legacy combatants, smaller modern combatants, and new submarines all took part in this effort to ensure sea control in the eastern Mediterranean.

As previously stated, Russian Cold War-era large naval vessels are becoming fewer and fewer. Still, the remaining ships – including their only aircraft carrier and all four of their cruisers (at the time), from all four of their fleets – participated in the Syrian escort mission. A couple of these – in particular the deployment of *Kuznetsov* CV and Kirov-class CGN *Petr Velikiy* to the Mediterranean in 2016 – were highly publicized and served as strategic messaging in addition to presence and power projection into Syria (in the case of the *Kuznetsov*). The majority of the escort mission fell to the two large combatants still assigned to the Black Sea Fleet, the *Slava*-class cruiser *Moskva* (sunk in 2022 during the war with Ukraine), and the Cold War-era *Kashin*-class DDG *Smetliviy*, which was decommissioned in 2020. These ships accounted for perhaps a dozen escort deployments to the Mediterranean, pulling in and out of various ports (primarily Tartus and Cyprus) for refueling. The *Smetliviy* deployed annually from 2013-2019 for between 3-5 months at a time prior to being decommissioned in 2020. As the flagship for the Black Sea Fleet, the *Moskva* spent fewer days deployed south of the Straits. In some instances, the two ships provided “heel-to-toe” escort duties in the Mediterranean. For example, the *Moskva* transited south through the Bosphorus on September 7, 2014, on its way to a four-month mission to Syria; five days later, the *Smetliviy* sailed north through the Straits, following its own four-month deployment to the eastern Mediterranean.

TABLE 4: RUSSIAN MAJOR COMBATANT TRANSITS OF TURKISH STRAITS, 2013-2022

<u>Ship</u>	<u>Class</u>	<u>Type</u>	<u>Comm</u>	<u>Displ</u>	<u>Armament</u>	<u>Transits</u>	<u>Fleet</u>	<u>Notes</u>
<u>Large Combat</u>								
Kuznetsov	Kuznetsov	CV	1990	59,000 T	Airwing	0	Northern	1 Med Dep
Pyotr Velikiy	Kirov	CGN	1998	26,000 T	SS-N-19	0	Northern	
Moskva	Slava	CG	1986	11,000 T	SS-N-12	11	Black	Sunk
Ustinov	"	CG	1983	"	SS-N-12	2	Northern	In Med '22
Varyag	"	CG	1989	"	SS-N-12	0	Pacific	In Med '22
Smetliviy	Kashin	DDG	1969	3720 T	SS-N-25	14	Black	Decom '20
Kulikov	Udaloy	DDG	1982	7570 T	Kalibr(?)	4	Northern	In Med '22
Severomorsk	"	DDG	1987	"	SS-N-14	2	Northern	
Levechenko	"	DDG	1988	"	Kalibr(?)	1	Northern	
Pantalev	"	DDG	1991	"	SS-N-14	1	Pacific	
Tot. Lg Combat	10					35		

Source: Turkishnavy.net, various internet sources

Surprisingly, when in 2016 the Russian Federation Navy began employing newer, much smaller frigates for a similar escorting role, the deployment patterns did not significantly change. Following some initial multi-week deployments to the eastern Mediterranean, these smaller vessels eventually began spending close to 5 months away from the Black Sea. Though their size meant they would need to pull into port more often to refuel and replenish supplies, the tradeoff was that they are cheaper to build and maintain and have more modern and lethal weapons systems than the legacy platforms. Though limited by the number of missiles each platform could carry (typically the Vertical Launch System on these ships has room for eight), the anti-ship versions would be extremely difficult to defeat and posed a significant threat to NATO vessels operating nearby.

The ability to employ a land attack option from these same missiles puts the critical infrastructure of southern Europe at risk from these ships as well – a capability Russia's legacy

platforms do not enjoy. The potential tactical nuclear warhead capability of *Kalibr* adds a further, strategic element to the problem. Finally, as stated by President Putin in his state of the union address, any platform capable of firing the *Kalibr* will also be capable of employing the hypersonic *Zircon* missile, an even more challenging threat to NATO.

TABLE 5: RUSSIAN MINOR COMBATANT TRANSITS OF TURKISH STRAITS, 2013-2022

<u>Small Combat</u>								
Grigorovich	Grigorovich	FFG	2016	4350 T	Kalibr	21	Black	
Essen	"	FFG	2016	"	Kalibr	16	Black	
Makarov	"	FFG	2017	"	Kalibr	10	Black	Damaged(?)
Pytivyy	Krivak	FFG	1981	3,300 T	SS-N-14	17	Black	
Ladnyy	"	FFG	1980	3,200 T	SS-N-14	6	Black	
Bykov	Bykov	FFLG	2018	1,500 T	Kalibr	10	Black	
Rogachev	"	FFLG	2018	"	Kalibr	6	Black	
Orekhovo-Zuevc	Buyan-M	FFLG	2018	950 T	Kalibr	6	Black	In Med '22
Volochek	"	FFLG	2018	"	Kalibr	6	Black	
Zeleyy Dol	"	FFLG	2015	"	Kalibr	5	Baltic	
Serpukhov	"	FFLG	2015	"	Kalibr	5	Baltic	
Veliki Ustyug	"	FFLG	2014	"	Kalibr	4	Caspian	
Ingushetia	"	FFLG	2019	"	Kalibr	4	Black	
Grad Sviyazhsk	"	FFLG	2014	"	Kalibr	2	Caspian	
Uglich	"	FFLG	2014	"	Kalibr	0	Caspian	
Burya	Karakurt	FFLG	2019	860 T	Kalibr	2	Baltic	
Mirazh	Nanuchka	PGG	1986	560 T	SS-N-9/25	4	Black	Decom '20
Ivanovets	Tarantul	PGG	1989	540 T	SS-N-22	2	Black	
Samum	Pergach	PGGA	2000	1,050 T	SS-N-22	4	Black	
Tot Sm. Comb	19					130		

Source: Turkishnavy.net, various internet sources

A third type of combatant that Moscow assigned this mission is the attack submarine, namely the six improved-*Kilo* 636.3 subs recently commissioned and assigned to the Black Sea Fleet. These vessels enjoy the same *Kalibr* capabilities as the frigates described above.

Furthermore, as submarines they are by nature more survivable than surface warships. Due to provisions in the Montreux Convention, Russia is restricted in how it employs submarines transiting out of the Black Sea. Furthermore, a submarine is not a suitable platform for presence or escort duties, as their greatest strength is in being invisible.

TABLE 6: RUSSIAN SUBMARINE TRANSITS OF TURKISH STRAITS, 2013-2022

<u>Submarines</u>							
Rostav-na-Donu	Kilo 636.3	SS	2014	3,100 T	Kalibr	3	Black
Staryy Oskol	Kilo 636.3	SS	2015	"	Kalibr	3	Black
Novorossiysk	Kilo 636.3	SS	2014	"	Kalibr	2	Black
Krasnodar	Kilo 636.3	SS	2015	"	Kalibr	2	Black
Novgorod	Kilo 636.3	SS	2016	"	Kalibr	1	Black
Kolpino	Kilo 636.3	SS	2016	"	Kalibr	1	Black
Total Subs						12	

Source: Turkishnavy.net

This wartime employment of Russian naval forces demonstrates the evolving doctrine of using what had been considered “self-defense” platforms – small ships and submarines – in a historically “great power navy” role – power projection and sea control. Russia has achieved their balanced fleet, though this balance is not in the numbers or types of ships it has built, but in the capabilities that all of their newer ships (and submarines) employ.

8.4 How the Modern Russian Navy Fits into Overall Military Doctrine and Usage

Two years after Putin unveiled the 2015 Russian Maritime Doctrine from aboard the *Admiral Gorshkov*, the Russian president signed a decree approving a more military-focused publication titled *Fundamentals of the State Policy of the Russian Federation in the Field of Naval*

Operations for the period until 2030, directing his government to implement the doctrine. The very first provision in the document states:

These Fundamentals determine the goals, objectives, priority areas, and mechanisms for implementation of the State Policy of the Russian Federation in the Field of Naval Operations for the period until 2030, as well as the role and place of the Navy, and capabilities and means of the Federal Security Services in the military component of the maritime potential of the Russian Federation.⁵²⁶

The question of the Russian Federation Navy's role within the context of the Russian military as a whole is key. While history has shown that, as the quintessential land power, Russian and Soviet navies have played only a supporting or defensive role, success in Syria coupled with increased technological capabilities is changing that calculus. While the *Fundamentals* are couched in defensive terms (i.e., using the Navy as a strategic deterrent), many of the Navy's capabilities, as displayed in Syria, are offensive in nature. In a section discussing Russia's response to the U.S. "Global Strike" concept, the *Fundamentals* states that the RFN is "one of the most effective instruments of strategic (nuclear and non-nuclear) deterrence" in part because it has:

...the ability to implement its combat potential in virtually any area of the World Ocean; ability to deploy naval expeditionary groups in a short period of time into the areas of conflict and remain in these areas for an extended period of time without violating the sovereignty of other states; as well as a high level of readiness for actions including strikes on critically important targets...With the development of high-precision weapons, the Navy faces a qualitatively new objective: destruction of enemy's military and economic potential by striking its vital facilities from the sea.⁵²⁷

One cannot help but note the phrase "from the sea." Nearly 30 years earlier the U.S. Navy's post-Cold War and post-Desert Storm doctrine was entitled just that: "From the Sea." The difference,

⁵²⁶ Anna Davis, tran., "The Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period until 2030," U.S. Naval War College Digital Commons (U.S. Naval War College, 2017), https://digital-commons.usnwc.edu/rmsi_research/2/, 2.

⁵²⁷ Ibid, 11-12.

as discussed earlier, is that U.S. doctrinaires had no peer competitor to challenge them for control of the sea; the Russian's are under no such misconception. While the land-attack variant of the *Kalibr* is simply gaining parity with the *TLAM*, the anti-ship variant is superior to the ASCM currently fielded by the United States, the 1970's-era *Harpoon*.

In between the publication of the official 2015 Maritime Doctrine and the 2017 Naval Fundamentals, an influential article was published in *Voennaia Mysl'*, or *Military Thought*, titled "The Naval Might of Russia in Today's Geopolitical Situation." *Military Thought*, an organ of the Russian Ministry of Defence, has been around under different names since the mid-1800's, and is still considered to be authoritative today, even within the United States Intelligence Community (the most recent unclassified Defense Intelligence Agency report "Russian Military Power" includes 41 references to the journal). Authored by three retired senior Russian naval officers, the 2016 article addresses the increased importance the navy finds itself in the hierarchy of the Russian military:

While active in the high seas, the Russian Federation should bear in mind that since the end of the 20th century and for a long time to come **the role of struggle in the ocean and sea sectors has been growing considerably within the overall efforts of the armed forces**, and in certain conditions these sectors may well become the principal ones [emphasis in the original].⁵²⁸

The authors acknowledge that, although they believe Russia is currently a "great maritime power,"⁵²⁹ history and geography have placed the position of the navy vis-à-vis the overall Russian military in doubt:

Given the geopolitical position of Russia, the issue of the role and place of the Navy within the Armed Forces has always been a subject for discussion. Debates still

⁵²⁸ O. V. Alyoshin, A. N. Popov, and V. V. Puchnin, "The Naval Might of Russia in Today's Geopolitical Situation," east view press (*Military Thought*, 2016), <https://www.eastviewpress.com/the-naval-might-of-russia-in-todays-geopolitical-situation/>, 16.

⁵²⁹ *Ibid*, 15.

*rage on. The reason is the continental mindset of some military figures and statesmen in this country, and also the fact that the Russian Navy has always suffered from considerable geographical inconvenience and the need to keep four fleets in various strategic sectors plus a flotilla in the Caspian Sea, which resulted in the fragmentation of its forces and considerable expense.*⁵³⁰

However, the authors make the case that modern technology has decided this debate in the navy's favor, specifically because of the development of "sea-based long range high-precision weapons (LRHPW)"⁵³¹ – namely supersonic *Kalibr*, and eventually *Zircon* land attack cruise missiles. Indeed, the article highlights Russian *Kalibr* strikes into Syria as an example of this "quantitatively different task, i.e., **crush the military economic potential of the adversary by directly impacting their vital centers from the sea...**" [emphasis in the original].⁵³²

Here, a year before the 2017 *Fundamentals* was published, the term "from the sea" is introduced into Russian strategic thinking. Unlike the 1992 U.S. doctrine that focused purely on power projection, however, the authors acknowledge the sea control aspect of any future naval conflict with the U.S. (without mentioning them by name). While simply the presence of sea based LRHPW would perform a deterrence mission in peacetime, these weapons would,

In wartime, destroy critically important ground-based facilities of the adversary and marine carriers that are the global strike assets before these can move to the line of weapon employment, and also marine components of the U.S. national AMD [antimissile defense] system in the shortest possible times [emphasis in the original].⁵³³

The distinction between the threatened employment of LRHPW in peacetime and the use of them in wartime is significant, since the article also highlights the requirement for preemptive strikes on the adversary once the decision to employ force is made. In a speech in 2019, Chief of

⁵³⁰ Ibid, 19.

⁵³¹ Ibid, 17.

⁵³² Ibid.

⁵³³ Ibid.

the General Staff of the Russian military, General Valery Gerasimov, unveiled what he himself referred to as a “strategy of limited actions.” In the speech, Gerasimov also highlighted the requirement for the “preemptive neutralization of threats.”⁵³⁴ A career army officer, he includes the *Zircon* among the weapons being developed in conjunction with this strategy. The implications are significant and frightening: even in a limited conflict, Russian strategy is to preemptively employ precision weapons “from the sea” against U.S. and NATO land-based and afloat naval forces. Had the U.S. administration not emphatically stressed that U.S. forces would not become involved in fighting on the eve of Russia’s invasion of Ukraine, the potential could have existed that this strategy may have been put to the test.

⁵³⁴ Roger McDermott, “Gerasimov Unveils Russia's 'Strategy of Limited Actions',” Jamestown (The Jamestown Foundation, March 6, 2019), <https://jamestown.org/program/gerasimov-unveils-russias-strategy-of-limited-actions/>.

CHAPTER 9

CONCLUSIONS AND AREAS FOR FURTHER STUDY

Due to its unique geographic limitations, expeditionary Russian ground forces failed in their two attempts in modern history to gain and hold territory in regions that did not border the Russian mainland. In the Russo-Japanese War, the Imperial Russian Navy failed in its attempt to rescue the ground forces at Port Arthur; in the Spanish Civil War, the lack of a blue-water Soviet Navy led to their ground forces' inability to stay in the fight in support of the Republicans. Russian naval operations in Syria have revealed an implementation of a strategy of employing naval assets (to include amphibious, naval strike and sea control) in wartime in a region outside of Russia's periphery; this time they appear to have been successful. As alluded to in the previous section, "debates still rage on" within the Russian defense apparatus as to what role the current and future navy will play. Vladimir Putin's personal involvement in the articulation of naval doctrine may indicate where he falls in this debate. The success of naval operations off the coast of (and into the heartland of) Syria may very well have swayed the discussion in the RFN's favor. However, more recent failures by the Russian military in general, and the Navy in particular, may have provided a counterpoint to those arguing against a major change in the relationship the navy has within the military establishment.

9.1 Importance of RFN involvement in the 2022 Russo-Ukrainian War

9.1.1 Russian Federation Navy and the Russo-Ukrainian War

The failures of the Russian military in the 2022 war in Ukraine have been well-documented (and, thanks to a robust Ukrainian Information Operations campaign, well-

publicized). One of the earliest storylines that grabbed the attention of the world – and helped sway public opinion quickly to Ukraine’s cause – was video of isolated Ukrainian soldiers on Snake Island, a craggy outpost 300 kilometers west of the Crimean Peninsula. These men were seen bravely defying a Russian warship in the distance that at the time was broadcasting demands for their surrender over a loudspeaker. The next day, Ukrainian President Zelensky personally awarded them the title of “Hero of Ukraine,” stating that “all the border guards died heroically.”⁵³⁵ As would later be revealed, the border guards did not die, and instead were captured by Russia, released in a prisoner exchange a month later.⁵³⁶

While this example may seem anecdotal, it was part of a well-orchestrated, effective and absolutely necessary Information Operations campaign by Ukraine and its allies, from the Heroes of Snake Island to the Ghost of Kyiv.⁵³⁷ While the Russian Federation Navy effectively removed a minimal Ukrainian presence from a small island in the Black Sea, Ukraine had turned that success into a social media event that went viral and bolstered support for the underdog in the crucial early hours of the campaign, turning a tactical victory into a strategic loss. Fighting Ukraine would not be the cakewalk that Russia experienced against ISIS in Syria.

The ship threatening the border guards off the coast of Snake Island was quickly identified as the *Kirov*-class guided-missile cruiser *Moskva* (Moscow), the flagship of the Russian Black Sea Fleet at the time. Built near the end of the Cold War to sink U.S. aircraft carriers, it carried the largest and fastest anti-ship cruise missiles ever built, the SS-N-12 *Sandbox*. With a range of over

⁵³⁵ “Snake Island: Ukraine Says Soldiers Killed after Refusing to Surrender,” BBC News (BBC, February 25, 2022), <https://www.bbc.com/news/world-europe-60522454>.

⁵³⁶ Bill Chappell, “Snake Island Sailors Are Freed as Ukraine and Russia Conduct a Prisoner Exchange,” NPR (NPR, March 24, 2022), <https://www.npr.org/2022/03/24/1088593653/snake-island-sailors-freed-prisoner-swap>.

⁵³⁷ Jackie Salo, “Heroic ‘Ghost of Kyiv’ Fighter Doesn’t Actually Exist, Ukraine Admits,” New York Post (New York Post, May 2, 2022), <https://nypost.com/2022/05/01/heroic-ghost-of-kyiv-fighter-doesnt-actually-exist-ukraine-admits/>.

300 nautical miles, and a 2,000-pound warhead, it travels two and a half times the speed of sound prior to impacting its target. On April 14th, 2022, the *Moskva* sank 65 miles off the coast of Odessa, Ukraine, after being reportedly struck by a pair of *Neptune* land-based cruise missiles with much smaller warheads of 330 pounds.⁵³⁸ While the psychological impact of the sinking was immeasurable, this attack also had significant operational implications – the *S-300* missiles carried by the *Moskva* were the longest range and most capable surface-to-air missile of any vessel in the Russian Black Sea Fleet, and its loss seriously diminished the RFN's ability to provide air defense of its remaining vessels in the Black Sea.

The sinking of the *Moskva*, while the most publicized, was not the RFN's only loss at the hands of the Ukrainians. The prior month the *Alligator*-class amphibious ship *Saratov*, one of Russia's largest, was sunk in port in the Sea of Azov; at least one, and perhaps two, nearby RFN amphibious ships were damaged during the attack.⁵³⁹ Additionally, a handful of other smaller Russian vessels have either been destroyed or damaged in a variety of other attacks.⁵⁴⁰

For their part, Russia has decimated the Ukrainian navy, already on its heels following Russian attacks during their 2014 invasion of Ukraine.⁵⁴¹ Following the highly publicized transit of Russian amphibious units north through the Turkish Straits on the eve of the invasion, the vessels eventually took part in landing operations near Mariupol in the Sea of Azov prior to the

⁵³⁸ "Russia's Moskva Cruiser Sinks Following Ukrainian Claim of Missile Strike," The Guardian (Guardian News and Media, April 15, 2022), <https://www.theguardian.com/world/2022/apr/14/russia-moskva-cruiser-sunk-stormy-seas-defense-ministry>.

⁵³⁹ H I Sutton, "Satellite Images Confirm Russian Navy Landing Ship Was Sunk at Berdyansk," USNI News (U.S. Naval Institute, March 25, 2022), <https://news.usni.org/2022/03/25/satellite-images-confirm-russian-navy-landing-ship-was-sunk-at-berdyansk>.

⁵⁴⁰ Stijn Mitzer, "List of Naval Losses during the 2022 Russian Invasion of Ukraine," Oryx, July 14, 2022, <https://www.oryxspioenkop.com/2022/03/list-of-naval-losses-during-2022.html>.

⁵⁴¹ Ibid.

months-long siege of that city.⁵⁴² While another, much larger (and riskier) amphibious assault appeared to be in the works for Odessa (Ukraine's largest port city and third largest city overall), even apparently telegraphed by the President of Belorussia,⁵⁴³ thus far such an assault has not taken place.

9.1.2 The RFN's Experience in the Russo-Ukrainian War

While Russia's naval experience in the Syrian Civil War is typically viewed as a success, their operations in Ukraine are a mixed bag at best. As with the Russo-Japanese War and the Spanish Civil War, there are similarities and differences between the two Russian naval actions in Syria and in Ukraine. The most important similarity is that the two operations are being conducted concurrently, with the same equipment, sailors, and officers. Furthermore, both are supporting Russian ground forces that are doing the majority of the heavy lifting on the land.

It is notable that the Russia has thus far not attempted an opposed amphibious landing in the Black Sea; even the Sea of Azov operations were apparently unopposed, landing at Berdyansk (west of Mariupol) after that city had already been taken by Russian ground forces.⁵⁴⁴ This is a reminder that the Syrian Express, though exclusively utilizing amphibious warships for most of the operation, was not an opposed amphibious action, but a massive sealift using military vessels. As outlined by retired Marine colonel Phillip Wasielewski in an informative article in *U.S.*

⁵⁴² Heather Mongillio and Sam LaGrone, "Updated: Russian Navy Launches Amphibious Assault on Ukraine; Naval Infantry 30 Miles West of Mariupol," USNI News (U.S. Naval Institute Press, February 27, 2022), <https://news.usni.org/2022/02/25/russian-navy-launches-amphibious-assault-on-ukraine>.

⁵⁴³ H I Sutton, "Evidence of Russia's Planned Amphibious Landings in Ukraine," H I Sutton - Covert Shores, March 1, 2022, <http://www.hisutton.com/Russias-Planned-Amphibious-Landings-in-Ukraine.html>.

⁵⁴⁴ Tayfun Ozberk, "Russia's Amphibious Operation Dilemma," Naval News, March 20, 2022, <https://www.navalnews.com/naval-news/2022/03/russias-amphibious-operation-dilemma/>.

Naval Institute Proceedings, Ukraine would pose extreme challenges for any state attempting an amphibious invasion, not the least of which are geographic:

Ukraine's coast is characterized by high ground and cliffs to the shoreline with limited beach exits and has few suitable beaches for a mechanized amphibious assault force. Coastal areas not bounded by cliffs are urbanized. These towns, if properly defended, would be difficult to fight through for a landing force going immediately from a beach assault to urban combat in a matter of meters.⁵⁴⁵

Furthermore, RFN losses at the hands of Ukraine highlight the fact that in Syria they were at war with a foe that had no naval capabilities to speak of. In Ukraine they face a modern threat with weapons, training and support by the United States, among others. The U.S. may have provided key intelligence to Ukrainian forces during the sinking of the *Moskva*, with one of America's newest aircraft, the P-8 *Poseidon*, providing locational data of the Russian cruiser prior to the attack.⁵⁴⁶

There are other lessons to be learned by the naval war in Ukraine. A formidable amphibious capability can still make a difference in providing rapid resupply and reserve forces during the crucial phase of a battle on land, even if the landing itself is not opposed. The amphibious operation in Berdyansk brought pressure to bear against Ukrainian defenders of Mariupol; that city, and the entire coast, fell under Russian occupation.⁵⁴⁷ Additionally, the amphibious force located off of Odessa since the beginning of the war may have been used as an "amphibious demonstration" all along, designed to keep a significant number of Ukraine's limited

⁵⁴⁵ Philip G. Wasielewski, "Russia-Ukraine: Putin's Amphibious Options Are Limited," *Proceedings* (U.S. Naval Institute, January 17, 2022), <https://www.usni.org/magazines/proceedings/2022/january/russia-ukraine-putins-amphibious-options-are-limited>.

⁵⁴⁶ Dan Sabbagh, "US Shared Location of Cruiser Moskva with Ukraine Prior to Sinking," *The Guardian* (Guardian News and Media, May 6, 2022), <https://www.theguardian.com/world/2022/may/05/us-intelligence-russia-moskva-ukraine>.

⁵⁴⁷ "Ukraine War in Maps: Tracking the Russian Invasion," *BBC News* (BBC, August 8, 2022), <https://www.bbc.com/news/world-europe-60506682>.

ground forces tied down on the coast while Russia focused on the east.⁵⁴⁸ Indeed, this is exactly the role that American amphibious forces were used for during Desert Storm, diverting Saddam Hussein's ground forces attention away from the coming "left hook" across the Saudi border.⁵⁴⁹ Writing for West Point's *Modern War Institute*, Walker Mills and Timothy Heck conclude that Russia's amphibious effort thus far in Ukraine "continues to validate the importance of amphibious capability, while simultaneously providing examples of the risk inherent to amphibious operations and adding a degree of granularity regarding the full range of effects amphibious capabilities can be used to produce."⁵⁵⁰

The sinking of the *Moskva* and *Saratov*, while an operational blow to the RFN and a propaganda bonanza for Ukraine, may have a silver lining from Russia's perspective. The vessels were two of the largest (and therefore oldest) ships in the Russian inventory. The *Saratov*, displacing close to 5,000 tons fully loaded, entered service in 1966, and at the time of her sinking was the oldest Russian amphibious ship in the navy. The *Moskva*, more than twice the size of the *Saratov*, entered the Soviet Navy in 1982, making it the third largest and third oldest of Russia's major combatants.

Some naval analysts, taking a "long view" of the implications of the Russo-Ukrainian naval war, have in particular sounded the alarm about the sinking of the *Moskva*, though the concern is not for Russia, but the United States. Retired U.S. Navy commander Alan Zimm notes the

⁵⁴⁸ Walker Mills and Timothy Heck, "What Can We Learn about Amphibious Warfare from a Conflict That Has Had Very Little of It? A Lot," *Modern War Institute*, April 22, 2022, <https://mwi.usma.edu/what-can-we-learn-about-amphibious-warfare-from-a-conflict-that-has-had-very-little-of-it-a-lot/>.

⁵⁴⁹ Michael Russ, "Marine Amphibious Force Operations in the Persian Gulf War," *U.S. Naval Institute Proceedings* (Naval Institute Press, February 21, 2019), <https://www.usni.org/magazines/proceedings/1997/july/marine-amphibious-force-operations-persian-gulf-war>.

⁵⁵⁰ Mills and Heck.

significance of a pair of small missiles like the *Neptune's* ability to sink such a large ship as the *Moskva*. This is evidence, according to Zimm, that modern anti-ship weapons have become significantly more deadly to large warships than previously assumed, in part due to improved sensors "along with the artificial intelligence that guides them."⁵⁵¹ Elliot Ackerman was even more poignant in his reading of the event in his article for *The Atlantic* titled "A Whole Age of Warfare Sank With the Moskva." Comparing the sinking with the U.S. Civil War's Battle of the Ironclads and Japan's attack on Pearl Harbor, Ackerman points out that much of the battlefield success of Ukraine (and failure of Russia) could spell bad news for the United States: "The successes against a platform-centric Russian Goliath by an anti-platform-centric Ukrainian David have elicited cheers in the West, but what we are witnessing in Ukraine may well be a prelude to the besting of our own American Goliath."⁵⁵²

If the maritime campaign in Ukraine is (among other things) a demonstration of the capability of modern anti-ship weapons against large, legacy naval platforms, then perhaps the United States should be worried. As previously noted, Russia has not built an aircraft carrier, cruiser, destroyer or large amphibious ship since the end of the Cold War. The only combatants they have built are modern, stealthy frigates and patrol craft equipped with state-of-the-art supersonic anti-ship cruise missiles. By contrast the United States, with the exception of a handful

⁵⁵¹ Alan D. Zimm, "Antiship Missile Lessons from Sinking of the Moskva," U.S. Naval Institute, May 22, 2022, https://www.usni.org/magazines/proceedings/2022/may/antiship-missile-lessons-sinking-moskva?check_logged_in=1.

⁵⁵² Elliot Ackerman, "A Whole Age of Warfare Sank with the Moskva," *The Atlantic* (Atlantic Media Company, May 22, 2022), <https://www.theatlantic.com/ideas/archive/2022/05/ukraine-russia-moskva-military-marine-corps/629930/>.

of non-missile equipped coastal patrol craft and the failed Littoral Combat Ship program,⁵⁵³ have built *exclusively* aircraft carriers, cruisers, destroyers, and large amphibious ships, the majority of which are equipped with a subsonic anti-ship missile designed in the 1970's. Against the Russia's flagship *Moskva*, the Ukrainian military was able to target and sink an 11,500-ton vessel with subsonic cruise missiles; it would cost Russia an estimated \$750 million to replace it.⁵⁵⁴ The largest American combatant, the *USS Ford*, is nearly ten times as large as the *Moskva* at 100,000 tons, would be facing Russian supersonic cruise missiles, and would cost \$13 *billion* to replace.⁵⁵⁵

Finally, perhaps the greatest success by the Russian Federation Navy in the war in Ukraine may have taken place not in the Black Sea or Sea of Azov, but in the Mediterranean Sea. Russian missile combatants were tasked with escorting the Syrian Express following the saga of the *M/V Alaed* not due to concern over the Islamic State on the open ocean, but because of the perceived threat by the U.S. or NATO in interfering with their sealift in support of Russian ground forces in Syria. In the Mediterranean, RFN forces were performing a deterrence mission by escorting their amphibious ships with missile shooters, a mission that only succeeds if one can display a credible threat (both in intent and in capability). In this, Russia was able to achieve their goals in Syria without interference from the West.

Similarly, during the run-up to the February 2022 invasion of Ukraine, a large Russian naval presence was not only in the Black Sea, where they could participate in the war directly,

⁵⁵³ Geoff Ziezulewicz, "The Littoral Combat Ship's Latest Problem: Class-Wide Structural Defects Leading to Hull Cracks," Navy Times (Navy Times, May 10, 2022), <https://www.navytimes.com/news/your-navy/2022/05/10/the-littoral-combat-ships-latest-problem-class-wide-structural-defects-leading-to-hull-cracks/>.

⁵⁵⁴ Denis Krasnikov and Kostyantyn Gnennyi, "Вартість Підбитого Крейсера 'Москва' – \$750 Млн. Forbes Склav Рейтинг Найдорожчої Російської Техніки, Знищеної На Війні," Forbes.ua, April 14, 2022, <https://forbes.ua/inside/vartist-zatoplenogo-kreysera-moskva-750-mln-forbes-sklav-reyting-naydorozhchoi-vorozhoi-tehniki-znishchenoi-na-viyni-14042022-5442>.

⁵⁵⁵ Ackerman.

but also in the Mediterranean, ostensibly to deter the U.S. and other NATO allies from entering the war on the Ukrainian side. These forces included the remaining two *Slava*-class cruisers (the same class as the ill-fated *Moskva*), plus a number of *Kalibr*-equipped frigates, patrol craft, and submarines.⁵⁵⁶ As with the Syrian Express, these vessels were there to deter Western forces from becoming involved in a Russian military operation. Just prior to the invasion NATO was conducting a large exercise (“Neptune Strike”) involving three aircraft carriers (American, French and Italian).⁵⁵⁷ If the Neptune exercise was meant as a message to Moscow warning against committing aggression against Ukraine, the sizeable Russian naval presence which faced them was a counter-warning against interfering should Russia invade. Taken in this light, tensions in the Mediterranean – not the Black Sea – between the two nuclear superpowers were as high as they had been since perhaps the 1973 Arab-Israeli War. Thus, while tactical actions in the Black Sea have been a mixed bag for the Russians, the deterrence mission against the U.S. and NATO could be considered a success in retrospect; the war has thus far been exclusively a Russian and Ukrainian affair.

9.1.3 Implications of the Russo-Ukrainian War on the RFN’s Mediterranean Operations

Taking the above into consideration, the impact of Russia’s 2022 invasion of Ukraine are having and will continue to have severe and long-lasting impacts on all aspects of Russia’s military, including the Navy. Conversely, Russia’s foray into Syria may have played a role in their significant struggles in what most analysts felt should have been a swift defeat of Ukrainian

⁵⁵⁶ LTZ Van Lokeren, “Russian Forces in the Mediterranean - WK12/2022,” Russian forces in the Mediterranean - Wk12/2022 (Blogger, March 26, 2022), <https://russianfleetanalysis.blogspot.com/2022/03/russian-forces-in-mediterranean-wk122022.html>.

⁵⁵⁷ Thomas Newdick, “Three NATO Carrier Groups Are Exercising Together in the Mediterranean,” The Drive, February 7, 2022, <https://www.thedrive.com/the-war-zone/44184/three-nato-carrier-groups-are-exercising-together-in-the-mediterranean>.

forces and a seizure of Kyiv. First and foremost, Moscow had poured a decade of treasure and blood into the Syrian Civil War by the time ground forces began rolling across the Ukrainian border on February 24th. The money, time and expertise that had been devoted to building a Russian navy with expeditionary capability (including the aforementioned cruise missile development) was therefore not available to similarly revolutionize their ground forces. Indeed, one platform that might have played a key role in the Ukrainian invasion was the T-14 *Armata*, a next-generation tank described in 2016 as a “major source of concern for Western armies.”⁵⁵⁸ Originally slated for a production of 2,300 units, budget shortfalls (likely exacerbated by the Syrian operation) began forcing Moscow to look at cheaper alternatives by late 2018.⁵⁵⁹ Russian state media announced on Christmas Eve 2021 – less than two months before the invasion of Ukraine – that mass production of the T-14 had begun, with the first tanks arriving in the army’s inventory “after 2023.”⁵⁶⁰

As previously discussed, the cost of a modern Russian surface vessel (such as the *Gorshkov*) is approximately \$250 million. A single T-14 tank, on the other hand, is estimated to cost just under \$4 million.⁵⁶¹ Thus, the opportunity cost of building even its modest fleet of 20 modern frigates and corvettes was the ability to purchase 1,200 T-14’s. Though speculative, had Russia devoted the resources spent on their new frigates and patrol craft instead on their next-

⁵⁵⁸ Dave Majumdar, “Surprise: Russia's Lethal T-14 Armata Tank Is in Production,” *The National Interest* (The Center for the National Interest, March 14, 2016), <https://nationalinterest.org/blog/the-buzz/surprise-russias-lethal-t-14-armata-tank-production-15480>.

⁵⁵⁹ Franz-Stefan Gady, “Russia Will Not Mass-Produce T-14 Armata Main Battle Tank,” *Russia Will Not Mass-Produce T-14 Armata Main Battle Tank* (The Diplomat, February 14, 2019), <https://thediplomat.com/2018/08/russia-will-not-mass-produce-t-14-armata-main-battle-tank/>.

⁵⁶⁰ “Roster Announced the Launch of Mass Production of the Armata Tank,” *Interfax.ru*, December 24, 2021, <https://www.interfax.ru/russia/812466>.

⁵⁶¹ Brad Howard, “Russia's Futuristic T-14 Tank Was Designed to Defeat Western Armies, but They're Too Expensive for Russia,” *Business Insider* (Business Insider, July 31, 2018), <https://www.businessinsider.com/russias-t-14-tank-made-to-beat-the-west-is-too-expensive-for-russia-2018-7>.

generation tank, they may have enjoyed a greater degree of battlefield success in Ukraine (at the potential cost of their last remaining foothold in the Middle East, of course). Still, it is hard to imagine, looking at the disastrous and ongoing effects of failing in Ukraine, that Putin would not have done things differently had he known the outcome.

Less obvious (but perhaps more insidious) may have been the effect that Russian military success in Syria – in the air, on land as well as at sea – had on Moscow’s decision to invade Ukraine so brazenly. Following successes in Iraq and Bosnia in the 1990’s, many political and military leaders in the United States believed success in Afghanistan and Iraq following 9/11 was a given. Coupled with the rapid invasion and annexation of the Crimean Peninsula in March 2014, Putin may have experienced his own “imperial hubris,” and assumed that the battlefield success which had come so easily in the 2010’s would repeat itself in 2022.

It is apparent that the gains realized as a result of the RFN’s successful operations in the Mediterranean are at risk when placed in context of Russia’s failures in Ukraine. The debilitating economic effects of long-term sanctions on the Russian economy could last generations. Combined with the significant cost of the war in Ukraine itself, future plans to continue the Russian navy’s modernization will no doubt be in jeopardy. Harder to quantify but equally as troubling to Moscow may be the loss of its “soft power” in the eyes of potential future allies, as Putin has quickly become an international pariah to a degree normally reserved for the likes of a Saddam Hussein or Kim Jong Un.

At the operational level, Russian military personnel – both leaders and the rank and file – could now be questioning any parity with a technologically savvy enemy they may have perceived following their operations in Syria. While strategic hubris is a bad thing, confidence on the

battlefield is not, and a lack of faith in their equipment, tactics and leadership will no doubt sap morale within the Russian military. Though it is too soon to tell, the net result of all of Putin's 21st century military adventurism could very well be a receding of the RFN as a global (or even regional) force, when prior to 2022 it appeared the trend was the opposite.

9.2 Implications for US foreign policy

The U.S. Navy of the 21st Century has suffered from two decades of complacency like that which faced the allied powers following the end of the first World War. The failed Littoral Combat Ship program, the decision not to develop an anti-ship cruise missile comparable to those fielded by Russia and China, and deadly high-profile collisions by principal U.S. Navy ships in the Pacific, all point to a potential crisis in American abilities to counter future Russian expeditionary operations of the type revealed in the Syrian Civil War. A burgeoning Russia-China military relationship adds a unique layer to this conundrum, as does the increasing emphasis by Russia of the introduction of nuclear weapons into conflict short of all-out nuclear war. While the February 2022 invasion of Ukraine finally put to rest any question of Russian belligerence towards the existing norms and rules of international order, thus far the intelligence community has misjudged and understated the threat posed by Russia, and its navy in particular.

9.2.1 US Intelligence Community Analysis

The 2015 publication by the Office of Naval Intelligence, *The Russian Navy: A Historic Transition*, appears to have missed the points highlighted in the 1993 document by the Center for Naval Analyses regarding Russian lessons learned following Operation Desert Storm. In the Executive Summary, the ONI report states "The new technologically advanced Russian Navy, increasingly armed with the KALIBR family of weapons, will be able to more capably defend the

maritime approaches to the Russian Federation and exert significant influence in adjacent seas.”⁵⁶² The concept of defense and “adjacent seas” could have been written in 1975, and the summary confirms this by going on to note, “On the basis of currently available data it is projected that the Russian Navy will retain its core missions.”⁵⁶³ These missions include “... forward-layered defense of Russia and its maritime exclusive economic zone and will be able to promote Russian diplomatic interests, advance maritime science, combat piracy, and provide humanitarian assistance.”⁵⁶⁴

This assessment almost sounds as if it was written by the Public Affairs Officer of the Russian Federation Navy, especially in light of the fact that, at the time of publication, the RFN had already fired dozens of LACMs from a non-adjacent sea into a country not bordered by Russia. The report continues, spelling out the Russian Navy’s peacetime missions as being deterrence (by ballistic-missile submarines, or SSBNs), defense of national interests (including in distant waters), and the demonstration of support to foreign policy through selected deployment of forces. In “increased tensions and wartime,” the navy’s mission is to protect their strategic assets (SSBNs) and defend against an “aero-space attack against Russia from the maritime directions.”⁵⁶⁵

Neither the resupply of Syria nor the attacks from the sea would fall into any of the preceding missions. Furthermore, while the ONI report mentions Russian aircraft carriers (past, present and future) nearly two dozen times, the focus is on capability, not utilization. The only discussion of a mission is focused on an extension of layered defense of the Russian homeland,

⁵⁶² ONI, *Historic Transition*, iii.

⁵⁶³ *Ibid*, iv.

⁵⁶⁴ *Ibid*, iii.

⁵⁶⁵ *Ibid*, ix.

the same mission envisioned by Soviet planners of the 1950s. In reality, less than a year after the report was published, the *Kuznetsov's* air wing would be conducting strikes into Syria.

While the report does mention the SS-N-30 *Kalibr* land attack cruise missile (LACM) from a capability's standpoint, it does not mention the impact this will have on missions, operations, or even deployments. Near the beginning of the document, in describing Russia's "layered defense" strategy against the U.S., a graphic is displayed depicting range rings of 1,000 nautical miles, the perceived threat to Russia by American Tomahawk LACMs. Near the end of the report, while describing the threat from KALIBR to America (really, her allies), ONI again uses a 1,000 nautical mile distance to describe "nominal KALIBR LACM ranges from fleet areas"⁵⁶⁶:

The two graphics had the same locations of the 1,000nm range rings; only the labels were different. The implication is that the Russians view the threat from the Tomahawk and the potential launch baskets for their own cruise missile as the same. It would not take long for this assessment to be proven wrong. The same month that the report was published, the Russian *Kilo-class* submarine *Rostov-on-the-Don* fired a volley of *Kalibr* LACMs from the eastern Mediterranean, a location *not* depicted by the Office of Naval Intelligence because it is not considered a "fleet area." This assessment represents an underappreciation of one of the greatest, if not the most significant, threats to US interests in the Mediterranean: the sea-based land attack cruise missile.

In 2017, the Defense Intelligence Agency published a report on Russian military power, an unclassified explanation of the U.S. Intelligence Community's view on the subject, with Russia's then-ongoing operations in Syria and the Crimean Peninsula as a backdrop. The 116-page

⁵⁶⁶ Ibid, 35.

document dedicates little more than a page to a section titled “Precision Strike,” the majority of which discusses a brief history of Soviet theory on the use of precision weapons. The last paragraph admits that in the years leading up to the publication of the analysis, Russia had been making its first strides towards realizing a precision strike capability and were testing these weapons in various exercises as well as in combat operations in Syria.⁵⁶⁷ The publication does acknowledge that Russia has acquired a new expeditionary capability:

Along with more conventional power projection missions, Russia has displayed a new capability to field an expeditionary force capable of intervening in a foreign conflict. In Syria, Russia used a mix of maritime and air assets to forward deploy its forces, and Russia will almost certainly be able to logistically support its current level of operations in Syria via a mix of those means for the foreseeable future.⁵⁶⁸

This “new capability,” though revolutionary in nature, is not expounded upon. Indeed, in the appendix dedicated to the sea service, the Defense Intelligence Agency states:

The Navy’s missions remain focused on strategic deterrence and homeland defense. Periodic distant deployments support the Russian Federation’s global foreign policy interests.

This assessment seems disconnected from the “new” expeditionary missions already employed in the Mediterranean and described earlier in the publication, as well as the technological advances and doctrinal Russian positions regarding precision strike that had been well-documented prior to and following operations in Syria and Crimea. For that matter, the navy’s involvement in the 2022 war in Ukraine (to include LACM strikes and amphibious operations) would not fall under the banner of strategic deterrence, homeland defense, nor periodic distant deployments (though one could make the argument that the deployment to the

⁵⁶⁷ “Russia Military Power - Building a Military to Support Great Power Aspirations,” DIA (Defense Intelligence Agency, 2017), https://www.dia.mil/Portals/110/Images/News/Military_Powers_Publications/Russia_Military_Power_Report_2017.pdf, 34.

⁵⁶⁸ Ibid, 43.

Mediterranean in the lead up to the invasion of Ukraine was a type of non-nuclear strategic deterrence).

9.2.2 Potential Future Russian Maritime Operations

When an intelligence professional is determining the degree to which either a state or non-state actor is a “threat,” two overarching factors are considered: capability and intent. In Syria, the West has witnessed the fact that not only has Russian naval capabilities expanded, but that Putin is willing (has the intent) to use these capabilities. Although the invasion of Ukraine in 2022 allowed Russia to experience failure, even there the die is not yet cast; as of August 2022, six months into the campaign, analysts are still offering assessments that range from a Russian wind to a Ukraine win, with a stalemate in between.⁵⁶⁹ No doubt one of their greatest strategic goals heading into the invasion was to ensure Ukraine would have no military allies fighting alongside of them, specifically the U.S. or Europe; in this, they’ve been successful. Future adventurism by Russia may be determined by Russian perception of their ability to deter the West from intervening.

Since 2017 there have been reports circulating that Russian special forces are on the Egyptian border with Libya, or are even conducting training within Libya itself, though “so far these forces have reportedly not been involved in combat operations...”⁵⁷⁰ The presence of special operators dispatched by Moscow has recently been a precursor to war – in Georgia, the Ukraine, and Syria. In 2020, al Jazeera reported on a leaked United Nations document that assessed up to 1,200 Russian mercenaries (members of the Wagner group) were actively fighting

⁵⁶⁹ David Leonhardt and Claire Moses, “Russia's Struggles,” The New York Times (The New York Times, August 19, 2022), <https://www.nytimes.com/2022/08/19/briefing/russia-ukraine-war-donbas.html>.

⁵⁷⁰ Mattia Toaldo, “Russia in Libya: War or Peace?” ECFR, August 02, 2017, accessed August 17, 2017, http://www.ecfr.eu/article/commentary_russia_in_libya_war_or_peace_7223.

in Libya. Libya was one of two countries in the Mediterranean that Putin could count on for air and naval deployments, and he was furious at the West for bringing down the Libyan regime, “accusing US special forces of being involved in the killing of deposed Libyan dictator Muammar Gaddafi.”⁵⁷¹ The other country he could count on was Syria. Should Russian involvement in the Libyan theater require a transition from mercenaries and special forces to conventional ground units, the Russian Federation Navy will have over a decade of combat experience to support such operations “from the sea.”

The potential options for an expansionist Russia range from the already observed, such as in Libya, to the fanciful. This author explored such options through the use of “fict-int,” or “fiction intelligence,” in a published article by the Center for International Maritime Security (CIMSEC), focused on a Turkey-based scenario. In “The Dream of Russia,” set in the near future, Russia utilizes naval forces and maritime-transported ground forces to launch a multi-axis attack in order to secure the Turkish Straits.⁵⁷²

Russia has been pursuing a much more aggressive maritime strategy than previously seen in the modern era. Though many in the Soviet regime understood thirty years ago that technology was changing the nature of warfare, political turmoil, a devastated economy, and a seemingly omnipotent foe in the United States forced them to put off any plans to take advantage of this change. The 2012 military sealift to Syria (which continues to this day) heralded the dawn

⁵⁷¹ Andrew Osborn, “Vladimir Putin lashes out at America for killing Gaddafi and backing protests,” The Telegraph, December 15, 2011, accessed December 2, 2017, <http://www.telegraph.co.uk/news/worldnews/europe/russia/8958475/Vladimir-Putin-lashes-out-at-America-for-killing-Gaddafi-and-backing-protests.html>.

⁵⁷² Bunn, William. THE DREAM OF RUSSIA: THE EVENTS OF SEPTEMBER 23RD, 2024. Center for International Maritime Security, December 1, 2021. <https://cimsec.org/the-dream-of-russia-the-events-of-september-23rd-2024/>.

of a new era of Russian aggressive foreign policy, including kinetic strikes, from the sea and against foes that are no longer contiguous to the Russian homeland. As the United States found after Desert Storm, LACMs can provide a quick, easy, low-risk tool to pursue national security objectives.

9.2.3 Sustainability of Russian Naval Development and Operations

While Russia continues to modernize its military, expend lives and treasure in Ukraine (and to a much lesser extent Syria), the question of sustainability over the long term arises. Since Putin has been described as a pragmatic opportunist, it is a safe assumption to make that a cost-benefit analysis will drive future Russian naval development and operations (as can be generally applied to any rational actor). The difficult part is determining what type of benefits are most important to the Russian regime, and what costs they are able and willing to sustain.

A March 2022 Washington Post report described Russian involvement in Syria as a “cheap war.”⁵⁷³ At an estimated \$2 billion per year,⁵⁷⁴ this would definitely be considered sustainable, even in the long term. In 2013 Russia’s Gross Domestic Product (GDP) was approximately \$2.3 trillion;⁵⁷⁵ if the \$2 billion estimate was correct, that would account for less than one tenth of one percent of the Russian economy (.087%). By comparison (though any estimate has numerous variables and unknowns), the U.S. involvement in Iraq was estimated to have cost over \$2 trillion by 2020.⁵⁷⁶ Over that same time period, U.S. GDP combined year over year totaled approximately

⁵⁷³ Natasha Hall, “Russia Waged a Cheap War in Syria. Here's What Those Tactics Might Look like in Ukraine,” CSIS (Center for Strategic & International Studies, March 11, 2022), <https://www.csis.org/analysis/russia-waged-cheap-war-syria-heres-what-those-tactics-might-look-ukraine>.

⁵⁷⁴ Ibid.

⁵⁷⁵ “GDP (Current US\$) - Russian Federation,” Data, accessed August 21, 2022, <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=RU>.

⁵⁷⁶ Neta C. Crawford, “The Iraq War Has Cost the US Nearly \$2 Trillion,” Defense One (The Conversation, February 4, 2020), <https://www.defenseone.com/threats/2020/02/iraq-war-has-cost-us-nearly-2-trillion/162859/>.

\$294 trillion⁵⁷⁷ – meaning the cost of the Iraq War amounted to 0.68% of the Gross Domestic Product...more than 6 times the estimated cost (as a percentage of GDP) of Russian involvement in the Syrian Civil War.

The same Washington Post article that referred to Russia's Syrian involvement as "cheap," however, stated that "Some estimates put the cost of the Russian invasion at \$7 billion *in the first week alone*"⁵⁷⁸ (emphasis added). Of course, combat operations in the first week of any conflict can be assumed to be higher than that near the end of a long war. Still, if the cost of the war to Russia approached anything close to \$7 billion per week, this would not be sustainable. With Russia's 2021 GDP coming in at a much lower \$1.8 trillion (the result of sanctions following the invasion of Crimea, along with a low price of crude oil), the cost of the war in Ukraine extrapolated over the year would equate to approximately 20% of Russian GDP. This would be a best-case for Russia, as their 2022 GDP will reflect the additional sanctions and isolation they have experienced as a result of the invasion of Ukraine. This analysis only touches on the economic costs of war; the human toll must also be counted, though the misinformation campaign has made such an assessment little more than a guessing game (ranges of Russian combat deaths in Ukraine range from 1,351 – Russia's official tally – to 43,000 – Ukraine's number – and everywhere in between).⁵⁷⁹ Even numbers of Russian combat fatalities in Syria are hard to come by, though by any estimate, they are significantly fewer than those Russia is experiencing in Ukraine (a Russian

⁵⁷⁷ Kimberly Amadeo, "An Annual Review of the U.S. Economy since 1929," The Balance (The Balance, May 26, 2022), <https://www.thebalance.com/us-gdp-by-year-3305543>.

⁵⁷⁸ Hall.

⁵⁷⁹ Joshua Keating, "How Many Russian Soldiers Have Been Killed in Ukraine? What We Know, How We Know It and What It Really Means.," Grid News (Grid News, August 16, 2022), <https://www.grid.news/story/global/2022/08/16/how-many-russian-soldiers-have-been-killed-in-ukraine-what-we-know-how-we-know-it-and-what-it-really-means/>.

official in 2021 admitted that, officially, 112 Russian servicemen had been killed in Syrian operations).⁵⁸⁰

There are additional significant costs to the invasion of Ukraine that are harder to quantify for Russia. They have been labeled a global pariah on the world stage; sanctions that were effective following the invasion of Crimea have become crippling; and the political ramifications of a large number of Russian soldiers coming home in body bags are yet to be realized. This points to the conclusion that Russian adventurism of the type embarked upon in 2022 is decidedly *not* sustainable; any machinations Putin may have had on the Baltic or other former Soviet Republics may be no longer in the cards. However, operations similar to support of the Syrian Civil War, be they in Libya or elsewhere, could most definitely be sustainable moving forward. This hypothesis is supported by a report that Russian mercenary forces in Libya, though they could be of use in Ukraine, will remain in North Africa.⁵⁸¹ In other words, the relatively minor investment in expeditionary operations away from Russia's periphery is worth the effort, at least in the eyes of the Kremlin.

9.3 Areas for Further Study

9.3.1 Russian and Chinese Potential Alliance

Alluded to several times, another area for further research would be the growing military-to-military relationship between Russia and China. Even separately, the most recent U.S. Defense Strategy calls out Russia as an “acute threat” to the United States, while China is elevated to the

⁵⁸⁰ “Russian Losses after a Decade of Syria War,” Warsaw Institute, March 16, 2021, <https://warsawinstitute.org/russian-losses-decade-syria-war/>.

⁵⁸¹ Giorgio Cafiero and Emily Milliken, “‘No Capitulation’: Russian Wagner Group Likely to Stay in Libya,” News | Al Jazeera (Al Jazeera, April 15, 2022), <https://www.aljazeera.com/news/2022/4/15/russians-unlikely-leave-libya-despite-ukraine-war>.

place of a “pacing threat.”⁵⁸² Taken together, geographically and militarily (and even economically), these two countries would present a formidable threat right now to the United States. Though they have not yet signed a formal military alliance, doing so would further open up opportunities for Moscow to pursue foreign policy objectives in an aggressive manner.

Even apart from a NATO-esque alliance, military-to-military ties between Russian and China have grown remarkably since 2005. A 2021 Center for Strategic and International Studies report referred to the relationship as both country’s “most important exercise partner,” going on to state that:

Since the mid-2000s, China and Russia have conducted an increasingly frequent number and more diverse range of Sino-Russian bilateral and multilateral military exercises. These have included a long-standing series of land drills and, somewhat later, novel maritime maneuvers. Recent years have also seen joint aviation patrols in the Asia-Pacific region, Chinese participation in Russia’s annual strategic exercises, and command post exercises simulating combined missile defense tasks.⁵⁸³

Of particular note is the “growing importance” of naval exercises between the two countries, ranging in setting from the Sea of Okhotsk in the Pacific to the Baltic and Mediterranean Seas.⁵⁸⁴ Even as China has moved away from purchasing or employing former Soviet arms due to their own growing defense industry, the joint exercises allow the nations to improve interoperability. Perhaps more importantly, military-to-military contacts allow confidence-building measures to be established; “Additionally, the joint exercises provide both parties opportunities to manifest

⁵⁸² “Fact Sheet: 2022 National Defense Strategy,” U.S. Department of Defense, March 28, 2022, <https://media.defense.gov/2022/Mar/28/2002964702/-1/-1/1/NDS-FACT-SHEET.PDF?source=GovDelivery>.

⁵⁸³ Richard Weitz, “Assessing Chinese-Russian Military Exercises: Past Progress and Future Trends,” Assessing Chinese-Russian Military Exercises: Past Progress and Future Trends | Center for Strategic and International Studies, July 9, 2021, <https://www.csis.org/analysis/assessing-chinese-russian-military-exercises-past-progress-and-future-trends>.

⁵⁸⁴ “Russian - Chinese Exercises ‘Maritime Interaction’ Dossier,” Tass.ru, September 18, 2017, <https://tass.ru/info/1960969>.

mutual trust, affirm their benign intentions, and stay abreast of each other's evolving military capabilities."⁵⁸⁵ This trust applies to areas well beyond the frosty waters of the northern Pacific, and can be observed manifested in Chinese support of the Russian invasion of Ukraine, when most states have uniformly condemned the action.

Moreover, though a formal military alliance may not necessarily be in the near future of Chinese/Russian relations, an unwritten strategic partnership against a common foe (the United States) may be much more effective. A well-timed Chinese large-scale naval exercise around Taiwan could draw any additional U.S. carrier power away from the Indian Ocean/Persian Gulf region just prior to Russian belligerency in the Mediterranean, or Baltic, or Black Seas (and, for that matter, vice versa).

9.3.2 Russian Navy in a Third Nuclear Age

Though alluded to several times, an analysis of Russia's nuclear programs, both strategic and tactical, is an area that requires dedicated and in-depth analysis. The one "old school" area that Russia is investing heavily in is nuclear-powered ballistic missile submarines. As a pragmatist, Putin would not pursue an aggressive foreign policy if he felt it could lead to a military engagement with the West; maintaining an undeniable nuclear deterrent would be an important hedge against that bet. This true "strategic" use of either strategic or conventional weapons may have been on display at the onset of Russia's February 2022 invasion of Ukraine, as the Biden Administration made clear – numerous times – that U.S. troops would "not be sent to Ukraine to take part in the conflict."⁵⁸⁶ The fact that every *Kalibr* land attack cruise missile (on small attack

⁵⁸⁵ Weitz.

⁵⁸⁶ Zachary B. Wolf, "Here's What Biden Has Said About Sending US Troops to Ukraine," CNN (Cable News Network, February 24, 2022), <https://www.cnn.com/2022/02/24/politics/us-troops-ukraine-russia-nato/index.html>.

subs stationed in the Mediterranean or small frigates in the Black Sea, or nuclear-powered guided missile submarines off the East Coast of the United States) could potentially carry a nuclear variant should give Western military planners pause.

9.4 Conclusion

Russia's successful employment of expeditionary ground operations in Syria, and the Russian Federation Navy's support to those operations, were unique in the history of Imperial Russia, the Soviet Union, and the Russian Federation. Geographic, political and economic constraints denied them the ability to realize such great power aspirations in the past. However, as evidenced by the Russo-Japanese War and the Spanish Civil War, Russia has long maintained these aspirations. 21st-century technology – in particular the *Kalibr* cruise missile's sea control and power projection capabilities – have finally allowed Russia to realize these aspirations in the Syrian Civil War. This success was both the result of and furthered the move towards an increased role played by the Russian Federation Navy within the armed forces of Russia. Since this capability was long sought after in Russian history, this shift in roles will continue, regardless of setbacks in Ukraine. The Russian Federation Navy has arrived thither – in a place the United States had arrived thirty years earlier in the waters of the Persian Gulf. The place they have arrived is a relatively low-cost, low-risk location. Barring a significant change in geopolitical reality, the Russian Federation Navy is there to stay.

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APPENDIX

RUSSIAN NAVAL COMBATANTS

The following is a key to the abbreviated types of naval vessels referred to in this paper, and a brief description of them. Note that vessels can be referred to by type, class, or name. Take, for example, the Russian submarine named *Rostov-on-Don*, which is a *Kilo*-class SS; “SS” refers to the *type* of warship, which stands for “attack submarine.” The Russians have built (and exported) dozens of attack submarines of the *Kilo* class; however, they have had many other classes of SS in the past.

Submarines

SSBN: This nomenclature stands for “Nuclear-powered, ballistic-missile firing submarine.” While the “N” refers to the vessels power plant, the SSBN’s primary weapon are ballistic missiles, each with one or multiple nuclear warheads. The sole purpose of an SSBN is strategic deterrence. Only Russia, China, the US, France, the UK, and India operate SSBNs.

SSGN: “Nuclear-powered, guided-missile firing submarine.” The difference between an SSGN and an SSBN is the type of missile that is fired, and the primary mission of the submarine. Throughout the Cold War only Russia employed SSGNs, which employed anti-ship cruise missiles (ASCMs), typically in an anti-carrier role. More recently, the United States converted some of their SSBNs into SSGNs by replacing the type of missile the platform carried.

SSN: This type is a “Nuclear-powered attack submarine.” Historically, their main mission is anti-submarine warfare (going after the enemy’s SSBNs, for example), or interdiction of Sea Lines of Communication (SLOCs) – going after the adversary’s commercial shipping. Nuclear powered subs are typically noisier than their diesel-electric powered counterparts but can stay underwater for much longer periods of time.

SS: Simply an “attack submarine, non-nuclear.” Sometimes referred to as “SSKs.” Quietest submarine type but must surface periodically (or at least “snorkel”) to vent poisonous gasses; unlike their nuclear-powered counterparts, the SS is limited by fuel stores. However, similar to an electric car, the diesel-electric submarine is extremely quiet.

Aircraft Carriers

CV: Stands for “fixed wing aircraft carrier” (as opposed to a helicopter carrier). The Russian’s lone aircraft carrier, the *Kuznetsov*, is a CV. All of the aircraft carriers in the U.S. inventory are nuclear powered, hence the CVN designation.

CVHG: “Fixed wing and helicopter-carrying, guided missile cruiser;” formerly used by the Soviet Union, they flew the Vertical/Short Take Off and Landing (VSTOL) aircraft “Yak-38 Forger.” No longer in operation.

CHG: “Helicopter-carrying guided missile cruiser.” No longer in operation.

Major Combatants

CGN: “Nuclear-powered guided missile cruiser.” When used as a modifier for frigates, destroyers and cruisers, a “guided missile” refers to a surface to air missile (SAM) that has a long enough range to protect multiple ships from air attack. During the Cold War, cruisers became ships with the primary mission of air defense due to the employment of long-range SAMs. Today, only Russia fields a nuclear-powered cruiser (the *Kirov*-class *Peter the Great*), and they only have one currently in operation.

CG: Stands for “guided missile cruiser;” the lack of an “N” means, by default, that it is conventionally powered. The Russians only have one class of CG, the *Slava*-class, with two ships in the class (following the sinking of the *Slava*-class cruiser *Moskva* during the war with Ukraine). The U.S. also fields one class of CG, the *Ticonderoga*-class, sometimes referred to as an “Aegis cruiser,” Aegis referring to the name of the air defense system it employs.

DDG: Refers to a “guided-missile destroyer;” the guided missile refers specifically to a long-range surface-to-air system; however, with the advent of vertical-launch systems (VLS), major combatants today can fire a mix of surface-to-air, anti-ship, and land-attack cruise missiles. The Russians still operate a number of Cold-War-era destroyers, notably the *Sovremennyy*-class and *Udaloy*-class. The United States employs the Arleigh Burke-class DDG, the backbone of the U.S. Navy (also utilizing the Aegis weapons system).

Minor Combatants

FFG/FF: Short for “Guided-missile frigate” (FFG) or “Frigate” (FF). Russia has built several new classes of FFG since the end of the Cold War, including the *Gepard* class, the *Admiral Gorshkov* class, and the *Admiral Grigorovich* class, albeit in small numbers. These ships employ the newest advanced missile systems, including the SS-N-30a *Kalibr* LACM.

FFLG/PTG: Ships that are smaller than the class of frigate but have greater capabilities than simply a coastal patrol vessel, can carry a variety of designations, and these vary from navy to navy. An “FFL,” which literally means “light frigate,” is oftentimes referred to as a corvette. An FFLG, therefore, is a light frigate (or corvette) that is capable of employing a guided missile. A “PT” boat (as popularized in World War II) meant “Patrol, Torpedo” boat, and today they still may keep that designator. A “PTG,” however, refers to a patrol boat that carries a guided missile (not a torpedo). Of note, with these smaller vessel classes (as with submarines), the type of guided missile referred to by the “G” in the designation is

that of an anti-ship cruise missile, not a surface-to-air missile (differentiating it from destroyer-sized ships and above).

Amphibious Ships

LPD: Stands for “Landing Platform Dock,” these are typically the largest amphibious vessels other than large helicopter carriers and can also serve as command-and-control platforms. While the U.S. and China have recently developed new classes of LPD, the Russian’s only LPD was decommissioned shortly after the Cold War ended.

LST: Literally standing for “Landing Ship, Tank,” this is amphibious vessel, while smaller than an LPD, is still large enough to transport tanks and troops across long distances. The Russians have been utilizing their two primary classes of LST (the *Alligator* and *Ropucha*-classes) at a breakneck pace during the “Syrian Express,” the operation to provide the Syrian regime with weapons and supplies via oceanic transport from the Black Sea.

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PUBLISHED

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