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THITHER THE RUSSIAN NAVY? PUTIN'S NAVALIZATION IN A HISTORICAL CONTEXT

by

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A Dissertation Submitted to the Faculty of  
Old Dominion University in Partial Fulfillment of the  
Requirements for the Degree of

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Approved by:

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## ABSTRACT

### THITHER THE RUSSIAN NAVY? PUTIN'S NAVALIZATION IN A HISTORICAL CONTEXT

William Emerson Bunn  
Old Dominion University, 2022  
Director: Dr. Regina Karp

The Syrian operation of 2012 was the first successful employment by Russia of expeditionary warfare, narrowly defined as naval support to Russian (or Soviet) ground forces in a war away from their periphery (i.e., in a country that does not border them), from the sea. This was brought about in part by the development of two types of cruise missiles: advanced anti-ship missiles (which protects their expeditionary force from NATO naval units, enabling local sea control) and new land attack cruise missiles (similar in design and capability to the U.S. *Tomahawk*). In the past geographical, technological and political constraints have kept Russia from employing its navy in this manner.

To prove this, Russia's unique geographic situation must be understood, along with the development of naval warfare (in particular the concept of sea control). A review of Russian naval history will show that, though they aspired to such a capability, neither Imperial Russia nor the Soviet Union were able to accomplish this. In the "modern age" (defined as the turn of the 20<sup>th</sup> Century), two cases can be identified that involved a Russian/Soviet attempt at such expeditionary operations --- the Russo-Japanese War and the Spanish Civil War. In the former, though armed with what was considered a "great power" navy, geography and politics assured Russian naval defeat (leading to their defeat on land). In the latter, the lack of a great power fleet

ensured that they were once again unable to support their ground forces, leading to withdrawal (and failure to achieve their objectives in Spain).

In Syria, Russia was able to successfully support expeditionary ground forces, using amphibious transport protected by a balanced fleet of escorts with advanced-technology missiles, in addition to providing for the direct support of ground forces through employment of land attack cruise missiles. Both the case studies and late-Cold War doctrinal writings show that this has always been on the minds of the Russians, but the confluence of geographic realities, doctrine, and economic or technological shortcomings assured their inability to realize these objectives. As a result of this new capability, the modern Russian navy will continue to enjoy a more significant place in Russian military strategy, even following the Syrian conflict

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This work is dedicated first and foremost to my amazing wife Vicki, a constant source of encouragement and support during the entirety of what at times felt like a never-ending process.

Also, to my children Andrew, Michael, Matthew, Katherine, Nathan and David, who had to suffer varying degrees of “orphan by dissertation” over the past several years.

In particular LTJG Michael Bunn (and his shipmates), currently serving onboard the USS Leyte Gulf somewhere in the Mediterranean. Michael (and those who will soon follow in his footsteps) has put himself in harm’s way to keep our nation safe during what I believe is an extremely dangerous time for the officers and sailors of the United States Navy. It is to further the understanding of this era that this dissertation is written.

Finally, this dissertation was originally a term paper (eight years ago) for one of the best people I’ve ever had the opportunity to meet. Dr. Steve Yetiv was taken from us long before his time in 2018. I have no doubt that he would have been pleased with this outcome; thank you Steve.

## ACKNOWLEDGEMENTS

There is little doubt that without the best Committee ever to be formed, this dissertation would have never been completed. That I was able to persevere is only the result of these mentors displaying unheard of patience, not just during the research and writing of the dissertation but for the entirety of my academic journey.

That journey began in 2004 at the Naval War College. It was there I met Dr. Lyle Goldstein; under his tutelage I became passionate what would eventually become known as Great Power Competition, a decade before it was cool. At the end of my studies, he worked tirelessly to help me turn an average term paper into my first published article, *Shock and Awe With Chinese Characteristics*. Over fifteen years later he agreed to be the outside reader for this Committee, continuing to pattern for me the characteristics of a great teacher.

The first class I took at ODU was International History, taught by Dr. Austin Jersild. His expertise in the Cold War and his emphasis on original sources was instrumental in my choice of dissertation topic. I was honored when he agreed to join the Committee, and his input throughout the process has been just what the paper needed.

The original Committee chairman for the project was Dr. Simon Serfaty. For years he guided and directed this dissertation, but he could not put off his retirement indefinitely. As a professor emeritus, however, he continued to provide his honest assessment and critical recommendations; this is as much his work as it is mine. Having an academic of Dr. Serfaty's caliber on the team veritably guaranteed success.

Upon Dr. Serfaty's retirement, and without batting an eye, Dr. Regina Karp took up the mantle of Committee chairperson without hesitation. As director of GPIS she has a thousand irons in the fire at once, yet when it came to the dissertation, I felt like I was her only student. As the world descended into pandemic, Dr. Karp established and personally led regular "salons" via Zoom that resulted in several students completing their studies, me included.

Though there is no way to mention them individually, I owe a great debt to the insight and experience of my fellow students that I've met and studied with during my time at Old Dominion. In particular, my fellow salon-mates with Dr. Karp during COVID-19 may have been the difference between success and failure. Writing a dissertation during a pandemic is challenging, but those hard-working current and former students made it enjoyable.

Finally, in the 11<sup>th</sup> hour, I could not have made it across the finish line without the amazing efforts of Old Dominion University's Style Editor for the College of Arts and Letters. Ms. Cathleen Rhodes worked virtual nights and weekends in order to get me to graduation. It was a humbling and enriching experience.

Thank you all.



## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	xi
Chapter	
1. FRONT MATTER.....	1
1.1 Author’s Note on the Dissertation Title and the 2022 Russian Invasion of Ukraine.....	1
1.1.1 Title of the Dissertation.....	1
1.1.2 A Note on Russia’s February 2022 Invasion of Ukraine .....	5
1.2 Research Question, Thesis.....	8
1.3 Research Methodology and Design.....	9
1.4 Contribution to Academic Literature.....	13
2. ACTIONS OF THE RUSSIAN NAVY IN SUPPORT OF ASSAD DURING THE SYRIAN CIVIL WAR ....	17
2.1 Attack on the Islamic State .....	17
2.2 Not the Usual Suspects .....	18
2.3 The Syrian Express .....	19
2.4 The Saga of the M/V Alaed.....	20
3. LITERATURE REVIEW .....	24
3.1 Naval Strategy and Maritime Theory .....	24
3.2 Geography .....	29
3.3 History.....	33
3.3.1 The Russo-Japanese War.....	34
3.3.2 The Soviet Experience in the Spanish Civil War .....	35
3.3.3 The Soviet Navy During and at the End of the Cold War .....	36
3.3.4 Modern Writings on the Russian Federation Navy.....	39
4. NAVAL STRATEGY .....	44
4.1 Levels of Warfare: Strategic, Operational and Tactical .....	45
4.2 Strategic View: Mahan and Corbett .....	46
4.2.1 Mahan .....	48
4.2.2 Corbett .....	51
4.3 Operational View: Vego.....	55
4.3.1 Sea Control .....	55
4.3.2 Types of Major Naval Operations .....	61
4.3.3 Narrow Seas .....	65
4.4 U.S. Navy’s Changing Emphasis on Sea Control .....	68
4.4.1 U.S. View of Sea Control 1945 – 1990.....	68

Chapter	Page
4.4.2 U.S. View of Sea Control 1991 – 2009 .....	71
4.4.3 U.S. View of Sea Control 2010 – Present .....	77
4.5 Soviet Move to a “Naval Offensive” .....	81
5. GEOGRAPHIC FRAMEWORK OF RUSSIAN MARITIME OPERATIONS .....	86
5.1 The Russian Federation Navy Disposition: Separated by Distance, Ice and Chokepoints ..	90
5.1.1 The Northern Fleet .....	92
5.1.2 The Baltic Fleet .....	94
5.1.3 The Black Sea Fleet .....	100
5.1.4 The Mediterranean Squadron .....	135
5.1.5 The Pacific Fleet .....	141
6. HISTORICAL FRAMEWORK OF RUSSIAN MARITIME OPERATIONS .....	147
6.1 The Evolution of Pre-20 <sup>th</sup> Century Russian Maritime Doctrine .....	147
6.1.1 Peter the Great .....	149
6.1.2 Catherine the Great .....	152
6.1.3 The Crimean War .....	154
6.2 20 <sup>th</sup> Century Russian and Soviet Naval Experience .....	155
6.2.1 Entrance into the Modern Era of Naval Operations .....	155
6.2.2 Russo-Japanese War .....	156
6.2.3 The Russian Navy in World War I .....	164
6.2.4 The Evolution of Soviet Naval Doctrine .....	167
6.2.5 The Spanish Civil War (1938-1939) .....	171
6.2.6 The Russian Navy in World War II .....	180
6.2.7 Soviet Navy Development in the post- World War II/Early Cold War Era .....	181
6.2.8 Soviet Naval Development Under Khrushchev .....	183
6.3 Technology in Naval Warfare and its Impact on Russian Naval History .....	184
6.3.1 The Kalibrization of the Russian Federation Navy .....	197
7. THE SOVIET NAVY AT THE END OF THE COLD WAR .....	200
7.1 Soviet Navy Vessels and Weapons Systems Near the End of the Cold War .....	200
7.2 U.S. Assessment While the Soviet Union Crumbles .....	203
7.3 Desert Storm and the Development of Russian Doctrine .....	204
8. RESEARCH QUESTIONS REVISITED: RUSSIA’S NAVY IN SYRIA .....	208
8.1 Makeup and Capabilities of Today’s Russian Federation Navy .....	209
8.1.1 Large Major Combatants .....	210
8.1.2 Newer Minor Combatants .....	213
8.1.3 Submarines .....	217
8.2 Operations of Today’s Russian Navy, Particularly in the Mediterranean and Black Seas.	222
8.3 Stated Russian Maritime Doctrine .....	228
8.4 How the Modern Russian Navy Fits into Overall Military Doctrine and Usage .....	238

Chapter	Page
9. CONCLUSIONS AND AREAS FOR FURTHER STUDY .....	243
9.1 Importance of RFN involvement in the 2022 Russo-Ukrainian War .....	243
9.1.1 Russian Federation Navy and the Russo-Ukrainian War .....	243
9.1.2 The RFN's Experience in the Russo-Ukrainian War.....	246
9.1.3 Implications of the Russo-Ukrainian War on the RFN's Mediterranean Operations .	251
9.2 Implications for US foreign policy.....	254
9.2.1 US Intelligence Community Analysis.....	254
9.2.2 Potential Future Russian Maritime Operations .....	258
9.2.3 Sustainability of Russian Naval Development and Operations.....	260
9.3 Areas for Further Study .....	262
9.3.1 Russian and Chinese Potential Alliance.....	262
9.3.2 Russian Navy in a Third Nuclear Age.....	264
9.4 Conclusion .....	265
 BIBLIOGRAPHY .....	 266
 APPENDIX .....	 289
 VITA.....	 292

## LIST OF TABLES

Table	Page
1: SOVIET/RUSSIAN NAVAL ORDER OF BATTLE, 1991, 1999 AND 2015 .....	10
2: SOVIET TANK DELIVERIES TO REPUBLICANS DURING SPANISH CIVIL WAR.....	177
3: RUSSIAN AMPHIBIOUS SHIP TRANSITS OF TURKISH STRAITS, 2013-2022 .....	234
4: RUSSIAN MAJOR COMBATANT TRANSITS OF TURKISH STRAITS, 2013-2022.....	236
5: RUSSIAN MINOR COMBATANT TRANSITS OF TURKISH STRAITS, 2013-2022.....	237
6: RUSSIAN SUBMARINE TRANSITS OF TURKISH STRAITS, 2013-2022 .....	238

CHAPTER 1  
FRONT MATTER

1.1 Author's Note on the Dissertation Title and the 2022 Russian Invasion of Ukraine

1.1.1 Title of the Dissertation

whith·er /'(h)wiTHər/

*adverb*

1. to what place or state (archaic); where  
"whither are we bound?"

"If (Russian amphibious forces) were actively used to intervene in some local conflict in the Middle East it would of course be an historic turning point in the Soviet Union's naval strategy."<sup>1</sup>

thith·er /'THiTHər/

*adverb*

1. to that place, in that direction; a destination; there.  
"We are headed thither."

"Russia received what it never had - an effective instrument of non-nuclear deterrence, which can be used tomorrow in the Middle East and the Mediterranean, and in a few years...in any region of the world."<sup>2</sup>

I became a naval intelligence officer in 1990, a very exciting yet turbulent time for the profession. For nearly four decades the U.S. naval intelligence community had been focused on one thing, and one thing alone: the Soviet Navy. In 1990 the U.S Navy's senior intelligence officer was Rear Admiral T.A. Brooks. When he took the reigns as Director of Naval Intelligence in 1988, the threat his community faced was a "10-foot tall" deadly superpower; when he retired at the

---

<sup>1</sup> David Fairhall, *Russian Sea Power* (Boston, MA: Gambit, 1971).

<sup>2</sup> Navy Korabel, "Крылатая Ракета ЗМ14 Комплекса 'Калибр' - Наш 'Томагавк' Или Второе Пришествие 'Граната,' (The ЗМ14 cruise missile of the Caliber complex - our Tomahawk or the second coming of the Pomegranate)" LiveJournal, March 26, 2015, <https://navy-korabel.livejournal.com/86469.html>.

end of his tour a mere three years later, that threat had ceased to exist, without a shot being fired.

Only ten years earlier, then-Captain Brooks had penned an article published in the “Professional Notes” section of the Proceedings of the U.S. Naval Institute, titled “Whither the Soviet Navy.” In it, Brooks lamented the difficulty of forecasting the direction of the U.S. Navy’s primary threat, noting that even though “secrecy that pervades all of Soviet society,”<sup>3</sup> the U.S. should still be able answer the question “whither the Soviet Navy” – i.e., “to where” is the Soviet Navy heading? Instead, the naval intelligence community (of which he was a senior member) was good at retrospection (i.e., the move in the late 1960’s from an anti-carrier focus to an anti-submarine focus).<sup>4</sup> Brooks believed that the answer to that question – where was the Soviet Navy heading – was a shift in focus from a defensive posture no one of offensive naval operations. This was exemplified by a plan to build up to four 60,000-ton nuclear aircraft carriers, nuclear-powered battlecruisers and other large surface combatants, and landing craft. Though built for defensive operations at the time, Brooks determined that Admiral Sergei Gorshkov, then-Commander-in-Chief of the Soviet Navy was building a long-sought-after “balanced navy:”

It will be a true high-seas navy able to project air power to sea and amphibious forces ashore, and it will be “second to none” in that the capabilities of the strike cruiser force will be unmatched by anything either in the Western inventory or on Western naval drawing boards.<sup>5</sup>

---

<sup>3</sup> T. A. Brooks, “Whither the Soviet Navy?,” *U.S. Naval Institute Proceedings* 106 (February 1980): pp. 103-104, 103.

<sup>4</sup> *Ibid.*

<sup>5</sup> *Ibid.*, 104.

Highlighting the combination of this striking power with a new emphasis on amphibious lift capacity, Brooks believed these developments gave credence to Gorshkov's writings in *Sea Power of the State* that:

The mobility of the fleet and its flexibility in limited military conflicts permit it to have an influence on coastal countries to employ and extend a military threat to any level, beginning with a demonstration of military might and ending with the landing of a landing party.<sup>6</sup>

Brooks argued that U.S. intelligence could discern two pieces of a three-piece puzzle to ascertain future Soviet employment: known Soviet naval construction and doctrinal writings. However there still remained "the third necessary ingredient for testing the hypothesis of new departures in Soviet naval doctrine, namely an exercise that we can observe which might tell us how the Soviets intend to put these weapon systems together."<sup>7</sup>

Still, should the hypothesis be proven true, the ramifications on Soviet foreign policy (and the resulting U.S. foreign policy to counter it) would be stark; Russia would basically be moving from a defensive posture to an offensive one:

It could then be concluded that the Soviet Navy is moving from its traditionally defensive posture to the capability to project power beyond the shadows of the homeland. While in Soviet parlance, the primary mission of the Soviet Navy will undoubtedly remain the defense of "Mother Russia" – the distinction between offense and defense is largely academic when the other guy is defending his mother in your backyard.<sup>8</sup>

The radical shift in Russian naval doctrine and resulting capabilities from defense of the Motherland to a naval offensive capable of projecting power on coastal countries (including

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<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

“landing parties”) did not come to fruition; less than ten years after Brooks’ predictive hypothesis, the Berlin Wall had fallen, with the Soviet Union itself crumbling not long after.

In May of 1993 – eighteen months following the official dissolution of the U.S.S.R. – Mary FitzGerald of the Hudson Institute penned a report for the Center for Naval Analyses titled *The Future Russian Navy: Interests of the Military*. The nearly 100-page report concluded with a section titled “Whither the Russian Navy,” asking the same question that Captain Brooks had asked thirteen years earlier: “determining the role and capabilities of the future Russian Navy.” Since Brooks’ 1980 article a “revolution in military affairs” had taken place, culminating in America’s overwhelming victory against Iraq in *Operation Desert Storm*. Looking at Russian naval writings, FitzGerald concludes that:

For the foreseeable future, Operation Desert Storm will serve as the paradigm of future war in strategy, operational art, and tactics. First, Russia’s new military leaders assign priority to the new systems employed during Desert Storm: ACMs [*Advanced Conventional Munitions*], EW [*Electronic Warfare*], and C3I [*Command, Control, Communication and Intelligence*]. Russian military scientists have argued, for example, that such ACMs as the Tomahawk accomplished nuclear missions during the war...Russian military scientists now argue that the Gulf War generated a new type of combat action – the “electronic-fire operation” – which consists of surprise, massed, and prolonged missile, aerospace, electronic, and naval strikes that will decide the outcome of the war within several days or weeks.<sup>9</sup>

Both Brooks and FitzGerald believed that the Russian Navy of the near future was on a course for significant change, in operation if not platform makeup. Both used the term “whither” – “to where” – is the Russian Federation Navy heading. When I first began researching this paper, I originally used the same title; however, a more appropriate title for today would use the word “thither” – another archaic term, but one that answers the question “whither.” In other words,

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<sup>9</sup> Mary C. FitzGerald, *Future Russian Navy: interests of the military*. Vol. CRM 92-109 (Alexandria, VA: Center for Naval Analyses, 1993), 78, accessed October 12, 2017. <http://www.dtic.mil/get-tr-doc/pdf?AD=ADA593813>.



Brooks and FitzGerald were trying to look forward to predict where they were trying to go, but the significance of Russian naval operations in Syria may *answer* the question posed by Brooks and FitzGerald: have they arrived, and if so, where?

### 1.1.2 A Note on Russia's February 2022 Invasion of Ukraine

The 500-pound elephant (or bear) in the room is the fact that, as this author is attempting to complete a dissertation on the modern Russian navy, Russia is in the middle of its largest and riskiest combat operation since World War II.<sup>10</sup> One of the original reasons in choosing this topic was because I felt not enough attention was being paid to the threat posed by potential Russian belligerency in the post-Syria and Crimea era. In 2012 – approximately six months before Russian naval vessels began shipping war material in support of Assad during the Syrian Civil War – the Obama administration published the colloquially-called “Pivot to the Pacific” (officially termed the “Defense Strategic Guidance”<sup>11</sup>), putting Russia firmly behind China among potential adversarial nations of the United States. When the final National Security Strategy of the Obama presidency was published in February of 2015, it was still terrorism that received the lion share of attention from a threat perspective, mentioned 37 times (“terror,” “terrorist,” “terrorism”) in the document as compared to only fifteen mentions of “Russia.”<sup>12</sup>

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<sup>10</sup> An argument could be made for both Russia's invasion of Afghanistan and its operations in Chechnya as being costlier, at least thus far. However, embarking on an invasion of a European country on the border with NATO is arguably the riskiest.

<sup>11</sup> The actual title of the cornerstone national security document of the Obama era was “Sustaining U.S. Global Leadership: Priorities for 21<sup>st</sup> Century Defense” – the term “Defense Strategic Guidance” described the document's purpose, not its actual name. While neither a “National Security Strategy” nor a “National Defense Strategy,” it fell under the category of “additional strategic guidance;” however it was used as the baseline by which all subsequent strategic documents were built under the Obama administration (including the 2015 National Security Strategy). See Leon E. Panetta and Barack Obama, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, D.C.: Dept. of Defense, 2012).

<sup>12</sup> Barak Obama, *National Security Strategy February 2015* (Washington, DC: The White House, 2015).

By the end of that year Russia had moved modern air force assets into Syria and had begun direct attack missions in support of Assad's forces, followed shortly by RFN cruise missile strikes from the Mediterranean and Caspian seas. In December 2015 the Office of Naval Intelligence acknowledged the "historic transition"<sup>13</sup> that was taking place in Russia, though the emphasis remained on Russia's defensive posture (this is addressed further Chapter 9). With that as a background, in September of 2017 research began on this paper, considering the unique aspect of Russia supporting ground operations from the sea away from its periphery. Then in December of 2017 the Trump administration published their first (and only) National Security Strategy, shifting the U.S. national security apparatus from a focus on terrorism to one of "Great Power Competition," specifically China and Russia.

More attention was paid to Russia during the remainder of the Trump administration, though it shared the stage with a rapidly modernizing Chinese naval force that was on pace to outnumbering the ships of the U.S. Navy (by end of 2020 the number of ships in the Chinese Navy was "approximately 360, compared to the United States' 297 according to the U.S. Office of Naval Intelligence."<sup>14</sup>) With the advent of the Biden administration, the focus shifted officially back to China, reinstating the "pivot to the Pacific." Within a few short months after taking office the Interim National Security Strategic Guidance (INSSG) was published. China is mentioned more than 3 times as often as Russia, with the assessment that it remains the only long-term threat confronting the United States:

China, in particular, has rapidly become more assertive. It is the only competitor potentially capable of combining its economic, diplomatic, military, and

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<sup>13</sup> *The Russian Navy: A Historic Transition* (Washington, DC: Office of Naval Intelligence, 2015).

<sup>14</sup> "China vs the World: Here's a Look at Naval Power in the Pacific in Numbers," *The Economic Times*, September 17, 2021, <https://economictimes.indiatimes.com/news/defence/china-vs-the-world-heres-a-look-at-naval-power-in-the-pacific-in-numbers/articleshow/86285514.cms?from=mdr>.

technological power to mount a sustained challenge to a stable and open international system.<sup>15</sup>

For its part, Putin's-led Russia was relegated to "playing a disruptive role on the world stage."<sup>16</sup> In August 2021 new Navy Secretary Carlos Del Toro sent a message to the fleet outlining the threats facing the U.S. Navy, and only China made the list among nation-states: "Like [U.S. Defense] Secretary [Lloyd] Austin, I view our most pressing challenges as the four Cs -- China, culture [i.e. race relations], climate [change] and COVID, and we need the resources and capabilities to address each now."

As work continued on this dissertation, the importance of the Montreux Convention in the 21<sup>st</sup> century became apparent, with Turkey's control of the Bosphorus and the Dardanelles impacting Russia's movement between the Black Sea and its other fleets. Russian amphibious vessels were researched, such as the *Saratov*, bringing soldiers and supplies on an unprecedented scale in Russian history to save the Assad regime. The role missile-laden combatants such as the *Slava*-class cruiser *Moskva* played in escorting those amphibious ships was discussed, and the corresponding ramifications to U.S. security policy. In February 2022, ten years after the beginning of the Syrian Civil War, Russia invaded Ukraine. As of the writing of this dissertation, that war continues. Many of the items this work was attempting to bring to light have become everyday topics of conversation. Turkey turned to the Montreux Convention to deny Russian warships passage into and out of the Black Sea. The *Saratov* was sunk at its pier in the Sea of Azov; the *Moskva* suffered the same fate in the Black Sea not long after.

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<sup>15</sup> Joseph R. Biden, "Interim National Security Strategic Guidance," The White House (The United States Government, March 3, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/03/interim-national-security-strategic-guidance/>, 8.

<sup>16</sup> Ibid.

Still, though the word *Kalibr* (Russia's new anti-ship and land attack missile) is now part of the academic lexicon, this dissertation will continue to add to the discourse; and perhaps the "jump start" on the competition will come in handy. This paper is not just analyzing current events, though they play a role. Instead, the goal is to place Russian modern naval operations in the Mediterranean into a much larger picture that includes strategy, geography and history. Failure by policymakers to take this long view has resulted in foreign policy missteps; it is hoped that, through a deeper understanding of Russian efforts, future decision-makers will be better prepared.

## 1.2 Research Question, Thesis

My research question is: What is the significance of successful Russian Federation Navy power projection operations in Syria from a historical point of view?

My thesis is: Technological advances in precision-guided munitions and anti-ship cruise missiles enabled Russian naval forces to contribute to 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 that Russia or the Soviet Union does not share a border with).

Originally this dissertation was titled "Whither the Russian Navy." This question was asked by analysts at the end of the Cold War, referring to what place or state the Russian Federation Navy (RFN) was heading. The more appropriate question for today is, has that previous question been answered? Has the Russian Navy arrived "thither" – i.e., to the destination its leaders had sent it on?

### 1.3 Research Methodology and Design

Methodology: A quantitative approach to analysis of this question is problematic for several reasons. First is a dearth of hard data on modern Russian maritime operations. During the Cold War, the U.S. Chief of Naval Operations promulgated (via the Director of Naval Intelligence) the unclassified document *Understanding Soviet Naval Developments*. A total of six of these works were published between 1975 and 1991, which included such things as charts and graphs with numbers and locations of deployed Soviet vessels, by type. Upon the collapse of the Soviet Union, this publication also ceased to exist, and with good reason: there was in effect no Soviet Navy to analyze.

Finally, after a nearly quarter-century gap, the Office of Naval Intelligence released in 2015 the publication *The Russian Navy: A Historic Transition*. While containing a good overview of history, strategy, personnel and platforms, this document provided little information on recent Russian naval operations, to include number of days per year deployed. Moreover, even though the RFN had been conducting a massive sealift supported by naval combatants in Syria since 2012, the word “Syria” is not mentioned once.

A quantitative analysis could be done comparing Cold War and current naval “orders of battle” (a list of numbers of each type of vessel in a country’s inventory), but this would be like comparing apples and oranges when it comes to insight into fleet operations. Bean-counting is a throwback to the days of the Cold War, and the question being posed is not “does Russia pose a greater threat today in an all-out war with the U.S. and NATO than they did in the past.” Looking strictly at order of battle, the Soviet Navy in 1991 dwarfs the Russian Navy of 2015 (when the new ONI report was published).

**TABLE 1: SOVIET/RUSSIAN NAVAL ORDER OF BATTLE, 1991, 1999 AND 2015**

Soviet/Russian Naval Order of Battle				
	<b>1991</b>	<b>1999</b>	<b>2015</b>	
SSBN	60	35	12	
SSG(N)/SSN	118	37	26	
SS	100	23	18	
CV	1	1	1	
CVHG	5	0	0	
CHG	2	0	0	
CGN	3	2	2	
CG	25	6	3	
DDG	37	21	14	
FFG/FF	44	20	11	
LPD	3	1	0	
LST	32	25	19	

Sources:

1991 Data: *Understanding Soviet Naval Developments, 1991*

1999 Data: *Janes Fighting Ships, 1998-1999*

2015 Data: *Russian Navy in Transition*

*For a key to naval ship types, see the Appendix.*

As Table 1 shows, Russian warship totals in 2015 are below even the levels of 1999, the year considered the post-Cold War low point for the Russian Navy. This is because in the early 1990's Russia began to decommission and scrap a majority of what were considered outdated and obsolete vessels, which continues to this day. Even so, of the remaining platforms, the majority are still "relics" of the Cold War.

Attempting to draw conclusions based on *capability* of Russian ships, then and now, would also yield few meaningful results. Most of the ships are the same, especially the "large surface combatants" – Russia's only aircraft carrier and all of the cruisers and destroyers were designed (and mostly built) during the Cold War. It is true the RFN has commissioned a handful

of modern frigates, patrol craft and submarines, but the most important weapon system for the purpose of this analysis, the conventional land attack cruise missile (LACM), did not exist in the previous era, and so cannot be compared to earlier systems.<sup>17</sup>

Looking at maritime operations, a quantitative comparison involving Russian power projection operations in the past with recent actions would be impossible, simply because the Russians did not often conduct such missions prior to the events in Syria. Their navy, and the doctrine that directed it, was geared for strategic deterrence of World War III, and, if that failed, the ability to defeat the West in the midst of World War III.

Therefore, a qualitative approach will be taken in analyzing the question of the significance of recent Russian navy employment. The metrics being considered will be, first, the development of naval strategic thought and its influence on Soviet and Russian military and naval doctrine, which is tied to their historic threats, geography, and economy; thus, Russian maritime geographic constraints will be discussed in depth. Next, a historic view of Russia's naval forces – ships, submarines, and weapons systems – will be analyzed. Although analyzing doctrine, geography and history separately seems logical on the face of it, in reality they are intertwined. Doctrine drives the type of equipment to be built, whereas economic considerations that impact a country's ability to produce naval platforms may affect their doctrine (i.e., what they can

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<sup>17</sup> An exception is the SS-N-21 "Sampson," a Russian submarine-launched LACM that was deployed near the end of the Cold War; however, this system was primarily designed to carry a nuclear warhead, and although there was a conventional option for submarines, the SS-N-21 was not accurate enough (150-meter Circular Error Probable, or CEP; source: [missilethreat.csis.org/missile/ss-n-21/](http://missilethreat.csis.org/missile/ss-n-21/) ) to be considered a "precision-guided munition," such as the USN Tomahawk (less than 10-meter CEP; source: [missilethreat.csis.org/missile/tomahawk/#en-674-14](http://missilethreat.csis.org/missile/tomahawk/#en-674-14) ) and the new Russian SS-N-30 Kalibr (reported 3-meter CEP; source: [missiledefenseadvocacy.org/missile-threat-and-proliferation/missile-proliferation/russia/ss-n-30a-kalibr/](http://missiledefenseadvocacy.org/missile-threat-and-proliferation/missile-proliferation/russia/ss-n-30a-kalibr/)).

accomplish vice what they would like to accomplish). Both doctrine and equipment are influenced by immutable geographic realities.

This will be a qualitative analysis of current Russian capabilities and operations, from a geographic and historical point of view, and using two examples in history to show that, while the success Russia had during the recent employment of naval power projection in Syria was new, the desire to utilize such force was not. Viewing Russian and Soviet maritime development through the lenses of naval strategy, geography, and history will demonstrate that, as the quintessential land power, Russia has had very limited experience in the successful projecting of naval power. This changed in 2012 in the Mediterranean Sea.

To explore this history more fully, two examples in the “modern” era (20<sup>th</sup> century) will be analyzed, cases that are as close to the Syrian example as can be found. These involve failure to effectively project naval power: the Russo-Japanese War and the Spanish Civil War.

Design: To answer the question of the significance of Russian naval operations in Syria, the first hypothesis is that Russia, the archetypal continental power, has been either not willing or not able to employ maritime power projection away from its periphery in its history. To test that hypothesis, modern-day operations in the Mediterranean will be analyzed and understood first. Once that is done, the geographic realities will be looked at. Next Russian and Soviet history will be examined to determine whether examples of similar operations can be identified (specifically, naval support to Russian ground forces in wartime in a region that is not contiguous to Russian territory). Once examples are identified, these are compared to the modern RFN mission in Syria.



Although a holistic view of Russian naval history will be examined, specific examples of Russian naval warfare will be limited to the 20<sup>th</sup> Century. The last major war involving Russia prior to this time, the Crimean War of 1853, did take place after what is considered the “Age of Steam” began (circa 1850). In Crimea, however, only Britain was able to field “steamers” as a majority of their fighting force. While the Russians did have approximately 40 “paddle-steamers,” paddles were extremely vulnerable to gunfire, and Russia had “no significant screw warship fleet” ready in time to see action in the Crimean War.<sup>18</sup> The development of ironclad warfare later in the century, along with advances in chemical engineering, metallurgy, and rifled artillery, made the dawn of the 20<sup>th</sup> Century the starting point of the modern age of naval warfare for Russia.

#### 1.4 Contribution to Academic Literature

Although many experts have been opining about the significance of Russia’s decade-long naval involvement in Syria, there is not much consensus on the subject. Some assessments believe the world is witnessing a generational transformation of the Russian Navy, which is projecting power in order to “diminish its geographical disadvantage of limited access to the world’s oceans.”<sup>19</sup> Others take nearly the opposite view, believing that Russia is “eschewing an American-style of power projection navy...in favor of more defensive forces armed with access denial weapons such as small missile-equipped corvettes.”<sup>20</sup> Still others believe naval

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<sup>18</sup> Duckers, Peter. *The Crimean War at Sea: Naval Campaigns against Russia, 1854-6*. Barnsley: Pen & Sword Maritime, 2011.

<sup>19</sup> Spyridon N. Litsas, “Russia in the Eastern Mediterranean: Intervention, Deterrence, Containment,” *Digest of Middle East Studies* 26, no. 1 (2016): pp. 56-73, <https://doi.org/10.1111/dome.12103>, 58.

<sup>20</sup> Michael Peck, “The Mediterranean: The Russian Navy’s New Playground? (NATO Worried?),” *The National Interest* (The Center for the National Interest, February 20, 2020), <https://nationalinterest.org/blog/buzz/mediterranean-russian-navy%E2%80%99s-new-playground-nato-worried-84966>.

involvement in the Syrian Civil War amounts to little more than an arms bazaar,<sup>21</sup> showcasing modern Russian equipment for sale on the open market.

This dissertation contributes to current academic literature since there has not been a truly historical look at the modern Russian naval experience in Syria. Much of the existing history-based literature has focused on just the past 30 years, since the fall of the Soviet Union. Furthermore, soon after Russia began supporting Assad in Syria, the operation was overshadowed by Russia's invasion and annexation of the Crimean Peninsula, and with good reason. However, this has resulted in limited analytic work on the historic nature of their success with expeditionary warfare in the Mediterranean, which could have significant implications in the long-term.

How this historical view of Russian naval operations contributes to current analysis on the subject can best be displayed by looking at other recent studies. In 2016 the Routledge Institute published a detailed analysis of modern Russia and the implications for the West. Although 255 pages long and containing over 85,500 words, the word "Syria" is only used a *single time* in the report: "He [Russian Admiral Vladimir Masorin] also called for reopening Russia's former naval base in Syria to serve a permanent naval presence in the Mediterranean." By contrast, the word "Ukraine" receives 379 mentions; "Georgia" receives 135.<sup>22</sup>

This is due to the study's downplaying of the future threat posed by the Russian military outside of their periphery. Indeed, the publication could be considered hawkish in nature, concluding that, even after Putin is out of power, the most likely outcome for Russia is a continued

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<sup>21</sup> Matthew Bodner, "Russia Shows Early Success, New Capabilities in Syria," Defense News (Defense News, August 8, 2017), <https://www.defensenews.com/home/2015/10/18/russia-shows-early-success-new-capabilities-in-syria/>.

<sup>22</sup> McNabb, David E. Vladimir Putin and Russia's Imperial Revival. Routledge, 2017.

march towards authoritarianism (what they refer to as “Stalin lite”<sup>23</sup>). However, the focus remains on typical threats posed by a continental power, not an expeditionary force.

While most literature focuses on Russian threats to Europe (Ukraine and the Baltic states, primarily), there has nonetheless been numerous studies on Russian operations in the Mediterranean, some examples of which are shown here. However, seldom do the studies look at these operations through a historical lens, short of Russian history following the collapse of the Soviet Union. That narrow focus may lead to a downplaying of the importance of what Russia was able to accomplish in Syria.

For example, in 2019 the George C. Marshall European Center for Security Studies published an article by Dmitry Gorenburg titled “Russia’s Naval Strategy in the Mediterranean.”<sup>24</sup>

An excerpt from the study reads:

Although the Russian Navy’s missions in the Mediterranean are primarily related to coastal defense and protection of territorial waters, conventional deterrence has come to play an increasingly important role since the development of a ship-based cruise missile capability. The Russian Navy has sought to establish credible maritime conventional deterrence versus NATO through the combination of air defenses and cruise missile-equipped ships, which work together to signal that any use of NATO naval forces against Russian ships and facilities would be highly costly for the adversary.<sup>25</sup>

Gorenburg couches Russian Mediterranean operations in the same language as would be used regarding Russian naval missions in the Black or Baltic Seas, identifying them as primarily related to “coastal defense” and “protection of territorial waters” – even though, legally, Russia has no territorial waters in the Mediterranean, nor a coast to defend. The author attempts to

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<sup>23</sup> Ibid, p. 187.

<sup>24</sup> Gorenburg, Dmitry. “Russia’s Naval Strategy in the Mediterranean.” Russia’s Naval Strategy in the Mediterranean. George C. Marshall European Center For Security Studies, July 2019. <https://www.marshallcenter.org/en/publications/security-insights/russias-naval-strategy-mediterranean-0>.

<sup>25</sup> Ibid, p. 1.

explain this contradiction by stating that “Russia has traditionally considered coastal defense to mean simply keeping foreign navies away from the Russian coast; since 2015, however, the coastal defense mission has come to encompass protection of Russian forces in Syria as well.”<sup>26</sup> This apparent change in Russian doctrine *in practice* is remarkable, and if accepted allows otherwise offensive naval operations to be regarded instead as defensive in nature.

This defensive view of the Russian navy leads to the conclusion that cruise-missile laden ships are being sailed in the Mediterranean for purposes of deterrence against NATO aggression against Russian “ships and facilities.” While this could be interpreted as accurate – Russian naval vessels with advanced anti-ship cruise missiles have been employed to deter US and NATO from taking action against the maritime resupply of Russian and Syrian forces in the Middle East – it ignores the context of how Russia has actually projected power in the Mediterranean. RFN missile-laden ships are protecting a massive military sealift in support of a civil war away from Russia’s periphery, along with utilizing land-attack cruise missiles and carrier-supplied naval aviation in direct support of Russian ground forces. In context, these operations have already moved far beyond concept of conventional deterrence.

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<sup>26</sup> Ibid, p. 3.

## CHAPTER 2

### ACTIONS OF THE RUSSIAN NAVY IN SUPPORT OF ASSAD DURING THE SYRIAN CIVIL WAR

#### 2.1 Attack on the Islamic State

December 8<sup>th</sup>, 2015 was a typically clear Tuesday afternoon in the warm waters between Cyprus and the Levant. Even in December, the eastern Mediterranean is one of the most serene bodies of water in the world, making it an ideal destination for cruise ships and fishing boats alike. This day was no different – the morning haze had burned off by 9:00am, and both the air and water temperatures approached 70 degrees Fahrenheit.<sup>27</sup>

Against this peaceful backdrop, it would have been difficult to imagine that, just a few hundred miles to the east, the bloodiest civil war of the 21<sup>st</sup> century was occurring.<sup>28</sup> The Syrian Civil War, more than 4 years old by this point, had already claimed over 400,000 lives according to some reports. One in ten Syrians had been killed or injured as a result of the war, and the life expectancy of a Syrian had dropped remarkably from 70.5 years to 55 years.<sup>29</sup> The rise of the Islamic State (IS) and the ensuing displacement of the civilian population created a refugee crisis the likes of which Europe had not seen since World War Two.<sup>30</sup>

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<sup>27</sup> "Past Weather in Mediterranean Region, Turkey - Yesterday and Last 2 Weeks," timeanddate.com, accessed September 4, 2020, <https://www.timeanddate.com/weather/@10922502/historic?month=12>.

<sup>28</sup> Technically, the Second Congo War, which ended in 2003 with an estimated 3 million dead, was deadlier; however, that war began in 1998. The Syrian Civil War takes the dubious honor among conflicts that began after the turn of the millennium.

<sup>29</sup> Priyanka Boghani, "A Staggering New Death Toll for Syria's War -- 470,000," PBS (Public Broadcasting Service, February 11, 2016), <https://www.pbs.org/wgbh/frontline/article/a-staggering-new-death-toll-for-syrias-war-470000/>.

<sup>30</sup> Lydia DePillis, Kulwant Saluja, and Denise Lu, "75 Years of Major Refugee Crises around the World," The Washington Post (WP Company, December 21, 2015), <https://www.washingtonpost.com/graphics/world/historical-migrant-crisis/>.

Suddenly, the calm waters of the Mediterranean convulsed momentarily as first one object, then three more, breached the surface. The 20-foot-long missiles began racing eastward, yellow flame and white contrails making them easily visible against the blue sky. Ten seconds into flight, the missiles' liquid-rocket-fueled boosters separated from the main body, and solid-rocket-fueled turbojet engines kicked in. No longer expelling flame and smoke, the weapons became more difficult to follow as they accelerated rapidly and streaked towards the Syrian coastline.<sup>31</sup>

Covering 250 nautical miles in less than thirty minutes, the four missiles accelerated to 600 miles per hour<sup>32</sup>, soaring low across the Syrian countryside, guided by a combination of satellite-provided coordinates and onboard imagery recognition software. The weapons eventually found their targets – Islamic State positions in their then-capital of Ar Raqqa, Syria, nearly 200 miles inland from the coast. The weapons detonated a thousand pounds of high explosive within three meters of their targets: an ammunition warehouse and a factory which produced mines for the Islamic State. Both targets were reportedly destroyed.<sup>33</sup>

## 2.2 Not the Usual Suspects

By 2015, of course, the use of land attack cruise missiles in wartime, even from a submarine, was far from unusual. Making their debut in Desert Storm, more than 2,200 of the

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<sup>31</sup> Haaretz.com, "Russian submarine launches cruise missiles toward Syria targets," YouTube Video, 1:09, December 9, 2015, <https://www.youtube.com/watch?v=y2twAIAftMc>.

<sup>32</sup> "3M-14 Kalibr (SS-N-30A)," Missile Defense Advocacy Alliance, May 2017, <https://missiledefenseadvocacy.org/missile-threat-and-proliferation/todays-missile-threat/russia/ss-n-30a-kalibr/>.

<sup>33</sup> Christopher P. Cavalas, "Russian Submarine Hits Targets in Syria," Defense News (Defense News, August 8, 2017), <https://www.defensenews.com/breaking-news/2015/12/08/russian-submarine-hits-targets-in-syria/>.

weapons had been employed in conflict, on fifteen different occasions,<sup>34</sup> and often from a submarine.<sup>35</sup> Until 2015, however, only the US-produced Tomahawk Land Attack Cruise Missile (TLAM) had ever been fired in anger, and only by the United States or the United Kingdom.

This day was different. The submarine responsible for the destruction in Ar Raqqa was neither British nor American, but a Russian *Kilo*-class fast attack submarine, the *Rostov-on-the-Don*, and the missile was the 3M-14T *Kalibr* (designated by NATO as the SS-N-30a). The *Kalibr* had made its wartime debut just two months earlier, when a surface-ship-launched variant of the missile was fired from four Russian Federation Navy (RFN) vessels in the Caspian Sea. On October 7, 2015, a 2,000-ton *Gepard*-class frigate, along with three 1,000-ton *Sviyazhsk* missile patrol boats, shot a total of 26 cruise missiles, which flew over Iranian and Iraqi airspace in order to reach their destinations, striking numerous targets associated with the Islamic State.<sup>36 37</sup>

### 2.3 The Syrian Express

Prior to the introduction of the Tomahawk in Desert Storm, the only way a nation could project power from the sea (with the exception of naval gunfire or nuclear missiles) was through the introduction of ground forces via amphibious landings or airstrikes from an aircraft carrier. Those methods require both sea control (which the U.S. has enjoyed across the globe since the

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<sup>34</sup> Niall McCarthy and Felix Richter, “Infographic: Tomahawks Have Been the US Weapon of Choice for Years,” Statista Infographics (statista.com, April 10, 2017), <https://www.statista.com/chart/8899/tomahawks-have-been-the-us-weapon-of-choice-for-years/>.

<sup>35</sup> Norman Polmar and Thomas B. Allen, “Naval Weapon of Choice,” *Naval weapon of choice* (U.S. Naval Institute, February 21, 2019), <https://www.usni.org/magazines/naval-history-magazine/2016/february/naval-weapon-choice>.

<sup>36</sup> David Cenciotti, “Watch Russian Warships Launch Cruise Missiles against Targets in Syria from the Caspian Sea,” *The Aviationist*, October 7, 2015, <https://theaviationist.com/2015/10/07/watch-russian-warships-launch-cruise-missiles-against-targets-in-syria-from-the-caspian-sea/>.

<sup>37</sup> The relatively small size of these ships is of significance; their American counterparts (surface vessels equipped with land-attack cruise missiles), the Arleigh Burke-class destroyers and the Ticonderoga-class cruisers, are significantly larger, displacing 9,200 and 9,600 tons respectively. Historically, such small combatants were not capable of firing missiles large enough to travel such long distances.

end of the Cold War), a substantial financial investment in an amphibious force or in an aircraft carrier program. Both options carried a significant risk to Marines or to naval aviators. Great maritime powers have historically used the control of the sea to enable their naval forces to project power. After World War II, the United States gained the upper hand in global sea control; following the demise of the Soviet Union, that control was unchallenged. Russian Federation Navy (RFN) involvement in Syria represents an end to that monopoly, and thus is an unprecedented potential threat to the West.

The most significant RFN power projection operations in the Syrian Civil War were not the 2015 missile strikes, however. The real support to ground operations (first for Assad's troops, and then for Russian ground forces) came from the massive sealift effort that Russia initiated at the very beginning of the civil war. Dubbed the "Syrian Express," the Russians have moved millions of tons of troops and equipment from positions in the Black Sea through the Turkish Straits. Unlike most sealift operations, the majority of war materiel has not been moved by merchant vessels, but via RFN amphibious ships, escorted by missile-laden small and large combatants. This effort was a concerted effort by the Russian Navy, as amphibious vessels from all four Russian fleets (including the Pacific, nearly ten thousand nautical miles and three weeks away)<sup>38</sup> took part in the effort. The reason for this militarization of a normally civil maritime operation can be traced to a 9,000-ton cargo vessel: the M/V *Alaed*.

#### 2.4 The Saga of the M/V *Alaed*

A little-remembered footnote to the early day of the Syrian Civil War is the fact that, momentarily, tensions between the United Kingdom and Russia skyrocketed in June of 2012.

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<sup>38</sup> "Sea Routes and Distances," Ports.com, September 3, 2020, <http://ports.com/sea-route/>.



Early that month, press reports noted that a Russian-owned merchant vessel, the *M/V Alaed* was heading from the Baltic Sea towards the Mediterranean with a shipment of refurbished attack helicopters for the Assad regime.<sup>39</sup> This was back in the early days of the conflict, when only 13,000 people had been reportedly killed, and the West was hoping for a diplomatic solution that would peacefully remove President Assad from power. Just days earlier, however, reports came out that the Syrian military was using attack helicopters to reportedly strafe civilians, and then-Secretary of State Clinton decried the delivery, asking “how can the Russians conscience their continued military sales to Syria?”<sup>40</sup>

British security services made plans to halt the shipment prior to it entering the Mediterranean, even without a formal embargo of Syria in place. These plans included “an armed boarding and seizure of the vessel, an action that surely would have elicited Russian ire.”<sup>41</sup> Before the situation came to a head, a British insurance organization was persuaded to drop coverage of the ship and cargo, forcing the shipping company to turn the vessel around and head back to Russia.<sup>42</sup>

For the Russians, this must have seemed like *déjà vu*. Unable to secure Sea Lines of Communication (SLOCs), they would be unable to maintain support for an ally embroiled in civil conflict. Eighty years earlier, Soviet tank units were aiding Republican forces on the Iberian

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<sup>39</sup> Charles Clover, “Confusion Clouds Fate of Syria Helicopters,” *Financial Times* (*Financial Times*, July 13, 2012), <https://www.ft.com/content/590748d4-ccf0-11e1-9960-00144feabdc0>.

<sup>40</sup> AP, “Hillary Clinton: Russia Sending Attack Helicopters to Syrian President Bashar Assad's Regime,” *CBS News* (*CBS Interactive*, June 12, 2012), <https://www.cbsnews.com/news/hillary-clinton-russia-sending-attack-helicopters-to-syrian-president-bashar-assads-regime/>.

<sup>41</sup> David Osborne, “Tensions between UK and Russia Soared over Syria-Bound Helicopters,” *The Independent* (*Independent Digital News and Media*, June 21, 2012), <https://www.independent.co.uk/news/world/politics/tensions-between-uk-and-russia-soared-over-syria-bound-helicopters-7869850.html>.

<sup>42</sup> “UK Insurers Foil Syrian Munitions Deal with Russia,” *Insurance Times*, June 21, 2012, <https://www.insurancetimes.co.uk/uk-insurers-foil-syrian-munitions-deal-with-russia/1397183.article>.

Peninsula during the Spanish Civil War. As the Nationalists slowly gained maritime supremacy in the Mediterranean, Russia was forced to withdraw ground forces and material support<sup>43</sup> (this will be expounded upon in Chapter 6).

History would not repeat itself in this case. Realizing their merchant fleet was at the mercy of international shipping insurers, President Putin turned to the Russian Federation Navy's amphibious assets. A force of marginal capability built during the Cold War, the nation's entire order-of-battle of *Alligator*- and *Ropucha*-class Landing Ship – Tank (LST) vessels were enlisted in the effort. This meant marshalling forces from their bases in the Arctic, the Baltic Sea, the Black Sea, and even the Pacific, in an effort to continue the resupply of Syrian (and eventually Russian) forces embroiled in the conflict.<sup>44</sup> If the UK or US had any thoughts of seizing a Russian merchant ship, surely they'd think twice about attempting to board a Russian Naval ship, painted grey and sailing through international waters.

Still, the Russians were not going to take any chances. While the sealift was underway, Moscow began sending naval combatants armed with anti-ship cruise missiles<sup>45</sup> to the eastern Mediterranean, reaching numbers not seen since the Cold War.<sup>46</sup> While some of these same missile boats and ships are capable of launching LACM attacks into Syria in support of Russian ground forces, their primary role is to protect the transport vessels delivering men, arms and

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<sup>43</sup> Mikhail Zhirokhov, "Советская Авиация Во Время Гражданской Войны в Испании," ("Soviet aviation during the Spanish Civil War"), Наука и Техника, March 7, 2020, <https://naukatehnika.com/pyilayushhee-nebo-pirenee-2.html>.

<sup>44</sup> "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/>.

<sup>45</sup> This will be discussed later in the paper. *Kalibr* actually refers to a family of missile systems, including primarily the Land Attack variant (SS-N-30a) and the Anti-Ship Cruise Missile variant (SS-N-27a, also known as *Sizzler*). The ASCM is one of the most capable anti-ship missiles in the world, traveling at terminal speeds over Mach 3. Any RFN ship or submarine that has the capability to fire one of the variants has the ability to fire the other as well.

<sup>46</sup> Russia Monitor, "Russia Strengthens the Mediterranean Squadron," Warsaw Institute, July 24, 2018, <https://warsawinstitute.org/russia-strengthens-mediterranean-squadron/>.

supplies to Tartus.<sup>47</sup> <sup>48</sup> In late 2015 these forces were joined by the two largest ships in the Russian Federation Navy inventory: the world's only nuclear-powered cruiser (the *Kirov* CGN) and Russia's only operational aircraft carrier (the *Kuznetsov* CV). During this deployment, aircraft from the *Kuznetsov* even participated in sorties over Syria, marking the first time the Russian or Soviet navies have used an aircraft carrier in the wartime employment of airpower.

Between land-based Russian aircraft flying off the Syrian coast, surface vessels carrying some of the world's most advanced anti-ship missiles, and quiet *Kilo*-class submarines operating out of Tartus naval base, the Russians have amassed a significant sea control capability above, on the surface of, and below the eastern Mediterranean. Furthermore, all of those platforms are also capable of projecting power hundreds or even thousands of miles inland. These two missions – effective deterrence against outside interference with the Syrian Express, and the ability to project power far from Russian territory -- have contributed greatly to the success of Russia's security objectives in the Syrian Civil War.<sup>49</sup>

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<sup>47</sup> Maria Tsvetkova, "Exclusive: Russia, despite Draw down, Shipping More to Syria than Removing," Reuters (Thomson Reuters, March 30, 2016), <https://www.reuters.com/article/us-mideast-crisis-syria-russia-supplies/exclusive-russia-despite-draw-down-shipping-more-to-syria-than-removing-idUSKCN0WW0DJ>.

<sup>48</sup> Igor Sutyagin, "Detailing Russian Forces in Syria," RUSI (Royal United Services Institute, November 13, 2015), <https://rusi.org/publication/rusi-defence-systems/detailing-russian-forces-syria>.

<sup>49</sup> Bill Neely and Saphora Smith, "As the U.S. Withdraws, Assad and Putin Are Emerging as the Winners in Syria," NBCNews.com (NBCUniversal News Group, October 15, 2019), <https://www.nbcnews.com/news/world/u-s-withdraws-assad-putin-are-emerging-winners-syria-n1066231>.

## CHAPTER 3

### LITERATURE REVIEW

A persistent challenge in organizing a paper such as this is that many of the broad themes discussed intertwine with one another, with few natural boundaries. For example, the literature on maritime geography is written from a historical naval perspective; strategists couch their theories in geographic position; and so on. Sergei Gorshkov, the head of the Soviet Navy during much of the Cold War, presents a key historical perspective on Soviet operations of the time, yet is also considered a naval strategist along the lines of Mahan or Corbett. Thus, sources used in this dissertation typically do not fall into a single section but find their way into various chapters throughout the work.

#### 3.1 Naval Strategy and Maritime Theory

Alfred Thayer Mahan published his landmark treatise on naval strategy, “The Influence of Seapower on History,” in 1889. This was a dozen years before the first aircraft achieved powered flight, prior to the successful employment of a submarine, not to mention earlier than the development of the missile, nuclear weapons, space operations or cyber warfare. It is difficult for some to believe that Mahan’s thoughts on doctrine, or those of Corbett (a decade later), would have any application to the modern warfighter.

Mahan, however, reaches all the way back to the Second Anglo-Dutch war of 1665 as the starting point for his landmark publication, nearly a quarter millennium prior to the publication of “Influence.” In other words, in order to convince American policy makers of the importance of sea power in the late 19<sup>th</sup> century (his *raison d’être*), Mahan provides lessons from a conflict

nearly two hundred years prior to the Industrial Revolution; surely technological and geopolitical conditions at the time of Mahan's writings must have seemed far removed from those facing the Dutch in 1665. Yet his theories (based in part on two-hundred-year-old lessons learned) were seen as groundbreaking and in the following century untold fortunes were spent on shipbuilding programs based on his principles.

Even today, Mahan and Corbett are taught in naval war colleges during the first week of class. This is because the heart of their theories deals with the ultimate importance of maritime trade, the projection of kinetic naval power, the unchanging constraints of maritime geography, and the significance of control of the sea – aspects of warfare that are just as relevant today as they were in 1889. Modern-day Russian naval operations in the eastern Mediterranean are a case in point. The SS-N-27 anti-ship cruise missile (and the variety of ships and subs that carry them), technologically superior to its counterpart employed by Western navies, is built for a great Mahanian battle-at-sea to destroy their enemy's fleet and establish sea control. Another variant of the same missile, the SS-N-30 *Kalibr*, has been employed in support of Russian ground forces in Syria, a role that would make Julian Corbett smile. Thus, while the tools and their applications have changed, the underlying naval truisms that classic works on sea power were built upon remain relevant today.

Beginning with such theories, a modern author, Andrew Lambert, has taken a fresh look at naval strategy in his 2018 book "Seapower States: Maritime Culture, Continental Empires and Conflict that Made the Modern World." This work revisits the age-old discussion of the "Whale versus the Elephant," maritime powers in history as compared to continental powers. The study of this dichotomy goes as far back as Thucydides' analysis of Athenian naval power against

Spartan ground forces in the Peloponnesian War. Lambert takes a historically unique view that Alfred Thayer Mahan's redefining of the original Greek notion of "sea power" shifted the meaning of the phrase to mean simply "strategy" vice "culture," thus allowing for a much more inclusive list of such states. For his part, Lambert's list only includes 5 such "sea power states" in all of history: Athens, Carthage, Venice, the Dutch Republic, and Britain. Other states were too weak to fit his definition (such as Genoa and Rhodes), while other Great Powers that developed powerful navies used them for historically continental purposes.<sup>50</sup>

Lambert dedicates an entire chapter to the latter, specifically Peter the Great's attempt to build a maritime mindset from scratch. According to Lambert, while Peter's accomplishments in this regard were extraordinary, economic, geographic and historical factors would not allow Russia to become a true sea power state in the original Greek sense of the word. This is key to any discussion of Putin's attempted transformation of the Russian Federation Navy into an offensive, expeditionary force, particularly since the same limiting factors exist today.

The two "founding fathers" of modern naval theory will be discussed extensively in Chapter 4. Alfred Thayer Mahan's 1890 masterpiece "The Influence of Sea Power Upon History, 1660-1783" is still considered the cornerstone of today's navies. With the rising Chinese fleet and a revanchist Russian Federation Navy, the prospect for Mahanian "great fleet engagements," considered highly unlikely just a few short years ago, has now reentered the realm of possibility. While Captain Mahan's sea control theories continue to have staying power, it is Sir Julian Corbett's "Principles of Maritime Strategy" that will receive much of the attention in this work.

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<sup>50</sup> Andrew Lambert, *Seapower States: Maritime Culture, Continental Empires and the Conflict That Made the Modern World* (New Haven, CT: YALE University Press, 2019), 6.

Using *limited* or *local* control of the sea to affect outcomes of battles on the land is Corbett's contribution to naval theory and is very much in line with what the Russian Federation Navy has displayed off the coast of Syria during the civil war. One of the stars of this dissertation, the *Kalibr* cruise missile, has two distinct variants – a deadly anti-ship version (built for sea control), and a very capable land-attack model (for power projection ashore). It could be said that the missile itself has a Mahanian variant and a Corbettian variant.

A prolific contemporary author, Professor James Holmes of the Naval War College, explores the complementary aspects of Mahan and Corbett in his 2016 article, "The Age of Great Sea Battles Isn't Over." Highlighting the staying power of the two sages, in 2021 Kevin D. McCranie published "Mahan, Corbett, and the Foundations of Naval Strategic Thought." Critically analyzing both of their careers, evolving views, disagreements with one another, and impact on world history, McCranie's book is thoroughly readable and should be a requirement for the contemporary student of maritime theory.

In addition to Mahan's and Corbett's insights on strategy, generations of naval planners (both in the United States and its allied nations) have been influenced by the writings of Dr. Milan Vego of the U.S. Naval War College. Born in 1940, Dr. Vego was commissioned in the Yugoslavian Navy in 1961 and was granted political asylum in the United States in 1973. In 1981 he completed his doctoral dissertation titled *The Anatomy of Austrian Sea Power, 1904-1914*, and has been an academic staple of maritime operational theory ever since. Similar to what Mahan and Corbett were able to accomplish at the strategic level, Vego spent a lifetime analyzing historical major combat operations, gleaning maxims that can be applied to modern-day naval doctrine at the operational level of war.

In 1991 Dr. Vego became a Professor of Operations in the Joint Maritime Operations course in Newport, Rhode Island, and has since been teaching mid-grade and senior naval officers the precepts of planning major combat operations and campaigns. His writings have been used as textbooks at the Naval War College for generations, and it would be no overstatement to say that every operational planner in the U.S. Navy today is a disciple of Vego. His works feature prominently in this paper, most notably "Major Naval Operations," "Maritime Strategy and Sea Control: Theory and Practice," "Operational Warfare at Sea: Theory and Practice," and "Naval Strategy and Operations in Narrow Seas." While these books offer tenets that apply universally at the operational level of war, like other strategists Vego employs an historical approach to prove his theories, with the Russo-Japanese War featured prominently. In addition, Vego has a chapter in Hattendorf's "Naval Strategy and Policy in the Mediterranean: Past, Present and Future" titled "Soviet and Russian Strategy in the Mediterranean since 1945." Thus, while a generalist in trade, Vego's career spanning much of the Cold War has made him a specialist on the Russian maritime experience.

Another important (and much less well-known) author when it comes to Soviet operational theory and practice is Edward Wegener. A West German naval officer during the Cold War, Wegener developed what could be considered a hawkish (and somewhat alarmist) view of the Soviet Navy as the Cold War reached its apex in the 1970s and 1980s. In 1972 he wrote the concise "The Soviet Naval Offensive: An Examination of the Strategic Role of Soviet Naval Forces in the East-West Conflict." Originally produced in German, it had been translated by the U.S. Naval Institute at Annapolis, Maryland. Wegener, as the subtitle implies, moves quickly beyond a recounting of Soviet naval hardware capabilities and examines the role the Red Navy played in



the then-occurring Cold War. Obviously limited by the date of publication, the author clearly understood the significant change the Soviet Navy was going through at the time. The title, as well as the chapter titles provide evidence of this important strategic shift in Russian doctrine: “Naval strategy in the atomic balance,” “From Coastal Defense to strategic naval offensive,” “The expansion of Soviet naval strategy to the oceans,” etc.

It was this book that provided one of the inspirations for this dissertation topic, as Russia’s contemporary metamorphosis mirrors (in many respects) the developments Wegener writes about. To Wegener, the Soviet Navy of the mid-1970’s was in the midst (or even the end) of a revolutionary switch from a historically Russian defensive strategy. In taking a Mahanian approach to the use of sea power, Wegener says “This, then, leads to the question: has Soviet Russia performed the transition from a continental to a sea-oriented mentality?”<sup>51</sup> This is, in essence, one of the primary questions this dissertation attempts to answer.

### 3.2 Geography

Another book that heavily influenced the decision to choose this dissertation topic was Robert D. Kaplan’s “The Revenge of Geography: What the map tells us about coming conflicts and the battle against fate” (2012). The end of the Cold War, with the simultaneous (though not altogether unrelated) computer revolution, appeared to shrink (or “flatten”) the world and make geographic distances and differences less important than at any other time in world history. Kaplan’s work lays out compelling arguments that geography is not just back; it never left. Quoting Colin Gray, Kaplan writes: “That technology has canceled geography contains just

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<sup>51</sup> Wegener, 4.

enough merit to be called a plausible fallacy.”<sup>52</sup> Kaplan introduces a new generation of reader to the fathers of geopolitical theory, Sir Halfred Mackinder and Nicholas J. Spykman, and their theories of a Eurasian heartland or rimland threat to the rest of the globe. In very concise and understandable language, in subsequent chapters Kaplan explains the importance of maritime geography (“The Allure of Sea Power”) and the ways in which geography has influenced Russian history (“Russia and the Independent Heartland”).

In 2015, Tim Marshall wrote “Prisoners of Geography: Ten Maps That Explain Everything About the World.” Written in a similar vein as Kaplan’s earlier work, Marshall’s first chapter deals with Russia, perhaps due to the invasion of the Crimean Peninsula shortly before publishing. While both authors ensure the readers understand that geography is not the *sole* determinant of a state’s actions (Kaplan in particular is sensitive to accusations of fatalism), their books highlight the fact that geography is at least an important factor in such actions. The past decade appears to bear this out, most notably in Europe; as Kaplan puts it, “Times of global upheaval, testing as they do our assumptions about the permanence of the political map, lead to a renaissance in thinking about geography.”<sup>53</sup> Even if the West had moved on from such antiquated notions as buffer states and avenues of approach, it appears that Russia (or at least Vladimir Putin) did not. As Dr. Simon Serfaty (professor emeritus at Old Dominion University) might say, geography matters, more or less: sometimes it matters more, sometimes it matters less. Today, it appears to be mattering more.

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<sup>52</sup> Kaplan, 33.

<sup>53</sup> Kaplan, 59.

As previously mentioned, much of the literature that is focused on areas such as Russian history or naval theory, are also sources of information on geographic challenges facing the Russians. British journalist David Fairhall, *The Guardian's* war correspondent at the time, produced his work *Russian Sea Power* in 1971. Fairhall attempts to examine the past to help explain the maritime developments that were then occurring in the Soviet Union. Note that the title mentions *sea* power, vice strictly *naval* force. While outside the scope of this paper, Fairhall spends much of the book analyzing other tools of Soviet maritime power, such as the merchant marine, fishing concerns, and oceanography, providing a much more comprehensive view of this question.

Two chapters – “Ice and Claustrophobia” and “Difficult Straits” – present timeless factors that affect all nations’ maritime strategies: climatological and geographical. The desire for a warm-water port is so ubiquitous in discussions about Russian strategic objectives, it has almost become a trope. Fairhall, however, describes the problem in historic terms. He weaves a thread from Peter the Great and Catherine the Great’s victories in gaining initial control of the Baltic and Black Seas, to the liabilities these straits become in wartime, to the political conventions that to this day place restrictions on Russian sovereignty on the sea. The author completes his work by looking at the evolution of Russian naval strategy and wrestling with the question as to whether or not the Soviets had moved to a more offensive posture. Fairhall comes to the conclusion that a shift had occurred and began with the 1967 conflict between Israel and its Arab neighbors.

Though not yet “kinetic” (using a 21<sup>st</sup> century term for physically destroying targets), Fairhall concludes his thesis by describing the impact that Admiral of the Fleet Sergei Gorshkov

(the head of the Soviet Navy for three decades) had on transitioning to what Wegener terms the “Soviet Naval Offensive:”

In the negative sense Admiral Gorshkov seems to have won his battle to free the Navy from the ‘defensive’ influence of the Red Army. There are limited signs that he is now reshaping his forces to suit a more offensive theoretical war strategy. As an instrument of ‘cold war’ diplomacy, to bolster Egyptian morale, to organize military aid for India or show the flag in Cuba, the Soviet Navy has been clearly on the offensive for years.<sup>54</sup>

However, a more significant turning point could be coming, Fairhill warned. Recounting recent amphibious exercises, he states, “If (Russian amphibious forces) were actively used to intervene in some local conflict in the Middle East it would of course be an historic turning point in the Soviet Union’s naval strategy.” This prediction would take 40 years to materialize, off of the coast of Tartus.

In the Wikipedia era of access to vast amounts of unverified data on any topic imaginable, it is sometimes challenging to find *authoritative* information on a given subject, even one that doesn’t change rapidly, such as physical geography. From 1978 through the present day, the Center for the Study of Marine Policy at the University of Delaware published a series of geographically focused books with just such authority titled “International Straits of the World.” This author stumbled upon the series while writing a paper for an Energy Security course in the summer of 2017. The 1982 book *The Red Sea and the Gulf of Aden* helped unlock the mysterious relationship between the world of geography and human development in presciently explaining why, 40 years after publishing, there could be a security challenge in the Bab al Mandab brought on by two failed states located on either side of the strait. The same level of detailed expertise is

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<sup>54</sup> Fairhall, p. 260-261.

evident in the two volumes that directly address the chokepoints that Russia faces in Europe: Alexandersson's "The Baltic Straits" and Rozakis and Stagos' "The Turkish Straits." Both volumes not only describe the strictly geophysical aspects of their respective narrows, but also provide a narrative as to how those constraints have impacted history.

### 3.3 History

Though there are countless books available documenting Russia's naval history, one outstanding source turns out to be a master's thesis written in 1988 by a then-U.S. Navy Lieutenant attending the Naval Postgraduate School in Monterey, California. The work, authored by Richard W. Daniel and titled "A History of Russian and Soviet Naval Development," is rich in detail, and broad in scope. Unlike most writers on Russian or Soviet naval history, Daniel goes back even further than Peter the Great, who is widely considered to be the father of the Russian Navy. In a very succinct way, Daniel is able to add context to the Russian experience, detailing a history of invasions from Teutonic Knights to the ravaging Mongols.

From a brief period of Russian successes against the Turks in the 1700's to the consistently abysmal defeats at the hands of geography and the British, French, Japanese and Germans, Daniel makes a compelling argument that Russian naval concerns are heavily influenced by a history of humiliation. Unfortunately, he stops his thesis after only a brief foray into the Khrushchev era, and offers no assessment of the future, citing a "desire to avoid accidental reference to classified information."<sup>55</sup> While he is to be commended for his concern to protect

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<sup>55</sup> Richard W. Daniel, *A History of Russian and Soviet Naval Development* (Monterey, CA: Naval Postgraduate School, 1988), 49.

national secrets, his readers would have been greatly served by a predictive analysis based on this “long view” of Russian history.

Two books were consulted that could be considered exhaustive works at the time they were published, both by authors with the last name of Mitchell (though, as far as can be determined, they were not related). The first, “The Maritime History of Russia, 848 – 1948” was written by British and Irish correspondent Mairin Mitchell in 1949. Though not strictly naval (as the title of the volume implies), her work delves deeply into the wartime and peacetime usage of the Imperial and Soviet navies. Uniquely, the book is organized not chronologically but geographically. Hence, specific wars do not warrant a chapter, nor even a subchapter, with one exception: the Russo-Japanese War (under the “Pacific” chapter).

The second book is Donald W. Mitchell’s masterwork “A History of Russian and Soviet Sea Power.” Published in 1974, this effort is organized more conventionally, and includes three chapters alone on the Russo-Japanese War (the same number as dedicated to World War II). This highlights the importance of the turn-of-the century war with Japan in Russian naval history, which is one reason why it is included in Chapter 8 as an example of Russian inability to successfully project sea power.

### 3.3.1 The Russo-Japanese War

In addition to the previously mentioned works, Ernest Eller’s 1971 “The Soviet Sea Challenge,” while not a history work, was the best source of concise and relevant information on the Russo-Japanese War for the purposes of this paper. Eller, who was the U.S. Navy’s chief historian for 14 years, used the Imperial Navy’s disastrous experience in the Pacific to help explain the “challenge” facing the Soviet fleet. While written from an adversarial point of view in the Cold

War, Eller nonetheless gives credit where credit is due, highlighting the incredible logistic effort it took to get the Soviet Baltic squadron around Africa and into the theater of operations. In the same vein, "The Soviet Navy: Strengths and Liabilities" (edited by Bruce W. and Susan M. Watson) includes a chapter by Peter Tsouras on "Soviet Naval Tradition" that also highlights the impact and importance of the Russo-Japanese War, calling it "in many respects, a replay of the Crimean War."<sup>56</sup>

### 3.3.2 The Soviet Experience in the Spanish Civil War

While volumes have been written about Russia's maritime experience in the Russo-Japanese War – Julian Corbett himself wrote an official (and originally classified) two-volume work on the subject – very little is written about the Soviet Navy's involvement in the Spanish Civil War. Though Soviet tank brigades provided the same key support to the Spanish Republican government that modern-day Russian tank units provided to the Syrian government, unlike today's Russian Federation Navy, the Soviet Navy of the late 1930's had no capability to support the sealift necessary to continue the ground support. Hence, the Spanish Civil War is often not even afforded a footnote in Russian maritime histories.

An exception to this rule is David Woodward's 1966 volume, "The Russians at Sea: A History of the Russian Navy." A foreign correspondent for Reuters during the Cold War, Woodward places the lacking Soviet sea power of the 1930's in historical perspective, coming "in an age which half expected its wars to be won by aircraft and tanks alone."<sup>57</sup> Other papers and articles fill in the blanks of Soviet naval operations during that era. A 2001 thesis by Commander

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<sup>56</sup> Tsouras...11

<sup>57</sup> Woodward, 204.

John M. Kersh, Jr., of the U.S. Navy entitled “Influence of Naval Power on the Course of the Spanish Civil War, 1936-1939” provides the bulk of source material. An article by Steven J. Zaloga titled “Soviet Tank Operations in the Spanish Civil War,” appearing in a 1999 issue of *Slavic Military Studies*, is an authoritative and entertaining description of the extensive Soviet armored effort conducted on behalf of the Republican cause. It was this article that highlighted the expeditionary nature of the Soviet effort in the Spanish Civil War.

### 3.3.3 The Soviet Navy During and at the End of the Cold War

Perhaps no writer of the early- to mid-Soviet period was as qualified as Robert Waring Herrick, a World War II veteran of the U.S. Navy and a former assistant naval attaché to Moscow who actually served aboard two different Soviet warships on an “exchange” tour. His 1968 book “Soviet Naval Strategy: Fifty Years of Theory and Practice,” complete with a forward by Admiral Arleigh Burke (former Chief of Naval Operations and the namesake of the U.S. Navy’s current workhorse destroyer), was considered a must-read for Cold War naval analysts. This paper relies on Herrick’s authoritative chronology and definitions of the Soviet Old School, Young School, Stalinist and Khrushchev-era navies. As a Russian language expert, Herrick extensively footnotes his work, often from Russian or Soviet original writings.

In March 1983, the CIA published a classified Secret “National Intelligence Estimate” entitled “Soviet Naval Strategy and Programs Through the 1990s,” predicting the direction the Soviet Navy would be headed over the proceeding two decades. Following the fall of the Soviet Union, and after having portions of the document redacted (though not heavily), the report was released to the public. Of course, the CIA failed to predict the fall of the Soviet Union (even months before the occurrence), and thus the major thrust of the analysis is incorrect. However,



the report still reveals a great deal of then-classified information on the U.S. intelligence community's understanding of the state of the Red Navy, which is in itself fascinating.

The CIA states the Soviet Navy's wartime strategy would be one of deterrence and defense – “deploy and provide protection for ballistic missile submarines” and “defend the USSR and its allies from strikes by enemy ballistic missile submarines and aircraft carriers.”<sup>58</sup> Interestingly, while the Soviet Union collapsed and the navy atrophied, an argument can be made that, even through the darkest times of the mid-1990s, the Russian Navy continued this primary mission, and does so to this day.

This product is enlightening in a number of ways. While it addresses the advent of the land attack cruise missile, both the U.S. Tomahawk and Soviet SS-NX-21, it incorrectly assesses the greatest aspect of the development of the LACM to be the nuclear warhead. Still, in seeing the difficulties the Soviets were having in countering the expeditionary naval threat from the United States, one could imagine, given the chance, that the Russians would want to attain these capabilities for themselves.

As previously noted, the Director of Naval Intelligence, as directed by the Chief of Naval Operations, wrote six unclassified studies on the Soviet Navy from 1975 until 1991 and released them to the public. Though they did not realize it at the time, the 1991 “6<sup>th</sup> edition” (titled “Understanding Soviet Naval Developments”) was the last of the Cold War. The Soviet Navy ceased to exist soon afterwards, replaced by first the Commonwealth of Independent States (CIS) Navy, and finally the Russian Federation Navy (RFN). The nearly 200-page document contained a wealth of information, ranging from a theater-by-theater rundown of Soviet naval operations to

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<sup>58</sup> CIA, p.5.

the type of training a typical Russian sailor received. It even included a 65-page platform guide, breaking down every major and minor naval combatant, including aircraft – all at the “unclassified” level.

While the data regarding “current” operations (in the 1980’s) and platform capabilities is surprisingly detailed, at the end of the day, it was just that: data. When it comes to predictive analysis, however, the report is just as wrong as the CIA’s National Intelligence Estimate written eight years earlier. Of course, this report was written six years into Mikhail Gorbachev’s rise to power, and soon after the American success of Desert Storm. Even so, the publication is unimaginative when it comes to the future, still focusing on the importance of nuclear weapons and air defense of the Russian homeland.

Two years after the publishing of the final “Understanding Soviet Naval Developments,” the Director of Naval Intelligence commissioned the Center for Naval Analysis (CNA) to produce “The Future Russian Navy: Interests of the Military (1993).” No longer constrained by Soviet secrecy, the author, Mary C. FitzGerald of the Hudson Institute, compiled an impressive array of articles, book excerpts, and other writings by Soviet and Russian authorities and academics regarding the future of the Russian Navy. With some analytic comments thrown in, the majority of the work is original source quotes of Soviet military and naval strategic concepts, Soviet and Russian doctrine on “Future War,” and the implications that the changing Russian doctrine will have on what the future Russian Navy will look like.

Unfortunately, the piece is poorly organized. With no paragraph numbering or lettering, the reader is forced to flip back and forth throughout the document to determine who is writing and in what period. As an example, the impact of *Operation Desert Storm* on Russian doctrine is

mentioned in the title of six of the sixty-two individual subtitle headings: on pages 31, 41, 52, 58, 70 and 73. As *Desert Storm's* impact is perhaps the most important theme in post-1990 writings, it is left to the reader to mentally compile all of these disparate views into a comprehensive whole. Still, from an analytic (and, as it would turn out, predictive) perspective, the work accomplishes what ONI's "Developments" did not. Russian operations into Syria should not have come as a surprise to readers of the CNA report.

The following year FitzGerald wrote "The Future Russian Navy." The first post-Soviet Russian military doctrine was approved by President Boris Yeltsin in November of that year, validating much of the publication's arguments. As a result, FitzGerald wrote a much more organized and traditional analytical piece for the Royal United Services Institute the following year titled "The New Revolution in Military Affairs." No longer requiring to piece together disparate sources for analysis, FitzGerald was able to point to official Russian doctrine as the source for her conclusions, such as the prioritization of using emerging technologies in any future conflict. Furthermore, in a dramatic turn from past practices, FitzGerald determines that Russian research and development (R&D) would have budgetary priority over procurement, meaning that future Russian militaries would be striving for a qualitative edge, vice the quantitative focus they had historically sought.<sup>59</sup>

#### 3.3.4 Modern Writings on the Russian Federation Navy

Unlike the immutable nature of classic writings on naval strategy, the understanding of the direction of the Russian Navy has changed as their shipbuilding priorities, written doctrine,

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<sup>59</sup> Mary C. FitzGerald, *The New Revolution in Russian Military Affairs* (London, UK: Royal United Services Institute for Defence Studies, 1994), 5.

and actual wartime employment have developed since the end of the Cold War. The importance of Russian employment of deadly military force in Georgia (2006), the Crimean Peninsula (2014), Syria (2015) and Ukraine (2022) cannot be understated. Typically, analysts have to look at doctrinal writings, compare them with adversary force design and make an educated guess at how, if war were to come, the forces might be employed. For example, in 2006 the Chinese navy launched their first Type-071 (*Yuzhao*) LPD, the largest and most modern amphibious ship they had ever built. Western analysts were then tasked with providing assessments as to how the ship would be used in wartime: delivery of tanks in a cross-Strait invasion of Taiwan? Command and control ship for a blockade operation? The vanguard of a quick seizure of the Japanese-controlled Senkaku islands?

With Russia's robust decade and a half of combat operations, Western analysts need not guess; to ascertain how Russia may use naval forces in wartime, one only has to click on one of a plethora of websites dedicated to the subject (War on the Rocks is just one example).<sup>60</sup> The sealift of Syria employed Cold War-era amphibious vessels being escorted by a mixture of older and newer anti-ship cruise missile laden warships. Russia's first land attack cruise missile was used in wartime almost immediately after its first combat deployment (similar to the experience of the American *Tomahawk* in the Gulf War a quarter century earlier). In the strategic realm, Russia utilized naval combat power to successfully impact Russian ground operations in a country that was not contiguous to Russia proper – a feat not observed in the modern era. Even with this evidence, the U.S. Intelligence Community tended to underplay the threat from Russia.

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<sup>60</sup> B. J. Armstrong, "The Russo-Ukrainian War at Sea: Retrospect and Prospect," War on the Rocks, April 21, 2022, <https://warontherocks.com/2022/04/the-russo-ukrainian-war-at-sea-retrospect-and-prospect/>.

Twenty-four years after publishing the last “Understanding Soviet Naval Developments,” the Russian Navy finally achieved recognition by the U.S. Office of Naval Intelligence (ONI), which published its first unclassified focus on Russia since the demise of the Soviet Union, the 2015 “The Russian Navy: A Historic Transition.” By comparison, ONI had already published three such unclassified reports on China’s navy, in 2007, 2009, and 2015. The information contained therein, to a large extent, mirrors the 1991 publication, with the notable exception of current naval operations; no listing of Russian Navy deployments or numbers of days at sea by fleet, let alone any mention of combat operations.

This is striking, as “Transition” was published in December of 2015 – two months *after* the first use of Russian LACMs in combat, and a full three *years* after large amphibious ships, flanked by missile-laden destroyers and cruisers, began the *Syrian Express* operation to provide warfighting materials to the Syrian regime. In fact, the word “Syria” is not mentioned once in the entire document. The reason for this omission is puzzling: it could not be due to classification issues, as Western media (in addition to official Russian sources) had detailed these operations meticulously. Whatever the case, the conclusions reached regarding Russian naval doctrine and missions are flawed, as if the previous years of documented operations had never occurred. Either way, the “transition” in the title of the report, according to ONI, is specifically in reference to a metamorphosis of capabilities and platforms, not one of mission.

The most recent information on Russian naval operations (and their implications) are located in news reports and magazine articles, such as the February 2017 Newsweek article by Owen Matthews, Jack Moore and Damien Sharkov titled “How Russia Became the Middle East’s New Power Broker.” While prior to the 2022 invasion of Ukraine many in the popular media had

dismissed the Russian navy, some outlets began taking developments seriously, particularly in the Middle East and North Africa. This article opens impactfully, describing a former U.S.-backed Libyan senior rebel commander (and U.S. citizen) being brought aboard an aircraft carrier in the Mediterranean to discuss the situation in Libya with a senior defense official of the superpower. While the reader would assume the carrier is American, in reality the Libyan, Field Marshal Khalifa Haftar, was being hosted by Russian Defense Minister Sergei Shoigu onboard the Russian Federation Navy's only aircraft carrier, *Kuznetsov*, on January 11, 2017.

Laying out the difference in foreign policy approaches between Moscow and Washington, Matthews, Moore and Sharkov succinctly describe the impact that two decades of turmoil in the Middle East has had on Russia's strategic position, while making a convincing argument that Putin has gone far in returning them to a place of influence (this assessment would obviously have to be revisited following the Russian Federation Navy's significant struggles in the 2022 war with Ukraine). While some lip service is paid to opportunism by the Kremlin, the article focuses on concerns within Russia over radical Islam as the driving force for their actions in the region. While the subsequent treasure and blood spent in Ukraine casts doubt on Islamic terrorism as Russia's primary national security objective, the piece did at least focus attention on the shifting Mediterranean balance of power (both militarily and politically).

In July 2015, Moscow published its most recent maritime doctrine,<sup>61</sup> superseding one that had been signed fourteen years earlier. In his article for the NATO Defense College titled "Towards a Dual Fleet? The Maritime Doctrine of the Russian Federation and the Modernisation

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<sup>61</sup> Since 2015 there have been other Capstone military documents produced by Russia, including a 2017 *Fundamentals of the State Policy of the Russian Federation in the Field of Naval Operations for the Period Until 2030*; however, none are as applicable to the current discussion as the 2015 Doctrine.

of Russian Naval Capabilities,” Dr. Richard Connolly provides a critique of most analysis of the doctrine to date. Furthermore, he declares that the *Kuznetsov’s* deployment to the Mediterranean the following year “would not have surprised those familiar with the updated maritime doctrine.”<sup>62</sup> He disagrees with most writers covering the topic who criticized the doctrine as being too ambitious, due to the prioritization Moscow had put on the different regions and missions.

That being stated, Connolly spends very little time discussing the Mediterranean or power projection operations. When he does, he states “The precise focus of Russia’s Mediterranean policy, however, remains unclear...”<sup>63</sup> Instead, the author focuses heavily on the importance the new doctrine places on the Arctic and exploration. He concludes that the current (and future) Russian navy is in reality two fleets; large legacy (i.e., Cold War-era) ships for traditional out-of-area missions such as showing the flag, and a smaller, newer “mosquito” fleet, equipped with advanced weaponry to accomplish missions close to home. The author’s points would be bolstered by an exploration of counterarguments – for example, the fact that the legacy vessels can be armed with modern missiles, or the ability of the smaller ships to still have a global reach. However, in general the work is a thoughtful analysis of an otherwise woefully understudied topic.

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<sup>62</sup> Richard Connolly, *Towards a Dual Fleet? The Maritime Doctrine of the Russian Federation and the Modernisation of Russian Naval Capabilities* (Rome, Italy: NATO Defense College, 2017), 1.

<sup>63</sup> *Ibid*, 4.

## CHAPTER 4

### NAVAL STRATEGY

To one degree or another, each of the subsequent chapters will deal with naval history, geography, strategy and technology. It is very difficult (in some cases impossible) to disaggregate the four concepts, and indisputably in the case of Russia. Geographic considerations have from time immemorial driven Russian maritime strategy, and thus its history of maritime operations. Sometimes these geographic truisms can be overcome by technological developments (as when the advent of steam power negated the climatological constraints of wind). Such overlap can be observed from the time the Kievan Rus' portaged the Volga River in order to trade with the Middle East, to today's requirement (thanks to the Montreux Convention) for Moscow to notify Ankara every time it sends supplies via sealift to their ground and air forces operating in Syria. Naval theory, geography, and maritime history are inextricably intertwined.

Even the great naval strategist Alfred Thayer Mahan titled his seminal work "The Influence of Sea Power *Upon History* [emphasis added]." Unwilling to present theory in a vacuum, Mahan turns to history to provide his own case studies as proof. Sir Julian Corbett's "Principles of Maritime Strategy" is built upon examples from the Napoleonic Wars, the Spanish-American war, and the Crimean War, among many others. As the following two chapters deal with geography and history, this section will serve as an introduction into naval strategy, both at the strategic and the operational levels of war, specifically its relevance to Russia. As will be discussed, naval strategy sometimes influences, and at other times is influenced by, the historical conduct of naval warfare.



#### 4.1 Levels of Warfare: Strategic, Operational and Tactical

Modern military doctrine recognizes three “levels of warfare:” strategic, operational, and tactical. U.S. Joint Publication 3-0 (“Joint Operations”) defines the Strategic Level of Warfare as “The level of warfare at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, then develops and uses national resources to achieve those objectives.”<sup>64</sup> The same publication defines the Operational Level of Warfare as “The level of warfare at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas.”<sup>65</sup> Where the rubber meets the road is the domain of the Tactical Level of Warfare, “the level of warfare at which battles and engagements are planned and executed to achieve military objectives assigned to tactical units or task.”<sup>66</sup>

Modern Russian naval operations in the eastern Mediterranean are the result of a strategic decision to employ the navy away from home waters during wartime; as will be shown in Chapter 6, this is not the norm in Russian or the Soviet Union’s history. In this regard, “maritime strategy is a genre of [the] ‘grand’ strategy” of Russia,<sup>67</sup> utilizing all instruments of national power (diplomatic, informational, military and economic) in an attempt to meet strategic security objectives. This strategy led to Russia’s Syrian campaign, which resulted in the planning of several major operations (the “Syrian Express,” combined airstrike and missile launches against the Islamic State and other targets, combined Syrian/Russian ground operations, etc.).

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<sup>64</sup> “JP 3-0, Joint Operations, Joint Chiefs of Staff,” October 22, 2018. [https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3\\_0ch1.pdf?ver=2018-11-27-160457-910](https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_0ch1.pdf?ver=2018-11-27-160457-910), p. GL-16.

<sup>65</sup> Ibid, GL-14.

<sup>66</sup> Ibid, p. GL-17.

<sup>67</sup> James R. Holmes, *A Brief Guide to Maritime Strategy* (Annapolis: Naval Institute Press, 2019), 7.

While tactics employed by the Russian Federation Navy against anti-Assad forces in Syria are worthy of study, it is the successful strategic employment of naval power (and the operational plans drawn up to execute this strategy) that is novel in Russia's history, and therefore the focus of this paper. Setting that stage, two of history's most important theorists on the use of maritime power at the strategic level of war, Captain Alfred Thayer Mahan and Sir Julian Corbett, will be briefly discussed. At the time of their writings, the idea of an "operational level of war" was not identified as a concept separate from the strategic and tactical studies of warfare. "...neither Mahan nor Corbett had an apparently clear understanding of naval operational art."<sup>68</sup> Therefore the writings of Dr. Milan Vego of the Naval War College and the late West German Vice Admiral Edward Wegener will also be introduced in order to fill this gap. Additionally, the views of the United States when it comes to sea control, which has changed over the years as the operational environment changed, will be addressed.

#### 4.2 Strategic View: Mahan and Corbett

To contextualize the significance of Russian maritime operations in the Mediterranean, a framework of naval strategy must be established. Terms like Sea Power, Power Projection, Sea Control and Sea Denial, and SLOC (Sea Line of Communication) protection and interdiction are often used without a common understanding of their meaning or origin. All these concepts are significant in the discussion of modern Russian naval strategy and its relationship to the Syrian Civil War.

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<sup>68</sup> Milan Vego, *Operational Warfare at Sea: Theory and Practice* (New York: Routledge, 2017), 6.

To establish this basic framework, two “sages of sea power,”<sup>69</sup> Captain Alfred Thayer Mahan and Sir Julian Corbett, will be discussed. Though their writings are over a hundred years old, both, in unique ways, have something to say about Russian naval strategy in the 21<sup>st</sup> century. While many martial theorists predate the late 19<sup>th</sup> century writings of Mahan and Corbett, those predecessors – Sun Tzu, Thucydides, Clausewitz, Jomini and others – tended to focus on land warfare, or as naval strategy only as an ancillary field of study:

Both Mahan and Corbett integrated naval history and land warfare theories to develop concepts of naval strategy. The underdeveloped state of the field made this a challenging subject. They had to wade through historical examples to uncover and generate the data that supported their analyses of naval warfare. Theories of land war formed the second half of the equation. If strategic principles from land warfare translated perfectly to the employment of navies, there would have been little need for either Mahan or Corbett; the work of Clausewitz and Jomini would apply seamlessly to the maritime domain. But this was not the case.

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Though the two men’s writings are often viewed as at odds with one another, careful analysis belies this position. Dr. James Holmes, professor at the U.S. Naval War College, wrote in 2016 that:

Around here we often ask students whether they’re Mahanian or Corbettian, but that’s a false choice. Mahan and Corbett agree on a lot. Together they articulate a composite logic and grammar of maritime strategy that remains as compelling as it was when they wrote a century ago.... Mahan excels at explaining the purposes that drive nations to do business in great waters, while Corbett explains how to use sea power on the operational level to help fulfill national purposes. Mahanian logic, Corbettian grammar: you might almost call it a unified field theory of sea power!<sup>71</sup>

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<sup>69</sup> James Holmes, “The Age of Great Sea Battles Isn’t Over,” *The National Interest* (The Center for the National Interest, June 15, 2016), <https://nationalinterest.org/feature/the-age-great-sea-battles-isnt-over-16586>.

<sup>70</sup> Kevin D. McCranie, *Mahan, Corbett, and the Foundations of Naval Strategic Thought* (Annapolis, MD: Naval Institute Press, 2021), 81.

<sup>71</sup> Holmes, *Sea Battles*.

How these sages of maritime theory approached naval warfare gives us insight into the strategy of the modern Russian Federation Navy.

#### 4.2.1 Mahan

Alfred Thayer Mahan (1840-1914) is generally regarded as the most important influence on 20<sup>th</sup> century great power navies, whose writings on sea power is largely reflected in the makeup of the strongest fleets of today. Even the fleets of tomorrow (principally China's) are still being directly influenced by Mahan's writings. In 2004 (not long after China began what has been described as a "spectacular" naval expansion<sup>72</sup>), Professor Holmes delivered a paper in Beijing and noted, "I lost count of how many times the Chinese panelists referred to Mahan. And they invariably quoted the most bellicose sounding of Mahan's precepts, which envisions titanic battles at sea."<sup>73</sup>

Writing as a propagandist of sorts, Alfred Thayer Mahan was attempting to convince the people of the United States (as well as political decision makers) of the essential importance of a world-class navy to an aspiring global power. Failing to understand the role that sea power played in the rise of global powers inspired Mahan's earliest writings:

...he chanced upon *The History of Rome* by Theodor Mommsen. "I was struck," Mahan later recounted, "by the non-recognition of the vital influence of sea power upon Hannibal's career." Mahan soon thought of other examples; one compounded upon the next, and each further solidified his views about the importance of what he labeled "sea power."<sup>74</sup>

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<sup>72</sup> Robert Farley, "China's Navy Buildup Really Is Remarkable, but It May Create a New Set of Headaches for Beijing," *Business Insider* (Business Insider, December 1, 2021), <https://www.businessinsider.com/chinas-remarkable-navy-buildup-may-create-new-problems-for-beijing-2021-12>.

<sup>73</sup> James Holmes, "Mahan Is Alive in China," *The National Interest* (The Center for the National Interest, April 10, 2016), <https://nationalinterest.org/article/mahan-is-alive-in-china-2703>.

<sup>74</sup> McCranie, 13.

Compiling the “Influence of Sea Power upon History” was not simply an attempt by Mahan to develop a theory of naval grand strategy; the goal was to convince the United States to become a maritime power, vice a continental power. According to Mahan, geography constrained nations to choose one path or the other:

Britain’s geographic position contrasted sharply with those of continental states. Mahan noted, “History has conclusively demonstrated the inability of a state with even a single continental frontier to compete in naval development with one that is insular, although of smaller population and resources.” Continental states faced the prospect of overland invasion by powerful neighbors and lacked the freedom of choice possessed by insular states. Although that situation did not condemn the continental states to constant warfare, it did force their leaders to think strategically and act carefully to balance continental commitments against maritime development.<sup>75</sup>

The United States, though a continental power, did not live in the “tough neighborhood”<sup>76</sup> that European land powers found themselves in, and therefore had a choice. Unlike the European powers of the day, the U.S. did not have colonies from which to establish naval bases (nor colonies that required a blue-water navy to protect):

Having therefore no foreign establishments, either colonial or military, the ships of war of the United States, in war, will be like land birds, unable to fly far from their own shores. To provide resting-places for them, where they can coal and repair, would be one of the first duties of a government proposing to itself the development of the power of the nation at sea.<sup>77</sup>

At the time of Mahan’s earliest writings, the lack of immediate overseas concerns caused Americans to see “themselves as a land power,”<sup>78</sup> thus necessitating Mahan’s naval evangelism.

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<sup>75</sup> Ibid, 25.

<sup>76</sup> Ibid.

<sup>77</sup> Alfred Thayer Mahan, *The Influence of Sea Power upon History, 1660-1783* (New York, NY: Dover publications, 2014), 83.

<sup>78</sup> Ibid, 21.

Mahan did not necessarily believe that the United States was unique in its ability to choose between being predominantly a land power or a sea power. Although Russia's geography (as will be discussed next) precluded it from being able to make this choice at the time, Mahan wrote that, of the European powers, France faced a similar choice to that of America. "Of all the great powers she alone had a free choice; the others were more or less constrained to the land chiefly, or to the sea chiefly."<sup>79</sup> The choice by France to focus on protection of their land borders eventually led to their defeat at the hands of the Royal Navy, in Mahan's estimation: "Mahan cited France as the cautionary example: had France's leaders 'chosen the path of sea power, she might both have escaped many conflicts and borne those that were unavoidable with greater ease."<sup>80</sup>

This idea that geography alone does not condemn a nation to "land power" or "sea power" status will be crucial in the discussion of Russian grand strategy, both historically and in the modern sense. Boasting the world's fourth longest coastline, Russia's is more extensive than that of the Japan, China, or the United States.<sup>81</sup> Peter the Great, Catherine the Great, and other leaders in Russian history recognized the importance of and embraced sea power, while others focused on the limitations of Russian maritime geography and "the prospect of overland invasion by powerful neighbors."<sup>82</sup> This has led to a historical schizophrenia in Russian naval development, manifested in "Young School," "Old School," "neo-Young School," "neo-Old School," high seas fleets, fortress fleets, and balanced fleets arguments.

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<sup>79</sup> Ibid, 20.

<sup>80</sup> Ibid, 25.

<sup>81</sup> Oishimaya Sen Nag, "Countries with the Longest Coastline," WorldAtlas (WorldAtlas, October 1, 2020), <https://www.worldatlas.com/articles/countries-with-the-most-coastline.html>.

<sup>82</sup> McCranie, 25.

Although focused on grand strategic ideas of the ultimate importance of sea power to any world power, Mahan may be best known for his operational expression of this strategy. The ultimate use of a navy (and the most oft-quoted Mahanian precept) – to draw the enemy out and destroy it in a decisive engagement – has seemingly limited applicability to the Russian Federation Navy of the 2020's. As will be shown below, the employment of Russian naval power aligns much more closely to a "Corbettian" model than to a "Mahanian" one. However, the historically significant use of Russian maritime power projection in the Mediterranean echoes Mahan's preaching on the importance of sea power to any aspiring global competitor.

#### 4.2.2 Corbett

As previously mentioned, Professor Holmes disagrees with the popular perception that Mahan's and Corbett's views were at odds with one another:

Corbett says he agrees with Mahan that seeking a decisive fleet engagement soon after the outbreak of war is the right course to pursue 90 percent of the time. Nevertheless, he spends an inordinate amount of time delineating a strategy for that other 10 percent of the time—when we're the weaker combatant and need time to build up strength and turn the tables on our opponent. This is what Corbett calls "active defense," or sometimes a "fleet-in-being" strategy.<sup>83</sup>

Mahan was writing to an American audience near the end of the 19<sup>th</sup> century to impress upon it the need for a world-class navy. Sir Julian Corbett, on the other hand, writing to a British audience, "the likes of Queen Victoria and Admiral Jacky Fisher – knew why Britain needed a Navy."<sup>84</sup> Thus, his focus was on the strategic use of the Royal Navy. As opposed to Mahan's purely naval-centered strategy, Corbett's focus was on the use of the navy as just one of a state's instruments of national power – what today may have been called a "whole of government

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<sup>83</sup> Holmes, "Sea Battles."

<sup>84</sup> Ibid.

approach” to attaining national objectives. In the modern parlance, a state has at least four “instruments of power” at its disposal: Diplomatic, Informational, Military and Economic (DIME).<sup>85</sup>

The union of multiple instruments of power created an organization stronger than its constituent parts. Whereas Mahan developed his sea power grand strategy as a theory of security, Corbett pioneered an alternative theory of grand strategy to address how maritime powers used all instruments of national power in the pursuit of policy objectives.<sup>86</sup>

Corbett indeed balked at Mahan’s ideas of a naval force as what he construed as an end to itself:

“We speak glibly of ‘sea-power’ and forget that its true value lies in its influence on the operations of armies,” Corbett wrote in 1900. Seven years later, he reflected on “the trite doctrine of the influence of sea power.” Such statements called Mahan out in all but name.<sup>87</sup>

Although Mahan’s “great fleet engagement” may be necessary to achieve national objectives, those objectives eventually wound up on land, and the maritime planner would do well to remember this:

...Corbett wrote, “Since men live upon land and not upon the sea, great issues between nations at war have always been decided – except in the rarest cases – either by what your army can do against your enemy’s territory and national life, or else by the fear of what the fleet makes it possible for your army to do.” With wars decided on land, Corbett insisted that the navy enabled the army to obtain decisive results...[he described] maritime strategy as “what part the fleet must play in relation to the action of the land forces.”<sup>88</sup>

Here the tie between Russian actions in the Mediterranean in the 2010’s and Corbettian strategy seems clear: through sealift and amphibious lift, land-attack cruise missile strikes, and carrier-

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<sup>85</sup> “JP 3-0, Joint Operations, Chairman of the Joint Chiefs of Staff,” October 22, 2018, [https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3\\_0ch1.pdf?ver=2018-11-27-160457-910, I-11 - I-14](https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_0ch1.pdf?ver=2018-11-27-160457-910, I-11 - I-14).

<sup>86</sup> McCraine, 29.

<sup>87</sup> Ibid, 28.

<sup>88</sup> Ibid, 35.



launched air sorties, Russian naval forces were utilized as an “enabler”<sup>89</sup> of the campaign waged by Russian ground forces, in coordination with Syrian allies.

This is not meant to imply that Corbett diminished the role of the navy in achieving national security objectives: “This does not mean that naval strategy was unimportant or underserving of study, but naval power had to be understood in a broader national security context.”<sup>90</sup> Quite the contrary; for Corbett, “By maritime strategy we mean the principles which govern a war in which the sea is a *substantial factor* [emphasis added].”<sup>91</sup> The change in Russian grand strategy in the 21<sup>st</sup> century is not on display in the Ukraine, or Georgia, but in Syria, a country that does not border Russia. The precise reason that the use of the Russian Federation Navy is a “substantial factor” in Syria is primarily in the RFN’s ability to protect the Sea Line of Communication from the Black Sea to Tartus to supply Russian ground forces, in addition to projecting kinetic power and resupply from the sea.

Perhaps the most telling evidence of Corbett’s applicability to the problem at hand is that, in his seminal work *Principles of Maritime Strategy*, one of three sections in the chapter dedicated to “Methods of Exercising Command” is titled “Attack, Defence, and Support of Naval Expeditions.” Here, Sir Julian articulates the connection (both the similarities and differences) between Mahan’s protection of maritime trade and the defense of military transports embarked on an expedition:

The attack and defence of oversea expeditions are governed in a large measure by the principles of attack and defence of trade. In both cases it is a question of control of communications, and in a general way it may be said, if we control them for the one purpose, we control them for the other. But with combined

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<sup>89</sup> Ibid, 32.

<sup>90</sup> Ibid, 87.

<sup>91</sup> Ibid.

expeditions freedom of passage is not the only consideration. The duties of the fleet do not end with the protection of the troops during transit, as in the case of convoys, unless indeed, as with convoys, the destination is a friendly country. In the normal case of a hostile destination, where resistance is to be expected from the commencement of the operations, the fleet is charged with further duties of a most exacting kind. They may be described generally as duties of support, and it is the intrusion of these duties which distinguish the naval arrangements for combined operations most sharply from those for the protection of trade. Except for this consideration there need be no difference in the method of defence. In each case the strength required would be measured by the dangers of interference in transit.<sup>92</sup>

Corbett affirms the similarities between defending peacetime maritime trade and wartime expeditionary transport – “if we control them for the one purpose, we control them for the other.” Indeed, should the destination of the expedition be a friendly country, there may be no differences; however, if there exists an unfriendly riparian state “where resistance is to be expected from the commencement of the operation,” then additional “support” duties will need to be executed. Here we see the challenge of the Russian Federation Navy in the eastern Mediterranean: while technically the destination of their forces was a “friendly” country (Assad’s Syria), the possibility existed that a hostile force (the United States/NATO) could attempt to interfere with the expedition. This begged the need for the ability to conduct support duties in the event they were needed. If he were alive today, Corbett would have no doubt raised the alarm at Russian frigates and submarines bristling with modern anti-ship cruise missiles in the Mediterranean; this capability would have been analogous to the development and proliferation of the torpedo in his era:

Armed with torpedoes, inexpensive warships of the flotilla were now capable of sinking even the largest battleship. Corbett explained, “The acquisition by the flotilla of battle power...is a feature of naval warfare that is entirely new.”<sup>93</sup>

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<sup>92</sup> Julian Stafford Corbett, *Principles of Maritime Strategy* (Mineola, NY: Dover Publications, 2004), 285.

<sup>93</sup> McCranie, 160.

There are other reasons to bring Captain Mahan and Sir Julian into the discussion of Russian naval operations. Fifteen years after his seminal work on sea power, Mahan wrote “The Problem With Asia” (1905), dedicating a good portion of the treatise on Russia’s geographic constraints (and its subsequent penchant for aggression). For his part, Corbett would write the two-volume work “Maritime Operations in the Russo-Japanese War, 1904-1905,” a study of one of the two instances in history where Russian or Soviet maritime power was employed beyond its periphery.

#### 4.3 Operational View: Vego

As discussed in the literature review, perhaps the most influential doctrinaire of the modern U.S. Navy is Milan Vego, whose writings have been the bedrock foundation of the curriculum of the Naval War College for decades.

##### 4.3.1 Sea Control

With the benefit of post-World War II history at his disposal, Vego is able to shine some light on modern interpretations of strategists like Corbett and Mahan, particularly when it comes to ideas of “command of the sea” and “sea control:”

In the aftermath of World War II, the term “command of the sea” was replaced gradually by the term sea control. One of the reasons for this was the perception that the term “command” sounds too absolute in its meaning. Many theorists believe that one cannot really “command” the sea but that a certain sea area could be only “controlled.” The term “sea control” is a derivation of the term “control of the sea” used by Admiral Alfred T. Mahan. This term implied that one belligerent in a war at sea was able from the outset or during hostilities to conduct large-scale overseas expeditions. It was also recognized that the advent of new and revolutionary weapons (mines, torpedoes) and platforms (submarine, aircraft) made it difficult, even for a major navy, to obtain full command of the sea for any extended time over a major part of the theater.<sup>94</sup>

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<sup>94</sup> Milan N. Vego, *Maritime Strategy and Sea Control: Theory and Practice* (London: Routledge, 2018), 24.

An understanding of what this dissertation describes as “sea control” is key to appreciating this historical nature of what the Russian Federation Navy was able to accomplish in the eastern Mediterranean beginning in 2012 and struggles to do a decade later during operations against Ukraine. Sea control is the first of Vego’s “Naval Objectives,” and an enabler of all others. In *Operational Warfare at Sea: Theory and Practice*, Vego describes sea control:

In its simplest and broadest definition, sea control can be described as *one’s ability to use a given part of the sea/ocean and associated air (space) for military and nonmilitary purposes and deny the same to the enemy*. Sea control implies sufficient and extensive control of a major part of a given maritime theater by a stronger side. An ocean or sea area may be considered under control when one’s naval/air forces can operate freely and conduct seaborne traffic while the enemy cannot do the same except at considerable risk.<sup>95</sup>

Similar to Corbett, when Vego uses the term “stronger side,” this is relative, based on the geographic location. In 1760, following the Seven Years War, Britain had more naval tonnage than France, Spain and the Netherlands combined.<sup>96</sup> While this relative balance remained mostly unchanged through the American War of Independence, in 1775 the French beat the British at the Battle of the Virginia Capes (sealing Cornwallis’ fate in Yorktown). At the time, much of the English fleet was stuck in the Caribbean, or off of India, or protecting England’s coastline. Vego quickly goes on to point out that “Experience shows that in a war between two strong opponents, sea control has in most cases been *relative and incomplete*.”<sup>97</sup> In a 2016 volume dedicated to the subject, *Maritime Strategy and Sea Control*, Vego drives this point home:

It was also recognized that the advent of new and revolutionary weapons (mines, torpedoes) and platforms (submarine, aircraft) made it difficult, even for a major

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<sup>95</sup> Vego, *Operational Warfare*, 26.

<sup>96</sup> Aaron O’Neill, “Comparison of European Navies’ Strength in the Mid-1700s,” Statista, January 1, 2006, <https://www.statista.com/statistics/1050278/comparison-of-european-navies-in-history/>.

<sup>97</sup> *Ibid*, 27.

navy, to obtain full command of the sea for any extended time over a major part of the theater.

The term “sea control” more accurately conveys the reality that in a war between two strong opponents at sea, it is not possible, except in the most limited sense, to completely control the sea for one’s use or to completely deny its use to the other side. It implies that one’s control of an ocean/sea area is inherently limited in space and time.<sup>98</sup>

In another work, *Naval Strategy and Operations in Narrow Seas* (discussed at length later in this chapter), Vego introduces the idea of “local command of the sea:”

*Local command* of the sea exists when one side possesses superiority in one part of the sea for the purpose of executing a specific mission. Sometimes, local command must be obtained to ensure the safety of a large convoy, the conduct of an amphibious landing, the bombardment of the enemy’s coastal installations/facilities, or to carry out hasty raids.<sup>99</sup>

While Vego’s idea of local command of the sea seems to imply a more limited timeframe – a single large convoy, an amphibious landing, etc., -- Russian operations into Syria have now lasted more than a decade. Still, this idea of local command appears to apply: the RFN has provided for the safety of their military operations between Sevastopol (in the Black Sea) and Tartus (in the eastern Mediterranean) during the course of war. This is not to imply that the Russian Federation Navy is superior elsewhere to U.S. or NATO forces: “Local command of a semi-enclosed sea theater is steadily more contested as one moves away from the center of a stronger force’s hub of power.”<sup>100</sup> Russia has established a strong military presence in the Black Sea and the eastern Mediterranean and is able to bridge the gap between the two with escorting naval vessels with advanced missiles. Outside of this region, the RFN would be hard-pressed to stand toe-to-toe with U.S. naval force.

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<sup>98</sup> Vego, *Maritime Strategy and Sea Control*, 24.

<sup>99</sup> Milan N. Vego, *Naval Strategy and Operations in Narrow Seas* (London, UK: Routledge, 2013), 113.

<sup>100</sup> *Ibid*, 115.

In “Sea Control,” Vego goes on to outline how a naval power achieves, maintains, and utilizes sea control:

In operational terms, the main methods for obtaining sea control are as follows:

- Destruction of the enemy forces
- Containment of the enemy forces
- Choke point control
- Capturing important enemy positions and basing areas.<sup>101</sup>

Obviously, the methods outlined above are used not only in wartime, but when one nation needs to wrest the control of the maritime domain from their adversary. This begs the question: do these definitions apply to the situation Russia found itself in during its 2012 naval campaign in Syria? Vego clearly states that his concept of “sea control” applies only in wartime; he spells out the difference between that and what he terms “naval influence” which can exist in peacetime:

It is often believed that sea control already exists in peacetime by virtue of one’s naval presence. This ignores the fact that the true meaning of sea control encompasses both the “use of the sea for one’s military and nonmilitary purposes” and “denying the same to the enemy.” ...In time of peace, any navy, regardless of its size and combat potential, possesses only a certain degree of what is arbitrarily called *naval influence* but not sea control. [emphasis in original]<sup>102</sup>

While the Russian Federation Navy was most definitely conducting wartime operations (sealift of ground forces, maritime resupply, seaborne cruise missile launches, naval aircraft attack missions), their enemy (the Islamic State and other anti-Assad entities) did not possess a navy. At the onset of the Syrian Civil War, Russia was resupplying Syrian military forces via its merchant fleet, without involvement by the RFN. It was not until the West (specifically the UK and U.S.) indicated it would stop the *M/V Alaed* from delivering refurbished attack helicopters to

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<sup>101</sup> Vego, *Maritime Strategy and Sea Control*, 75.

<sup>102</sup> Vego, *Maritime Strategy and Sea Control*, 25.

Syria that the Russian navy instituted the massive naval sealift operation that continues to this day.

Following the cancellation of the vessel's insurance after pressure from London, Russia reflagged the *Alaed* and, according to news reports, escorted it from the Norwegian Sea to Tartus with four RFN vessels. The reason for this change in procedures was explained by a Russian military official at the time:

Earlier this week, Russian officials had hinted at a role for the naval flotilla in safeguarding ships, though the rebuff to Ms. Clinton's [then U.S. Secretary of State] efforts to halt the *Alaed* was unclear until its position near Norway, near the warships, became public.

RIA Novosti, the Russian news agency, cited Vyacheslav Dzirkaln, the director of a military aide agency in the Russian government, as saying the fleet would "be sent on a task to guarantee the safety of our ships, to prevent anyone from interfering with them in the event of a blockade."<sup>103</sup>

This seemingly unimportant statement by a relatively minor Russian defense official, in retrospect, set the stage for what would become the lion share of Russian naval operations over the next decade: the militarily escorted naval sealift of Syria. Of note, it was not the Islamic State that had threatened to interfere with Russian support operations, nor did the Islamic State have the capability to "blockade" Tartus from receiving Russian military supplies. While Russia was conducting power projection operations in wartime against one adversary (anti-Assad militant groups), it was simultaneously *assuring* sea control to enable those operations by deterring the U.S. and NATO from interference via naval power. They were in effect conducting what could be termed a "preemptive counter-blockade."

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<sup>103</sup> Andrew E. Kramer, "Russian Ship with Syrian Helicopters Embarks on Renewed Voyage," The New York Times (The New York Times, July 12, 2012), <https://www.nytimes.com/2012/07/13/world/europe/russian-ship-with-syrian-helicopters-embarks-on-renewed-voyage.html>.

While not quite fitting Vego's definition of sea control, this concept is not unique to the Syrian civil war. As will be discussed further in Chapter 6, the Russian's faced a similar situation (albeit with a different outcome) in the 1930's with their support of the Republicans during the Spanish Civil War. Soviet tank units operating in Spain were dependent on merchant resupply from the Black Sea. Once the Nationalists gained maritime superiority in the Mediterranean, the Soviets, bereft of a blue water navy and thus unable to protect their sea lines of communication, removed their ground forces, helping lead to the Republican defeat in Spain. There was no great naval battle for sea control in the Mediterranean; Nationalist naval capability forced the Soviets to make the rational decision to end support in the Spanish Civil War.

Vego, in an earlier work, does address what might be considered his "Corbettian" approach to sea control. In *Naval Strategy and Operations in Narrow Seas*, he dedicates an entire chapter to "Contesting Command," including a section simply titled *Fleet in Being*:

As long as the inferior fleet is undefeated its *very existence constitutes a perpetual menace to control of the sea by a stronger fleet* [emphasis added]... In general, an inferior fleet exercises a restraining influence on the stronger fleet. While it avoids a decisive encounter with the superior force, the fleet in being retains the maximum possible threat value... A fleet in being, skillfully handled, can prevent the superior fleet from taking full advantage of its strength.<sup>104</sup>

For Vego, sea control is the enabling mission for all other types of naval operations that a nation might conduct in wartime. For Russia in Syria, these primarily involve power projection and sealift operations (and the escort or force protection missions that allow these missions to continue in safety). And regardless of the comparative strength of the NATO fleet (or weakness

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<sup>104</sup> Vego, *Narrow Seas*, 207.



of Russia), the mere existence of Russian counter-blockade forces in the eastern Mediterranean “constitute a perpetual menace” to the U.S. and allied navies.

#### 4.3.2 Types of Major Naval Operations

In his 2008 book *Major Naval Operations*, Milan Vego highlights the variety of types, objectives, and theaters within which a nation can employ its navy. He divides the types of naval operations into two generic categories: “Fleet versus Fleet” and “Fleet versus Land.” Using multiple historical examples, Vego attempts a holistic description of the pantheon of options open to strategic planners, from attacking the enemy’s naval forces in port to the destruction of their strategic nuclear launch capabilities. Of particular importance for the purposes of this paper are his descriptions of “Major Naval Operations to Defend /Protect Maritime Trade” and “Major Operations in Support of Ground Forces on the Coast.”

##### 4.3.2.1 Major Naval Operations to Defend/Protect Maritime Trade

As previously highlighted, direct Russian naval support to the Syrian Civil War began in 2012, with what has colloquially been termed the “Syrian Express”<sup>105</sup> (sometimes the “Tartus Express”<sup>106</sup>). This endeavor shifted from sealift in support of Syrian military forces, to sealift in support of Russian air forces, to amphibious lift of Russian ground units and sealift support of those forces as well. Following the *M/V Alaed* incident, Russian amphibious vessels (*Ropucha*- and *Alligator*-class “Landing Ship – Tank,” or LST’s) were the primary method of this transport.

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<sup>105</sup> “‘Syrian Express’ Picks up Steam: Russian Ferry Transfers Military Cargo to Tartus,” InformNapalm.org (English), December 24, 2015, <https://informnapalm.org/en/syrian-express-picks-up-steam-russian-ferry-transfers-military-cargo-to-tartus/>.

<sup>106</sup> Marc Pierini, “Russia’s Posture in the Mediterranean: Implications for NATO and Europe,” Carnegie Europe, June 8, 2021, <https://carnegieeurope.eu/2021/06/08/russia-s-posture-in-mediterranean-implications-for-nato-and-europe-pub-84670>.

Where *Vego's* "types of naval operations" are concerned, the Syrian Express gets into a doctrinal gray area. If the Russians had simply provided escort to the merchant vessels providing material support to Assad, this would clearly have fallen under "Major Naval Operations to Defend/Protect Trade" – similar to the escort operations the U.S. Navy provided to Kuwaiti merchant vessels during the "Tanker War" of the 1980's.<sup>107</sup> However, by using "grey-hulled" combatants instead of merchant ships, the operation became something in between defense of maritime trade and support of ground forces ashore.

While the LST's are Russian Federation Navy vessels, their primary purpose is amphibious lift, not surface warfare, and thus have limited self-defense armament (at best a 76-mm cannon for the Ropucha LST);<sup>108</sup> no match for a US destroyer or cruiser determined to stop, board, or disable them prior to delivering their cargo to Tartus. As discussed earlier, the *Alaed* situation appears to have convinced the Russians that a U.S. or NATO blockade of the Syrian coast was a potentiality. Their response was to escort the LSTs, typically coming out of the Black Sea, with missile-laden combatant vessels once they exited the Turkish Straits, thus ensuring (or at least attempting) sea control against Western efforts of interference. Although *Vego* describes the importance of such control during support to ground forces in wartime, the same holds true for protection of maritime trade prior to the introduction of ground forces:

The success of the ground troops along a coast is affected not only by the naval forces directly supporting them but also by those conducting major operations to destroy enemy naval forces at sea or in their bases and *thereby obtaining sea control* [emphasis added]... one's naval forces would conduct a series of such tactical actions as...protecting transport of troops and material...<sup>109</sup>

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<sup>107</sup> Kelley, Stephen Andrew. "Better Lucky than Good: Operation Earnest Will as Gunboat Diplomacy." Thesis, Naval Postgraduate School, 2007.

<sup>108</sup> "Ropucha (Class) / Project 775," Military Factory - Global Defense Reference, May 19, 2020, [https://www.militaryfactory.com/ships/detail.php?ship\\_id=ropucha-class-landing-ship-russia](https://www.militaryfactory.com/ships/detail.php?ship_id=ropucha-class-landing-ship-russia).

<sup>109</sup> Milan N. *Vego*., *Major Naval Operations* (Newport, RI, RI: Naval War College Press, 2008), 32, 34.

Since the threat to Russian naval support operations came from U.S. or NATO efforts to possibly blockade Syria (as perceived by Russia following *Alaed*), it was the *deterrent* effect of the Russian escorts that ensured this sea control, and thus provided the protection for troop and material transport.

#### 4.3.2.2 Major Operations in Support of Ground Forces on the Coast

Vego writes that naval operations in support of the army takes three basic forms: In the broadest terms, naval forces support troops on the coast by providing cover, support, and supply. *Cover* means preventing enemy air, missile, or gunnery strikes, or amphibious landings on the flank or in the rear of friendly ground troops... *Support* by naval forces encompasses a range of tasks, from destroying important targets on the coast and in the depth of enemy defenses, to attacking maritime traffic in coastal waters flanking troops on the coast. *Supply* includes transport of troops and materiel...<sup>110</sup>

All three elements in Vego's definition – supply, cover and support – can be identified in Russian naval operations against Syria. Most of the support from the RFN to Russian (and Syrian) ground operations came in the form of “supply;” however, this supply was only possible as a result of the physical protection those transports received from potential Western blockade. This was accomplished by RFN surface combatants armed with modern anti-ship and surface-to-air missiles, providing “cover” from “enemy air [and] missile...strikes.” While Vego defines this cover as that which directly protects ground forces already on land, the same concept can be applied to the deterrent effect the Russian navy had on potential Western action against their forces at sea delivering troops and equipment to Syria.

Vego's third type of major naval operations that assists ground forces, “support,” is also on display in the ongoing Syrian Civil War. While a comparatively small part of the overall land

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<sup>110</sup> Ibid, 32.

campaign, Russia has consistently and effectively been “destroying important targets on the coast and in the depth of enemy defenses” in a non-peripheral country to Russia, for the first time in its history. Using new land-attack cruise missiles (Kalibr) and a Cold War-era aircraft carrier (the *Kuznetsov*), the RFN has employed a precision strike capability thousands of miles from the sea, contributing to the Assad regime’s ability to hold onto power in Syria.

Prior to the introduction of the Tomahawk Land Attack Cruise Missile (TLAM) by the United States during Desert Storm in 1991, the only way a navy without an aircraft carrier could destroy enemy targets with non-nuclear weapons was through “naval gunfire support,” which was relatively imprecise and of short range; the USS *Wisconsin*, America’s last battleship that also saw action in Desert Storm, had 16-inch guns that could hurl 2,000-lb shells nearly two dozen miles.<sup>111</sup> The TLAM changed all of that, enabling much smaller ships to send a thousand pounds of high explosives over a thousand miles away, with GPS-guided precision:

By the start of the offensive phase of the Gulf War of 1991 (Operation *Desert Storm*), the US Navy carried out massive strikes and attacks against selected Iraqi targets by carrier-based aircraft and surface ships and submarines armed with the Tomahawk land-attack missiles (TLAMs)... Nine US guided missile cruisers and destroyers launched TLAMs against selected targets in Iraq from their operating areas in the Red Sea and the Arabian Gulf...<sup>112</sup>

After enjoying a 20-year monopoly, the Syrian battlefield was introduced to Russia’s version of the TLAM, the *Kalibr* (NATO code-named “SS-N-30”) land attack cruise missile, allowing the Russian navy to provide “deep” support to ground forces for the first time in its history.

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<sup>111</sup> Tony DiGiulian, “16’/50 (40.6 Cm) Mark 7,” Navweaps, 2022, [http://www.navweaps.com/Weapons/WNUS\\_16-50\\_mk7.php](http://www.navweaps.com/Weapons/WNUS_16-50_mk7.php).

<sup>112</sup> Vego, *Narrow Seas*, 196.

### 4.3.3 Narrow Seas

For purposes of this paper, classics of maritime strategy and doctrine are studied in order to gain insights into recent (and potentially future) naval operations. This can be accomplished only to the degree that said doctrine was derived from examples that closely resembles situations being studied today. Russian operations in the Mediterranean are decidedly *not* similar to the American campaign against Japan in the Pacific in World War II, nor the German U-boat operation in the Atlantic during the same war. Perhaps the biggest difference is geographic; considerations for warfare in the “open ocean” is significantly different than that conducted in what Vego terms “narrow seas.” His book *Naval Strategy and Operations in Narrow Seas* (1999) addresses these unique considerations.

Although many writers of naval strategy have focused on warfare away from the high seas, there is no standard definition of what is considered a “narrow” or “restricted” sea; Vego explains:

Navies operate in the open ocean and what are euphemistically called ‘narrow seas’. However, this term is not always properly defined and understood. It is often used interchangeably with the terms ‘coastal waters’, ‘shallow waters’, or ‘confined waters’, but, despite some apparent similarities, each of these terms has a different meaning...In the geographic definition of the term, narrow sea covers enclosed and semi-enclosed seas...In the military meaning of the term, a narrow sea is a body of water that can be controlled by both sides...Throughout recorded history the control or lack of control in a narrow sea had a significant, and at times a key role in war on land.<sup>113</sup>

The Black Sea, the Baltic Sea, and the Mediterranean Sea are all “enclosed seas” by Vego’s definition, the Mediterranean being the largest enclosed sea on the planet. The previous discussions of sea control still apply to narrow seas, but within the confines of the narrow sea,

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<sup>113</sup> Vego, *Narrow Seas*, 5-6.

the temporary or limited nature of sea control becomes less applicable: "Control of a typical narrow sea has in contrast a broader meaning than that on the open ocean, because it involves control of the entire theater and adjacent landmass, important to sea control. It should allow one's own fleet forces and aircraft to strike enemy forces not only at sea, but also on the adjacent coast as well."<sup>114</sup>

In the Syrian theater of war, Russia is coordinating the efforts of not only naval and ground forces, but an advanced Russian Air Force presence on the ground at the Khmeimim air base (60 kilometers north of Tartus on the Syrian coast), not to mention aircraft operating in Syria but sometimes originating in Russia, transiting Iranian and Iraqi airspace (and sometimes originating from Iran itself<sup>115</sup>). This cooperation is the hallmark of operations in a narrow sea, according to Vego:

Command of the sea in an enclosed sea theater is normally obtained and maintained by the closest cooperation among all the services of a country's armed forces. It is most directly affected by the situation on the land front and in the air. Yet, that does not mean that one's own fleet forces play a negligible role.<sup>116</sup>

This coordination between the different services in the Russian armed forces has historically been a weak point; to be fair, this can be considered a weak point of any country with an air, naval, and ground force. Apart from normal inter-service rivalries that beset even the most professional of militaries, a lack of interoperability and joint training makes the coordination of air, land and sea operations problematic. While Russia's decade long "joint" experience in Syria should have paid dividends in their overall warfighting capability, the debacle they have

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<sup>114</sup> Ibid, 111.

<sup>115</sup> Richard Sisk, "Russia Gave Us Short Notice of Syria Bombing Run from Iran," Military.com, October 31, 2017, <https://www.military.com/daily-news/2016/08/16/russia-gave-us-short-notice-of-syria-bombing-run-from-iran.html>.

<sup>116</sup> Vego, *Narrow Seas*, 111.

experienced in Ukraine is evidence that the ability to translate success from one theater of war (with its unique set of security objectives) to another is not a given.

#### 4.3.3.1 Choke Point Control

Although this will be expounded upon in greater detail later, one of the characteristics pointed out by Vego of a narrow sea is the likelihood of the presence of a strategic choke point complicating the ability to conduct naval operations:

A unique feature of narrow seas is the extraordinary influence that straits and narrows – commonly called *choke points* – play in naval strategy... By establishing control over straits and narrows in peacetime one creates the main prerequisites for gaining command in the adjacent sea or ocean shortly after the outbreak of hostilities. For a blue-water navy general command of the sea is hardly possible without establishing superiority on the open ocean and control of several critical passages and narrows of vital importance to the protection of international shipping...The straits or narrows through which pass the shortest or the safest and most convenient routes for the movement of shipping have particularly great importance. In wartime, they constitute the most vulnerable sections of sea communications. They can be used primarily to blockade hostile naval forces and merchant shipping.<sup>117</sup>

In order to achieve their objectives in the eastern Mediterranean, the Russian Black Sea Fleet (BSF) has to pass through the Turkish Straits, containing not one but two of the world's strategic choke points: the Dardanelles and the Bosphorus. Particularly for the BSF, the Turkish Straits are not only the "most convenient" route, but as the Black Sea itself is a semi-enclosed sea, it is the *only* route of passage available to get to the Syrian area of operations. Conversely, it is the only route the Russians can utilize to send reinforcements from its other fleets into the Black Sea (with the exception of small patrol craft and possibly submarines utilizing an internal

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<sup>117</sup> Vego, *Narrow Seas*, 120-121.

river system within Russia itself).<sup>118</sup> Because the Straits are under the political control of Turkey (by way of the 1936 Montreux Convention), a member of NATO, Russia does not maintain “control over the straits and narrows.” The demonstrated ability to achieve their objectives in the Mediterranean is a result of not just military but diplomatic maneuvering, especially regarding Turkey. This 85-year-old Convention will become contemporarily relevant within a week of Russia’s 2022 invasion of Ukraine, as will the importance of choke point control.

#### 4.4 U.S. Navy’s Changing Emphasis on Sea Control

Since World War II, the U.S. Navy has found itself in a series of historically unique positions – first as one of two superpowers vying for superiority on the open ocean, then as the lone remaining hegemon experiencing a “unipolar moment,” and most recently as the first among equals in a rapidly developing “great power competition” that includes Russia and China. As these eras have come and gone, so has official U.S. doctrine regarding the importance of Sea Control. Of course, this doctrine was not developed in a vacuum, but instead was the result of the evolving threats the United States faced at the time.

##### 4.4.1 U.S. View of Sea Control 1945 – 1990

The broad view of the Cold War on the oceans is one of action and counteraction between the United States and the Soviet Union. Following World War II, with the Russian economy and military in shambles, the U.S. had no naval rival (a situation that reappeared in the 1990s). As the 1975 Office of Naval Intelligence (ONI) report *Understanding Soviet Naval Developments* put it,

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<sup>118</sup> There is some evidence that Russia is still utilizing these inland waterways, which involve a “network of canals joining its ports in the Baltic, Arctic, Caspian and Black Seas.” H.I. Sutton, open-source writer at the U.S. Naval Institute has analyzed declassified Cold War-era U.S. Intelligence Community writings on this program and has evidence the Russians may be continuing this practice in the modern era. See H I Sutton, “Russian Navy’s Way around Turkey Closing the Bosphorus to Its Warships, Literally,” *Covert Shores*, May 22, 2022, <http://www.hisutton.com/Russian-Navys-Secret-Internal-Waterways.html>.



“From the end of World War II until the early 1970s the United States maintained virtually unquestioned naval supremacy.”<sup>119</sup> From a Russian perspective, this resulted in a number of humiliating foreign policy defeats at the hand of the Americans:

The lack of a far-ranging fleet was politically embarrassing to the Soviet government in 1956 when Anglo-French naval forces invaded Suez, in 1958 when U.S. naval forces landed in Lebanon, and in 1962 when a U.S. naval blockade (and the threat of overwhelming nuclear retaliation) forced the Soviets to withdraw strategic weapons from Cuba. In these eyeball-to-eyeball situations the Soviets had no options for countering western political-military activities at sea except the pouring forth of propaganda.<sup>120</sup>

The Cuban missile crisis appears to have been the tipping point. By the mid-1970s, “...the Soviet Navy had reached a new capability in its own dramatic development since 1962 and were now regarded as a global naval power.”<sup>121</sup> The 1975 ONI report details how the head of the Soviet Navy, Admiral Sergei Gorshkov, responded to the debacle in Cuba:

In 1963 the Soviet Navy chief “ordered his men to sea.” Despite limitations in training, experience, support capabilities, and the like, Soviet ships began operating out of their traditional coastal areas. In mid-1964 Soviet warships established a continual presence in the Mediterranean...Subsequently the Soviets have maintained an average of at least 35 to 40 ships in the Mediterranean.<sup>122</sup>

This loss of unquestioned naval supremacy across the globe drove U.S. naval strategy and supporting doctrine for the remainder of the Cold War. This strategy was centered on achieving and maintain control of the sea, since such control was a basic supporting requirement of any other missions in the maritime domain (Sea Line of Communication protection, power projection, strategic deterrence, sealift, etc.).

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<sup>119</sup> *Understanding Soviet Naval Developments: Background Material for Addressing Soviet Naval Developments* by U.S. Naval Personnel (Washington: Dept. of the Navy, Office of the Chief of Naval Operations, 1975), 1.

<sup>120</sup> *Ibid*, 5-6.

<sup>121</sup> John B. Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986*, vol. 19 (Newport, RI: Naval War College, 2004), 4.

<sup>122</sup> *Understanding Soviet Naval Developments*, 1975, 6.

In the comprehensive (and at the time classified) 1989 Naval War College report *The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986*, Professor John Hattendorf described the challenges faced by western naval developers of the period, reacting to what was considered at the time a breathtaking evolution of Soviet capabilities. While much has been made of John Lehman's (Secretary of the Navy under President Reagan) quest for a massive 600-ship navy, this number was at the lower end of U.S. defense planners estimates to counter the Russian naval buildup: "Studies were done for various naval force levels: 500, 600, 700, and 800 ships."<sup>123</sup>

There was no question that the preeminent requirement of whatever fleet emerged would be sea control. Indeed, the only table in the 1990 report comparing the differing force levels was labeled "Table of Sea Control Capabilities," displaying the risks involved in achieving sea control at the varying numbers between the Soviets and the U.S. in different warfighting scenarios.<sup>124</sup> While settling on a goal of 600 ships (including 15 carrier strike groups and over 100 attack submarines), the overarching goal of the fleet buildup was to execute what would eventually become known as the "forward maritime strategy." Chief of Naval Operations James Watkins penned an essay in a 1986 issue of the U.S. Naval Institute Proceedings describing this strategy (without using the term):

If war comes, we will move into the second phase<sup>125</sup> of the strategy in which the Navy will seize the initiative as far forward as possible. Naval forces will destroy Soviet forces in the Mediterranean, Indian Ocean, and other forward areas, neutralize Soviet clients if required, and fight our way toward Soviet home waters.<sup>126</sup>

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<sup>123</sup> Hattendorf, 10.

<sup>124</sup> Ibid, 11.

<sup>125</sup> The first phase is "Deterrence, or the Transition to War"

<sup>126</sup> James D Watkins, "The Maritime Strategy," *U.S. Naval Institute Proceedings* 112, no. 1 (January 1986).

It is interesting that “sea control” is only mentioned once in this article. An accompanying piece published simultaneously and written by then-Secretary of the Navy Lehman titled “The 600-ship Navy” also mentions “sea control” just once, highlighting the fact that sea control was considered an enabling mission to the other purposes of the navy during wartime, in particular power projection.

#### 4.4.2 U.S. View of Sea Control 1991 – 2009

Perhaps not coincidentally, as the U.S. Navy began to acquire the overwhelming number of naval platforms programmed by the Reagan administration, the Soviet Union collapsed economically and politically. Never before in world history had a country prepared to go to war with so great a threat as the U.S.S.R., just to have that threat dissipate and disappear in a matter of months. President George H. W. Bush’s 1991 National Security Strategy (NSS) noted that the “bitter struggle that has divided the world for over two generations has come to an end...We do not know what path the Soviet Union will ultimately take, but a return to the superpower adversary we faced for over forty years is unlikely.”<sup>127</sup> While just the previous year’s strategy had maintained containment of Communism as the grand strategy of the United States, the 1991 NSS stated that “The four fundamental demands of a new era are already clear: to ensure strategic deterrence, to exercise forward presence in key areas, to respond effectively to crises and to retain the national capacity to reconstitute forces should this ever be needed.”<sup>128</sup>

Using the 1991 National Security Strategy as a blueprint, it didn’t take long for budgeteers and strategists to begin articulating a new vision for the U.S. Navy. By September 1992 a capstone

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<sup>127</sup> George Bush, *National Security Strategy of the United States* (Washington, DC: White House, 1991), 1.

<sup>128</sup> *Ibid*, 25.

white paper titled “...From the Sea: Preparing the Naval Service for the 21<sup>st</sup> Century” was published by the Department of the Navy. Signed by Secretary of the Navy Sean O’Keefe, Chief of Naval Operations Admiral Frank Kelso II, and Commandant of the Marine Corps General C.E. Mundy Jr., “...From the Sea” was billed as a “combined vision for the Navy and Marine Corps.”<sup>129</sup>

In the Introduction, the document unapologetically states:

Our ability to command the seas in areas where we anticipate future operations allows us to resize our Naval Forces and to concentrate more on capabilities required in the complex operating environment of the ‘littoral’ or coastlines of the earth. With the demise of the Soviet Union, the free nations of the world claim preeminent control of the seas and ensure freedom of commercial maritime passage.<sup>130</sup>

Note that sea control is no longer something that must be gained or fought for; command of the seas is an “ability,” and control of the seas is a “claim” by the free nations of the world (led by the United States). This was not hubris – at that time in history, the U.S. Navy was built to fight a terrible great power, and was still equipped to do so, even with the foe vanquished. “...From the Sea” became the cornerstone which would drive more than two decades of naval development. A quarter century later, U.S. Naval War College professor James Holmes, looking back at the impact that this document had on the development of the 21<sup>st</sup>-century navy, noted that:

It’s a remarkable document. In the preamble the sea-service leadership declares rather starkly that America owns the sea. We had won big. The Soviet Navy had vanished from the high seas, much as the Imperial Japanese Navy adorned the seafloor in 1945. With no one left to fight for command of the sea, we could afford to concentrate on projecting power ashore from this offshore safe haven. The leadership thus sent a strong bureaucratic signal: that battle is passé. That History with a capital H had repealed the most basic fact about naval warfare, namely that you have to win maritime command if you hope to exercise

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<sup>129</sup> --*From the Sea: Preparing the Naval Service for the 21st Century* (Washington, D.C.: Dept. of the Navy, 1992).

<sup>130</sup> *Ibid*, 1.

command. It's no accident that many of the capabilities we're now scrambling to recreate—long-range anti-surface warfare, to name one—started to decay after 1992. Such atrophy was in keeping with the times, and with official guidance.<sup>131</sup>

With an additional three years of hindsight, in 2019 Professor Holmes put a fine point on his criticism of the Navy leadership's shortsightedness. In his article "The evolution of the U.S. Navy," Holmes argued that "...From the Sea" had allowed the Navy to transform itself, in their own words, into a "fundamentally different naval force."<sup>132</sup>

The sea services, that is, could lay down arms and transform themselves. Though not in so many words, sea-service chieftains contended that victory in the Cold War had abolished the chief function of navies, namely fighting enemy battle fleets for maritime command in Mahanian fashion. Since there was no one left to fight, American and friendly forces could skip straight to projecting power from this offshore safe haven. They could land troops on combat missions or errands of mercy, launch air strikes from carrier flight decks, or pelt targets with cruise missiles with impunity. ". . . From the Sea" broadcast a powerful and resonant signal to the sea services. From then forward, hardware, tactics, and skills for dueling peer navies languished—and languished on explicit orders from naval prelates.<sup>133</sup>

Two years after "...From the Sea" came out, the strategy became enshrined in doctrine with the publication of "Naval Doctrine Publication 1, "Naval Warfare" (NDP-1 1994), self-described as the "first in a series of six capstone documents for naval forces that translate the vision and strategy of the White Paper '...From the Sea' into doctrinal reality."<sup>134</sup> This NDP only uses the phrase "sea control" twice – once alluding to a type of force the *enemy* has at their disposal, and once in the glossary under the definition of "power projection." Instead, and

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<sup>131</sup> Holmes, *Sea Battles*.

<sup>132</sup> --*From the Sea*, 1.

<sup>133</sup> James Holmes, "The Evolution of the U.S. Navy," *The National Interest* (The Center for the National Interest, June 20, 2020), <https://nationalinterest.org/feature/evolution-us-navy-63457>.

<sup>134</sup> *Naval Doctrine Publication 1: Naval Warfare* (Washington, DC: Dept. of the Navy, Office of the Chief of Naval Operations and Headquarters, U.S. Marine Corps, 1994), iv.

without explanation, the doctrine uses the phrase “control of the sea” eleven times, nearly all of them in the section titled “Naval Operations in War.”

While NDP-1 describes the importance of control of the sea, how to gain such control, and what missions “control of the sea” enables, it never actually defines the term, apart from stating that it “supports directly our ability to project power ashore by encompassing control of the entire maritime area: subsurface, surface, and airspace, in both the open ocean and the littoral regions of the world.”<sup>135</sup> Unlike other missions such as power projection, forward presence, and naval surface fire support, neither “control of the sea” nor “sea control” make it into the glossary of terms.

The concept of “sea denial” – denying the enemy the ability to control the sea – is not mentioned at all. Indeed, the 1994 NDP-1 is written from the perspective of a peerless maritime world. While this was a true view of the environment in 1994, there was no apparent warning of a future where the United States may once again have to fight for sea control. In the opening sentence of the fourth chapter “Where We Are Headed – Into the 21<sup>st</sup> Century,” the NDP reads “The United States is and will remain a maritime nation, relying on the day-to-day forward presence of strong naval forces that can project power as required to execute national policy.”<sup>136</sup> Note that gaining sea control is not at issue; forward presence alone leads to the ability to project power.

From the end of the Cold War through 2001, the lack of a threat facing the United States Navy was manifested in their share of the budget cuts of the so-called “peace dividend” instituted

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<sup>135</sup> Ibid, 26.

<sup>136</sup> Ibid, 59.

by the Bush administration and continued through the Clinton presidency. The 1997 Quadrennial Defense Review (“QDR”) was emblematic of the reductions across the force; as the Center for Strategic and International Studies noted in 1999, the Navy was hit with the following cuts from the QDR:

- Reduce attack submarines from 73 to 50.
- Reduce procurement of F/A-18E/F aircraft from 1,000 to 548
- Reduce number of tenders and early withdrawal of the SH-2 helicopter from service.
- Cut active strength by 27,000 and reserves by 4,100<sup>137</sup>

Four years later, on a clear Tuesday morning in New York City, America’s strategic environment dramatically changed. The September 11, 2001, terrorist attacks by al Qaeda averted the Department of Defense’s funding crisis. However, a new mission emerged that did not lend itself to the U.S. Navy as the lead service: the Global War on Terrorism. Within weeks of the attacks on New York and Washington, U.S. special operations units from across all branches of the military were engaged with al Qaeda and Taliban forces in Afghanistan, a landlocked country that is 300 miles from the nearest body of water (the Arabian Sea to its south). The USN, then composed of ageing platforms designed to confront the Soviet threat, faced the challenge of adapting to a new enemy or face budgetary relegation to the Air Force and Army, much better suited to fight a land war in Asia.

Thus began the transformation of the U.S. Navy from a world class sea control force to one that could contribute to counter-terrorism and stability operations deep inland. Naval

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<sup>137</sup> Anthony H Cordesman, “Trends in US Military Forces and Defense Spending: Peace Dividend or Underfunding?,” Trends in US Military Forces and Defense Spending: Peace Dividend or Underfunding? | Center for Strategic and International Studies (Center for Strategic and International Studies, March 29, 2022), <https://www.csis.org/analysis/trends-us-military-forces-and-defense-spending-peace-dividend-or-underfunding>, 16.

weapons systems that were designed to gain and maintain sea control, such as the carrier-based F-14 Tomcat (an air superiority fighter plane) and the land-based P-3 Orion (designed to hunt and kill Soviet submarines), found new missions. The Tomcat was built to shoot down anti-ship cruise missile-carrying Soviet bombers from extremely long range – longer range than the anti-ship missiles the bombers could fire. Even before 9/11, the Tomcat program, staving off cancellation, reimagined itself as the “Bombcat,” adding air-to-ground munitions and employing such in both Iraq and Bosnia in the late 1990s.<sup>138</sup> Pressed into service upon America’s execution of the Global War on Terror, the Tomcat’s final mission was a bombing run over Baghdad during Operation Iraqi Freedom in 2006.

The P-3 Orion was a long-range, turboprop aircraft designed with a magnetic anomaly detector (MAD) and the capability to drop both sonobuoys and torpedoes. It was built with one purpose in mind: detect, track and (if necessary) destroy Soviet submarines. The venerable P-3 spent its last years in service, however, flying combat missions hundreds of miles from the sea, conducting intelligence collection operations in support of allied ground troops in the war against al Qaeda:

Over the course of twenty days in March 2002, Navy veterans from coast to coast were riveted as reports trickled back to the United States regarding Operation Anaconda, the military’s fierce offensive against al-Qaida and the Taliban in southeast Afghanistan.

There, over an arid landlocked country, P-3 Orion maritime patrol aircraft that were originally designed to hunt submarines during the Cold War were making quite a splash.

The crew of the 116-foot-long turboprop plane did it all, using its cutting-edge sensors and thermal-sensitive cameras to do nearly everything from

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<sup>138</sup> Stefano D'Urso, “How the F-14 Tomcat Evolved and Became the Bombcat,” *The Aviationist* (The Aviationist, December 26, 2020), <https://theaviationist.com/2020/12/26/how-the-f-14-tomcat-evolved-and-became-the-bombcat/>.



identifying safe sites for helicopter landings to locating small bands of insurgents hiding in caves.<sup>139</sup>

The Cold War navy of the United States, after struggling through a decade of budget cuts, spent the next decade changing tactics, techniques and procedures to fight in an overland or littoral environment. An entire generation of sailors, even with equipment designed to fight for control of the ocean against an enemy superpower, no longer had the institutional knowledge, gained over the course of nearly a hundred years, to achieve sea control.

#### 4.4.3 U.S. View of Sea Control 2010 – Present

It wasn't until 2010 that the 1994 NDP-1 was superseded by a publication of the same name. In the new publication, the term "sea control" returned to naval doctrine, mentioned 28 times in the document. This was inculcating into doctrine what had become the naval strategy three years earlier. In 2007 "A Cooperative Strategy for 21<sup>st</sup> Century Maritime Superiority" (known colloquially as "CS-21") was published, which listed "Sea Control" among five other "core capabilities" of the U.S. Navy. This change reflected an "increase in emphasis on those activities that prevent war and build partnerships."<sup>140</sup> By 2010, China was well underway in modernizing their navy, and Russia had embarked on a costly conflict with Georgia. Still, while neither CS-21 nor the 2010 NDP-1 mentions either Russia or China by name, one could point to the following sentence (the NDP quotes the CS-21 directly) as the first acknowledgement of a return to great power competition: "While war with another *great power* [emphasis added] strikes many as improbable, the near-certainty of its ruinous effects demands that it be actively deterred using

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<sup>139</sup> "P-3 Orion: The All-Terrain Hunter," Lockheed Martin (Lockheed Martin, March 28, 2018), <https://www.lockheedmartin.com/en-us/news/features/history/p-3-orion.html>.

<sup>140</sup> *A Cooperative Strategy for 21st Century Seapower* (Washington, DC: United States Marine Corps, United States Dept. of the Navy, United States Coast Guard, 2007), 12. The other five core capabilities were forward presence, deterrence, power projection, maritime security, and humanitarian assistance/disaster relief, or "HA/DR".

all elements of national power”<sup>141</sup> (“Great Power Competition,” or simply “GPC,” would become the cornerstone of U.S. strategy and planning after the Trump Administration published the 2017 National Security Strategy).

This acknowledgement of a return to competition amongst major powers meant that no longer could sea control be taken for granted. Indeed, the 2010 NDP-1 describes it as “the essence of sea power and is a necessary ingredient in the successful accomplishment of all naval missions.”<sup>142</sup> While achieving sea control is an imperative, the idea of unchallenged U.S. maritime hegemony had disappeared:

Arguably, the vastness of the world’s oceans makes it impossible for even a preeminent naval power to achieve global maritime superiority. Thus achieving *local* or *regional* maritime superiority may be a goal for a *limited duration* in order to accomplish *specific* objectives...Strategic maritime geography, the CCDR’s regional requirements, the capabilities of potential adversaries, and enduring US national objectives drive the scale of forward-deployed naval presence and surge capability necessary to deter aggression at sea and, when required, establish maritime superiority in a *specific locale*. [emphasis added]<sup>143</sup>

This understanding of limited sea control may very well describe the Russian navy’s approach to control in the Syrian area of operations. According to the 2010 NDP’s definition, and contrarian to Mahanian theory, this local sea control can exist in wartime even without firing a shot: “Sea control is achieved primarily through the demonstrated use *or credible threat* of force (emphasis added).”<sup>144</sup>

In 2020, the most recent version of “Naval Doctrine Publication 1: Naval Warfare” was published. In the decade separating it and the previous NDP-1, China had begun the physical land

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<sup>141</sup> *Naval Warfare* (Norfolk, VA: Navy Warfare Development Command, 2010), 27.

<sup>142</sup> *Ibid*, 34.

<sup>143</sup> *Ibid*, 35.

<sup>144</sup> *Ibid*.

reclamation of several islands in the South China Sea; China had become legally and physically embroiled in conflicts with the Philippines and Japan over the Scarborough Reef and the Senkaku Islands, respectively; Russia had invaded and annexed the Crimean Peninsula; and Russia had simultaneously embarked on a massive sealift and power projection operation against anti-Assad forces in the Syrian Civil War. Great power conflict was no longer simply an unthinkable worst-case scenario, and unchallenged American control of the world ocean seemed like a distant memory. In the 2020 NDP-1, “Sea Control” for the first time was officially defined by the U.S. Navy as:

The condition in which one has freedom of action to use the sea for one’s own purposes in specified areas and for specified periods of time and, where necessary, to deny or limit its use to the enemy. Sea control includes the airspace above the surface and the water volume and seabed below.<sup>145</sup>

Sea control is emphasized repeatedly in the 2020 NDP-1, with one phrase repeated, enlarged, and bolded: “There is, however, one constant. Sea control enables all other naval functions.”<sup>146</sup> The idea of sea control being exercised without firing a shot (as implied in the 2010 doctrine) is gone; the phrase “credible threat” no longer appears with sea control and is exclusively used to define deterrence. Quite to the contrary, by 2020 sea control was being described as the “manifestation of *lethality* afloat. [emphasis added]”<sup>147</sup>

The most recent NDP-1 was published in April 2020. In December of that same year, a new U.S. Naval Strategy<sup>148</sup> was unveiled, titled “Advantage at Sea: Prevailing with Integrated, All-

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<sup>145</sup> *Naval Warfare Publication 1: Naval Warfare* (Norfolk, VA: Navy Warfare Development Command, 2020), 76.

<sup>146</sup> *Ibid*, 24.

<sup>147</sup> *Ibid*, 22.

<sup>148</sup> Although the terms “strategy” and “doctrine” are related, they are not the same. Military doctrine can be thought of as the underlying principles at various levels that a warfighter turns to in determining a course of action. Strategy, on the other hand, is the course of action itself – a path to achieve military objectives.

Domain Naval Power” (colloquially known as the “Tri-Service Strategy,” since it was signed by the Chief of Naval Operations, Commandant of the Marine Corps, and Commandant of the Coast Guard). The Tri-Service Strategy explicitly stated what the previous doctrine had only alluded to: that America’s maritime services were no longer masters of the maritime domain, and that a return to an emphasis on sea control was an imperative:

**Contested seas require a renewed emphasis on sea control.** Denying our adversaries’ use of the seas thwarts their direct wartime objectives and disrupts their efforts to threaten our allies and the American homeland from the maritime domain. We must increase our emphasis on controlling the seas in conflict to provide joint and allied forces with the freedom of maneuver to attack adversary forces and impose costs globally (emphasis in the original).<sup>149</sup>

A stark admission is made in the Tri-Service Strategy: “The maritime domain can no longer be considered a permissive environment.”<sup>150</sup> Should it come to war, while the stronger side would attempt sea control, the best an obviously weaker opponent could hope for was sea denial, “partially or completely denying the adversary the use of the sea with a force that may be insufficient to ensure the use of the sea by one’s own forces.”<sup>151</sup> The idea that the U.S. would be reduced to pursuing a sea denial strategy was so anathema to American doctrinaires that the term is not used at all in either the 1994 nor the 2010 NDP-1’s. Only in the 2020 NDP-1 and Tri-service strategy is the idea that the United States may be forced into a *sea denial* strategy (the strategy of the weaker side) entertained. In the 2020 NDP, half of the times “sea denial” is mentioned, it is grouped together with “sea control” as one of two viable options facing the U.S. Navy in a future maritime conflict.

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<sup>149</sup> *Advantage at Sea: Prevailing with Integrated All-Domain Naval Power*, § (2020), <https://media.defense.gov/2020/Dec/16/2002553074/-1/-1/0/TRISERVICESTRATEGY.PDF>, 6.

<sup>150</sup> *Ibid*, 16.

<sup>151</sup> *Ibid*, 27.

#### 4.5 Soviet Move to a “Naval Offensive”

A final naval theoretician will be discussed to close out this section. Edward Wegener is a relatively obscure author who rose to the rank of Vice Admiral in the West German navy during the Cold War. In 1972 the Naval Institute Press, the publishing arm of the United States Naval Institute, published an article by then-retired Vice Admiral Wegener titled “Theory of Naval Strategy in the Nuclear Age.” That same year Wegener wrote a book in German, “The Soviet Naval Offensive: An Examination of the Strategic Role of Soviet Naval Forces in the East-West Conflict.” In the book Wegener applied his theories from the article to the specific case of the Soviet naval buildup of the 1960’s. In 1975 the Naval Institute Press had the book translated into English and republished.

In the 1972 article Wegener, while agreeing with Mahan’s basic concepts, noted that some nations that applied Mahanian theory to their shipbuilding programs prior to the First World War had, in his mind, misread Mahan. Like their American and British counterparts, Germany and Russia had embarked on building large fleets to engage in a decisive battle at sea, but unlike America and Britain, they lacked the geographic position to do so:

In their time, Mahan's books were carefully studied by all governments and all navies of the world. Statesmen, politicians, and admirals were inspired by his works and found in them a justification for their naval armament. Several big states, spurred by Mahan's ideas, incurred great sacrifices to build mighty fleets. When, soon after, they had to fight for national survival in World War I, these fleets turned out to be poor investments. They were hardly used in combat. Where was their "influence upon history"? These states—Tsarist Russia, Austria-Hungary, and, above all, Imperial Germany (all three countries with continental tradition and longstanding experience in land warfare)—had, as we can state retrospectively, misread Mahan's teachings. Why were these empires induced into error? It would be highly instructive to find out, since the present antagonist of the West, the Soviet Union, is, just like the old Russia, a state in geographical position far removed from disputed sea areas. At the same time it is a state with a continental tradition and much experience in land warfare. Nevertheless, it

owns the second strongest navy in the world. One is struck by the contrast between naval armament of such enormous dimensions and the geographical area upon which it is based.<sup>152</sup>

These observations hold considerable importance when assessing the modern Russian navy, as Russia's geographic position has only diminished since the end of the Soviet Union. As it continues to add modern warships to its inventory, a 21<sup>st</sup> century analyst might still be "struck" by this dichotomy.

Wegener's naval theory, both in general and as specifically applied to Russia, was that sea power (which led to the ability to control the sea) could be described in the form of a multiplicative formula:

Seapower thus becomes a product of fleet and position. If one factor is zero, the product itself becomes zero: the fleet is worthless without position and, without a fleet, position does not count.

The stronger the fleet and the more favorable the position, the bigger the product, and the stronger seapower becomes.<sup>153</sup>

We can thus summarize: seapower consists—and there is no undue simplification in this—of only two elements: fleet and naval strategic position. The product of the two elements, and thereby the rank and efficiency of seapower, hinges on the quality of each of them.<sup>154</sup>

Thus, according to Wegener, 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.") Mathematically, this drives home the point that a country cannot outspend poor geography; if G is zero, then no matter how large the value of F is, SP will always come out to zero. Taking to the extreme, the formula is obvious: if a country has a world class navy yet is landlocked with no base

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<sup>152</sup> Edward Wegener, "Theory of Naval Strategy in the Nuclear Age," *Naval Institute Proceedings* 98, no. 5 (May 1972): pp. 190-207, <https://doi.org/https://www.usni.org/magazines/proceedings/1972/may/theory-naval-strategy-nuclear-age>, 192.

<sup>153</sup> *Ibid*, 195.

<sup>154</sup> *Ibid*, 197.

to sail it from, then they have no naval power. If conversely a nation has the most advantageous geographic position on the globe, but no combatant ships whatsoever, it also has zero naval power.

As a German (with a father who was also a vice admiral in the Imperial German Navy during World War I), Wegener details how a misreading of Mahan coupled with a lack of geographic position doomed the Germans from the start:

Mahan was most patently misread by the Imperial German Navy. The geographical position of the High Seas Fleet was the German North Sea coast with its fine ports. Admiral Tirpitz had based his excellent fleet on this geographical position, in the innermost southeastern corner of the North Sea. His strategic aims were, quite exclusively, to make his fleet the equal of the British Grand Fleet in number and quality of battleships. The German navy had firmly counted on one or more battles in the North Sea soon after a war with England would break out. Its numerical inferiority notwithstanding, it hoped for a victory, and was certain that it could sway a naval war its way. But the decisive battle did not materialize. The Battle of Jutland—left uncompleted one day, and not renewed the next morning—proved to be a much-noticed German military success. From the viewpoint of naval strategy, however, it remained without aftermath. This would have been the case even if the German success had been more sizeable. For the strategic situation would not have been changed a bit even by a memorable and resounding victory. The English had all they desired: mastery of the sea throughout the Atlantic. Why should they wage a battle in the North Sea? It is clear that they expressly avoided another big naval battle with the Germans.

The Germans faced this situation helplessly. They thought they had learned from Mahan that what counts most in naval war is to concentrate one's forces and seek the battle at sea to bring about a decision. This theory fitted in with their experience in land war. In a land war, where a given territory is to be conquered, the combat of the armies comes about automatically, and is indeed decisive. During the war and even after, the Germans were unable to answer the question why this should be different at sea. They did not manage to solve the riddle of the non-occurrence of the battle at sea...

From this specific World War I example, we can learn a great deal about the concept of seapower:

By itself a fleet, no matter how strong it is, is not seapower.

A fleet needs a geographical position adjacent to the disputed sea, from which it can set out upon the contest of supremacy.<sup>155</sup>

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<sup>155</sup> Ibid, 194-195.

Of course, writing as a former military officer in a divided Germany, Wegener's general theory of sea power, derived from German failures a half-century earlier, were meant for those in NATO facing the Soviet threat of the 1970's. Like World War I Germany, the Soviets were building a large and menacing fleet in an attempt to challenge that of the West, yet faced geographic realities at least as dire as those that faced Germany:

The Soviet Union is a country just as much shaped by continental traditions, possessing long coast lines and some fine ports, but lacking, as did Germany, naval strategic positions adjacent to the oceans. In fact, the similarity of the two countries with regard to their naval strategic situation is quite striking. The particular insistence on the importance of the naval strategic position which characterizes this analysis has this similarity in mind, and, we believe, is thereby justified.<sup>156</sup>

In his book *The Soviet Naval Offensive*, Wegener expands on his general theory of sea power and applies it specifically to the Soviet Navy at the beginning of the 1970's. Here, in addition to his previously mentioned factors of "fleet" and "geographic position," he introduces a third element: a "sea-oriented mentality...on the behalf of the people, especially of its leaders and its government."<sup>157</sup> Because of the expense involved in building and maintaining a technologically and numerically competitive fleet, a nation must commit, for the long term, to a strategy of sea power, in particular a naval "strategic offensive." The less advantageous a country's geographical position, the more difficult this commitment will be (by the political leadership or the population they are accountable to, depending on the relative level of democracy or authoritarianism in the country of study). Where Wegener's formula is concerned, one may think of this as a part of the factor of "fleet" – leaders with a sea-going mentality will be

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<sup>156</sup> Ibid, 196.

<sup>157</sup> Edward Wegener, *The Soviet Naval Offensive* (Annapolis, MD: U.S. Naval Institute, 1975), 3.



willing to invest in a navy with the capability to challenge other great powers on the open ocean. Without this focus, a fleet focused on self-defense will be the result.

The buildup in the 1960s of large numbers of Soviet deep-draft naval combatants led Wegener in 1975 to ask the question: "...has Soviet Russia performed a transition from a continental to a sea-oriented mentality?"<sup>158</sup> Wegener passed away six years later at the age of 77; a decade after that, the Soviet Union was no more, and the questions he raised were put on hold. Now, nearly fifty years after he wrote "The Soviet Naval Offensive," as a result of their offensive operations into Syria, that same question can be asked of Putin's Russia: has Russia transitioned to the naval offensive?

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<sup>158</sup> Ibid, 4.

## 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.”<sup>159</sup>

- 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.”<sup>160</sup>

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

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

— Napoleon Bonaparte<sup>161</sup>

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

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

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

<sup>161</sup> 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:”<sup>162</sup>

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.<sup>163</sup>

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.<sup>164</sup>

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

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<sup>162</sup> Alfred Thayer Mahan, *The Problem of Asia and Its Effect upon International Policies* (Boston, MA: Harper and Brothers, 1900), 36.

<sup>163</sup> *Ibid.*, 43.

<sup>164</sup> *Ibid.*

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

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...”<sup>166</sup>

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.<sup>167</sup>

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<sup>165</sup> 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.

<sup>166</sup> Mahan, *Asia*, 43-44.

<sup>167</sup> 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.<sup>168</sup>

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.<sup>169</sup>

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

<sup>169</sup> *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.<sup>170</sup>

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-

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<sup>170</sup> Ibid, 15.

established a naval squadron in the eastern Mediterranean, known during the Cold War as the 5<sup>th</sup> “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.<sup>171</sup>

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),

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<sup>171</sup> 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 69<sup>th</sup> 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.<sup>172</sup> 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”)<sup>173</sup> is ice-packed during much of the year, resulting in the development (begun

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

<sup>173</sup> “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.<sup>174</sup>

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.<sup>175</sup>

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."<sup>176</sup> 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"<sup>177</sup>), planners on both sides nonetheless viewed the GIUK Gap as a key transit route of the Cold War: "The Gap's geography

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<sup>174</sup> 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>.

<sup>175</sup> 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>.

<sup>176</sup> 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/>.

<sup>177</sup> 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.”<sup>178</sup>

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.<sup>179</sup>

### 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...”<sup>180</sup> The threat was made following reports that two non-

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<sup>178</sup> Ibid.

<sup>179</sup> 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>.

<sup>180</sup> 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.<sup>181</sup>

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...”<sup>182</sup> 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.<sup>183</sup>

At the turn of the 20<sup>th</sup> 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.

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<sup>181</sup> 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/>.

<sup>182</sup> “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/>.

<sup>183</sup> 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.”<sup>184</sup> 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.<sup>185</sup>

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 May<sup>186</sup>), Kaliningrad’s port of Baltiysk became the headquarters of the Soviet Baltic Fleet and remains so

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

<sup>185</sup> *Ibid*, 48.

<sup>186</sup> “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. Freedberg 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."<sup>187</sup>

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.<sup>188</sup>

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

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<sup>187</sup> 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/>.

<sup>188</sup> 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.<sup>189</sup>

### 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).<sup>190</sup> 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).<sup>191</sup> 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

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<sup>189</sup> Fairhall, 52-53.

<sup>190</sup> Alexandersson, 65.

<sup>191</sup> 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.<sup>192</sup>

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.<sup>193</sup>

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”<sup>194</sup> 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.

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<sup>192</sup> Ibid.

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

<sup>194</sup> 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”<sup>195</sup>

-- Csar Alexander I, to Napoleon’s Ambassador

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

-- 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.”<sup>197</sup>

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

<sup>196</sup> 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/>.

<sup>197</sup> 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,<sup>198</sup> hastily made copies of Russian-made Kh-35<sup>199</sup> (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."<sup>200</sup> 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

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<sup>198</sup> 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>.

<sup>199</sup> "Kh-35 Anti-Ship Cruise Missile," Military today (Military-Today.com), accessed April 27, 2022, [http://www.military-today.com/missiles/kh\\_35.htm](http://www.military-today.com/missiles/kh_35.htm).

<sup>200</sup> 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."<sup>201</sup> Although the first known manuscript of this tale is dated from around 800 B.C.,<sup>202</sup> 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.<sup>203</sup>

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

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

<sup>202</sup> 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](https://www.bbc.co.uk/history/ancient/greeks/jason_01.shtml#:~:text=The%20story%20is%20a%20set,where%20early%20epic%20poetry%20developed).

<sup>203</sup> Ibid.

Black Sea beyond.”<sup>204</sup> 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'.<sup>205</sup> 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]<sup>206</sup> 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.”<sup>207</sup>

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.<sup>208</sup>

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<sup>204</sup> Ibid.

<sup>205</sup> Ibid.

<sup>206</sup> Vespremeanu and Golumbeanu.

<sup>207</sup> “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).)

<sup>208</sup> Fairhall, 54.

From an economic standpoint, though half a century has passed since Fairhall penned his Cold War assessment of the importance of the Euxeinus Pontius 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.<sup>209</sup> 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.<sup>210</sup> 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.

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

<sup>210</sup> 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.<sup>211</sup> 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."<sup>212</sup> 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.<sup>213</sup>

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

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

<sup>212</sup> *Ibid*, 183.

<sup>213</sup> *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.<sup>214</sup>

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.<sup>215</sup>

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

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<sup>214</sup> “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).)

<sup>215</sup> Delanoe, 370.

activity. The operation evolved out of NATO's immediate response to the terrorist attacks against the United States of 11 September 2001.<sup>216</sup>

NATO forces "hailed over 128,000 merchant vessels and boarded some 172 suspect ships under *Active Endeavor*," which lasted from 2001 until 2014.<sup>217</sup> What seems remarkable in retrospect is the fact that, according to NATO, "Russia deployed vessels twice, in 2005 and 2006."<sup>218</sup> 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.<sup>219</sup>

The *Pitliviy* 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

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<sup>216</sup> "Operation Active Endeavour (Archived)," NATO (North Atlantic Treaty Organization, March 9, 2011), [https://www.nato.int/cps/en/natohq/topics\\_7932.htm](https://www.nato.int/cps/en/natohq/topics_7932.htm).

<sup>217</sup> Ibid.

<sup>218</sup> Ibid.

<sup>219</sup> "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.<sup>220</sup>

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.”<sup>221</sup>

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.<sup>222</sup> At least by the yardstick of naval cooperation, Russia's relationship with the West was on a very positive trajectory.

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<sup>220</sup> 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>.

<sup>221</sup> Ibid.

<sup>222</sup> “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.<sup>223</sup> 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."<sup>224</sup> 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."<sup>225</sup>

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<sup>223</sup> 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/>.

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

<sup>225</sup> 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.<sup>226</sup>

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

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<sup>226</sup> Delanoë, 375.

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

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.”<sup>228</sup> 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.<sup>229</sup>

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

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<sup>227</sup> 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>.

<sup>228</sup> Delanoë, 371.

<sup>229</sup> “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 variant<sup>230</sup> while shorter 1,500 km-range estimates are for the conventionally armed missile.<sup>231</sup>

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

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<sup>230</sup> 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”

<sup>231</sup> “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.<sup>232</sup>

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.<sup>233</sup>

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<sup>232</sup> 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.

<sup>233</sup> 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.<sup>234</sup>*

—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,

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<sup>234</sup> 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?<sup>235</sup>

Hamlin’s 19<sup>th</sup> 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.<sup>236</sup>

“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.”<sup>237</sup> 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

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<sup>235</sup> 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/>.

<sup>236</sup> *Ibid.*

<sup>237</sup> 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?<sup>238</sup>

Vali goes on to point out that this importance was recognized long before 19<sup>th</sup> 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.<sup>239</sup>

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.<sup>240</sup>

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 18<sup>th</sup> century to the current day. That

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

<sup>239</sup> *Ibid*, 14-15.

<sup>240</sup> 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<sup>241</sup> 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.<sup>242</sup>

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.<sup>243</sup>

#### 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

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<sup>241</sup> 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.

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

<sup>243</sup> 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,”<sup>244</sup> 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 trends 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.<sup>245</sup>

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.<sup>246</sup>

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<sup>244</sup> 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/>.

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

<sup>246</sup> 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").<sup>247</sup> 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.<sup>248</sup> 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,

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<sup>247</sup> Insert footnote with the Twitter user

<sup>248</sup> "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...<sup>249</sup>

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”<sup>250</sup> – 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

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<sup>249</sup> Chrēstos L. and Stankos, 4-5.

<sup>250</sup> 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.<sup>251</sup>

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.<sup>252</sup>

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.<sup>253</sup>

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<sup>251</sup> Albert, 8.

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

<sup>253</sup> 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.<sup>254</sup>

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<sup>254</sup> 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),<sup>255</sup> 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”<sup>256</sup> 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

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<sup>255</sup> “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,were%20British%20and%20Irish%20troops.>

<sup>256</sup> “Treaty of Lausanne,” Encyclopædia Britannica (Encyclopædia Britannica, inc.), accessed May 10, 2022, [https://www.britannica.com/event/Treaty-of-Lausanne-1923.](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.<sup>257</sup>

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.<sup>258</sup>

Of course, it took slightly more than ten years for the 20<sup>th</sup> 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):

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<sup>257</sup> “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>.

<sup>258</sup> 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](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...<sup>259</sup>

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.<sup>260</sup>

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<sup>259</sup> Kemal Kirişci 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/>.

<sup>260</sup> "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/>, 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.”<sup>261</sup>

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.”<sup>262</sup>

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.”<sup>263</sup>

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<sup>261</sup> Ibid, 8.

<sup>262</sup> 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/>.

<sup>263</sup> “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.”<sup>264</sup> 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,”)<sup>265</sup> 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”<sup>266</sup> – 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.<sup>267</sup> 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

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<sup>264</sup> “Ibid, 7.

<sup>265</sup> Ibid, 6.

<sup>266</sup> Ibid, 16.

<sup>267</sup> “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.”<sup>268</sup>

Nonetheless, “on July 18<sup>th</sup>, 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.”<sup>269</sup> 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.<sup>270</sup>

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*

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<sup>268</sup> “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>.

<sup>269</sup> 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](https://digital.sandiego.edu/sdlr/vol14/iss3/11/?utm_source=digital.sandiego.edu%2Fsdlr%2Fvol14%2Fiss3%2F11&utm_medium=PDF&utm_campaign=PDFCoverPages), 681.

<sup>270</sup> *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.<sup>271</sup> 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.”<sup>272</sup>

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.<sup>273</sup>

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

<sup>272</sup> *Ibid*, 681-682.

<sup>273</sup> “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/>, 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 submarines<sup>274</sup> 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

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<sup>274</sup> 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.<sup>275</sup>

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.<sup>276</sup>

For its part, the *Krasnodar* passed north through the English Channel in July 2020, as reported by H.I. Sutton in the *Financial Times*,<sup>277</sup> 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

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<sup>275</sup> 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>.

<sup>276</sup> “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/>.

<sup>277</sup> 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...<sup>278</sup>

Russia kicked off its invasion of Ukraine on February 23, 2022, in what Russian President Vladimir Putin described it as a “special military operation.”<sup>279</sup> 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”.<sup>280</sup>

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<sup>278</sup> “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.

<sup>279</sup> 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>.

<sup>280</sup> “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.”<sup>281</sup> 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.”<sup>282</sup> 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.”<sup>283</sup>

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.”<sup>284</sup> Technically, according to Montreux, this was not within Turkey’s power to declare, unless it felt it was “threatened with imminent danger of war,”<sup>285</sup> 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

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<sup>281</sup> 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-uDQCa9dMZsNGZLQsfWYg>.

<sup>282</sup> Ibid.

<sup>283</sup> Meyers.

<sup>284</sup> 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>.

<sup>285</sup> “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.<sup>286</sup>

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:

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<sup>286</sup> 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.<sup>287</sup>

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:

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<sup>287</sup> 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.<sup>288</sup>

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.<sup>289</sup>

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.<sup>290</sup>

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<sup>288</sup> 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>.

<sup>289</sup> Hattendorf, *Naval Policy and Strategy in the Mediterranean*, 5.

<sup>290</sup> *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.<sup>291</sup>*

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.<sup>292</sup>

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

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<sup>291</sup> Ibid, 6.

<sup>292</sup> 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*<sup>293</sup>; and her ensign has always carried the badge of St George (for Valour) in commemoration.<sup>294</sup>

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.<sup>295</sup>

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

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<sup>293</sup> 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.

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

<sup>295</sup> 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."<sup>296</sup>

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

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<sup>296</sup> 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.<sup>297</sup>

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.

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<sup>297</sup> 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".<sup>298</sup>

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,<sup>299</sup> Mongols that "brutally conquered"<sup>300</sup> and subjected the Russian people for nearly a quarter millennium from the 13<sup>th</sup> to the 15<sup>th</sup> 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

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<sup>298</sup> Marshall, 13.

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

<sup>300</sup> Kaplan, 65.

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

The naval base at Petropavlovsk is north of the 53<sup>rd</sup> parallel of latitude; by comparison, the entirety of the continental United States lies below the 50<sup>th</sup> parallel. The Russian Pacific Fleet’s adversarial counterpart, the U.S. Pacific Fleet, is headquartered in Pearl Harbor, Hawaii, just north of the 23<sup>rd</sup> 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.”<sup>303</sup> 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.<sup>304</sup>

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

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<sup>301</sup> 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>.

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

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

<sup>304</sup> 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.<sup>305</sup>

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).<sup>306</sup> 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),<sup>307</sup> which in late 2021 made the Pacific Fleet its homeport.<sup>308</sup>

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

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

<sup>306</sup> "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>.

<sup>307</sup> "The Gremyashchiy-Class - Extremely Lethal with Zircon Missiles," YouTube (FORCE Technology, March 13, 2021), [https://www.youtube.com/watch?v=e9\\_uxBrjs7o](https://www.youtube.com/watch?v=e9_uxBrjs7o).

<sup>308</sup> 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.<sup>309</sup>

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."<sup>310</sup> 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

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<sup>309</sup> 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/>.

<sup>310</sup> 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 journey<sup>311</sup> 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.”<sup>312</sup> 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*

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

<sup>312</sup> 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,”<sup>313</sup> 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.”<sup>314</sup>

The Chinese navy – officially named the “People’s Liberation Army Navy” – has become the world’s largest<sup>315</sup> and most modern<sup>316</sup> 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 21<sup>st</sup>-century navy.

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<sup>313</sup> “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/>.

<sup>314</sup> Hattendorf, *Naval Policy and Strategy in the Mediterranean*, 6.

<sup>315</sup> 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>.

<sup>316</sup> “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 21<sup>st</sup> 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-20<sup>th</sup> 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)*<sup>317</sup>

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

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<sup>317</sup> 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.<sup>318</sup>

There were other ramifications besides a national psyche dominated by “the bitterest of feelings of inferiority and insecurity.”<sup>319</sup> 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.”<sup>320</sup>

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.”<sup>321</sup> 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.”<sup>322</sup> Though

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<sup>318</sup> Kaplan, 65.

<sup>319</sup> Ibid.

<sup>320</sup> Daniel, 14.

<sup>321</sup> Ibid, 15.

<sup>322</sup> 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.<sup>323</sup> 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."<sup>324</sup>

#### 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.<sup>325</sup> With a Western mentality (bolstered by journeys to Sweden, Holland, England, Germany and Austria), Peter would defeat

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<sup>323</sup> 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.

<sup>324</sup> Daniel, 15.

<sup>325</sup> *Ibid*, 20.

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

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.<sup>327</sup> 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.<sup>328</sup> 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.<sup>329</sup> 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:

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<sup>326</sup> Ibid, 21.

<sup>327</sup> Ibid, 21-22.

<sup>328</sup> Lambert, 6-7.

<sup>329</sup> 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.<sup>330</sup>

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."<sup>331</sup>

This assessment by Lambert is germane to the discussion of the modern use of Russian naval power in the 21<sup>st</sup> 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.<sup>332</sup>

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

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<sup>330</sup> Ibid, 239.

<sup>331</sup> Ibid, 242.

<sup>332</sup> 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 21<sup>st</sup> 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."<sup>333</sup> Since current Russian President Vladimir Putin fashions himself a modern-day Peter the Great,<sup>334</sup> 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.<sup>335</sup> 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

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<sup>333</sup> Ibid.

<sup>334</sup> 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>.

<sup>335</sup> 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.<sup>336</sup> 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.<sup>337</sup> 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).<sup>338</sup> 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.”<sup>339</sup> 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...”<sup>340</sup>), which would give rise to a deep-seated suspicion in the West, especially regarding Russian designs on Constantinople.

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

<sup>337</sup> *Ibid.*

<sup>338</sup> *Ibid.*

<sup>339</sup> 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>.

<sup>340</sup> 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 19<sup>th</sup> 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.”<sup>341</sup> 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.”<sup>342</sup>

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.<sup>343</sup>

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<sup>341</sup> Daniel, 27.

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

<sup>343</sup> Daniel, 27.

## 6.2 20<sup>th</sup> Century Russian and Soviet Naval Experience

### 6.2.1 Entrance into the Modern Era of Naval Operations

As the 19<sup>th</sup> 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 20<sup>th</sup> 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 20<sup>th</sup> century; the 19<sup>th</sup> 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.”<sup>344</sup> While many

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<sup>344</sup> 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.<sup>345</sup>

### 6.2.2 Russo-Japanese War

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

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<sup>345</sup> 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.”<sup>346</sup>

#### 6.2.2.1 Conflict Overview

The technological revolution of the end of the 19<sup>th</sup> century would segue into the Russo-Japanese War of the beginning of the 20<sup>th</sup>. 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

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<sup>346</sup> 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,"<sup>347</sup> 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.*<sup>348</sup>

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.<sup>349</sup>

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

<sup>348</sup> Ibid.

<sup>349</sup> 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 20<sup>th</sup> 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...”<sup>350</sup> 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.”<sup>351</sup> 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).<sup>352</sup>

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 7<sup>th</sup>, 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

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<sup>350</sup> Eller, 79.

<sup>351</sup> Ibid.

<sup>352</sup> 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 accomplis* 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: 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.<sup>353</sup>

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<sup>353</sup> 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.”<sup>354</sup> 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.<sup>355</sup>

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

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<sup>354</sup> D. Mitchell, 237.

<sup>355</sup> 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 21<sup>st</sup> 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."<sup>356</sup> 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,

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<sup>356</sup> 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.<sup>357</sup>*

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.”<sup>358</sup>

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.<sup>359</sup>*

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

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

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

<sup>359</sup> *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.<sup>360</sup>

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.<sup>361</sup> This, and the economic devastation that accompanied, directly led to the successful

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<sup>360</sup> Ibid, 14.

<sup>361</sup> 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.")<sup>362</sup>

#### 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."<sup>363</sup> 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."<sup>364</sup> A cleansing ("chistka") occurred throughout the Red Fleet, with 15,000 personnel (about "one out of every six persons"<sup>365</sup>) 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"

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<sup>362</sup> 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#>.

<sup>363</sup> Daniel, 41.

<sup>364</sup> Herrick, 5.

<sup>365</sup> 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.”<sup>366</sup>

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.”<sup>367</sup> Luckily for traditionalists in

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<sup>366</sup> Ibid, 22.

<sup>367</sup> 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.<sup>368</sup>

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 Gillette 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.”<sup>369</sup>

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.”<sup>370</sup> 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

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<sup>368</sup> Ibid, 30.

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

<sup>370</sup> 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.<sup>371</sup>

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”<sup>372</sup> 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.”<sup>373</sup> 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

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<sup>371</sup> Ibid.

<sup>372</sup> Ibid, 105.

<sup>373</sup> 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.<sup>374</sup>

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.

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<sup>374</sup> 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.<sup>375</sup>

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.<sup>376</sup>

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.<sup>377</sup> Unlike in Syria, Russia did not have the naval assets to protect their lines of communication in the Mediterranean:

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

<sup>376</sup> 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.

<sup>377</sup> *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.<sup>378</sup>

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.<sup>379</sup>

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.<sup>380</sup>

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<sup>378</sup> Ibid.

<sup>379</sup> Woodward, 204.

<sup>380</sup> 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.<sup>381</sup> 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.<sup>382</sup> 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.

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<sup>381</sup> 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.

<sup>382</sup> *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.<sup>383</sup>

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).<sup>384</sup> 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.<sup>385</sup> In this opening engagement of Soviet tank operations in the Spanish Civil War, fully fifty percent of the casualties were Soviet. As discussed

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<sup>383</sup> 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>.

<sup>384</sup> *Ibid.*

<sup>385</sup> *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.*<sup>386</sup>

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:

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<sup>386</sup> Ibid.

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

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

Source: "Soviet Tank Operations in the Spanish Civil War" (Zaloga)<sup>387</sup>

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

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<sup>387</sup> 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.<sup>388</sup> 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.<sup>389</sup>

#### 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.<sup>390</sup> 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.<sup>391</sup> 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

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

<sup>389</sup> *Ibid*, 113.

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

<sup>391</sup> *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.<sup>392</sup>

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..."<sup>393</sup> 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

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<sup>392</sup> Gillette and Frank, 104.

<sup>393</sup> 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.<sup>394</sup>

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...<sup>395</sup>

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."<sup>396</sup> However, while a large "balanced" fleet was now

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<sup>394</sup> M. Mitchell, 382.

<sup>395</sup> Ibid.

<sup>396</sup> 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."<sup>397</sup> 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..."<sup>398</sup>*

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<sup>397</sup> Ibid, 60.

<sup>398</sup> 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...”<sup>399</sup>

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.’<sup>400</sup>

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

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<sup>399</sup> Ibid, 67.

<sup>400</sup> Ibid, 25.

technology...No more was to be heard for 12 years in favor of aircraft carriers.”<sup>401</sup> 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).<sup>402</sup>

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

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<sup>401</sup> Ibid, 70.

<sup>402</sup> 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 21<sup>st</sup> 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.<sup>403</sup>

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

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<sup>403</sup> 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.”<sup>404</sup> 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

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<sup>404</sup> 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.<sup>405</sup>

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 2017<sup>406</sup> 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.<sup>407</sup> 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

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<sup>405</sup> Ibid, 8.

<sup>406</sup> "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>.

<sup>407</sup> Lautenschlager, 11.

port), this alone did not account for the transformation from 19<sup>th</sup> 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-19<sup>th</sup> 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.<sup>408</sup> The range (up to 2,000 yards)<sup>409</sup> 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 19<sup>th</sup> 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,

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<sup>408</sup> Ibid, 10.

<sup>409</sup> 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.<sup>410</sup>

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.<sup>411</sup>

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.

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<sup>410</sup> Ibid, 31.

<sup>411</sup> 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*.<sup>412</sup> 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.<sup>413</sup>

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.<sup>414</sup>

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

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<sup>412</sup> Ibid, 39.

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

<sup>414</sup> 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.<sup>415</sup> 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

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<sup>415</sup> “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 Styx*<sup>416</sup> 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

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<sup>416</sup> 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.<sup>417</sup> Russia reportedly used this missile to sink a Georgian patrol boat in 2008.<sup>418</sup> 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.<sup>419</sup> 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).<sup>420</sup>

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.<sup>421</sup> 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).

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<sup>417</sup> Mark Vermynen, "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/>.

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

<sup>419</sup> 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>.

<sup>420</sup> "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/>.

<sup>421</sup> 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.<sup>422</sup> 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

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<sup>422</sup> "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 *Sovremennyi's*, along with their accompanying SS-N-22 missiles.<sup>423</sup>

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.<sup>424</sup>

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

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

<sup>424</sup> 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.<sup>425</sup>

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.<sup>426</sup> 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.<sup>427</sup>

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

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<sup>425</sup> Polmar and Allen.

<sup>426</sup> Wit, 252.

<sup>427</sup> 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.<sup>428</sup> 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.<sup>429</sup>

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,

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<sup>428</sup> 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/>.

<sup>429</sup> "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](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.<sup>430</sup>

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.<sup>431</sup>

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

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<sup>430</sup> "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>.

<sup>431</sup> 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.<sup>432</sup> 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.<sup>433</sup> 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.

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

<sup>433</sup> 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."<sup>434</sup>

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):

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<sup>434</sup> 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](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-21<sup>435</sup> with a nonnuclear warhead...[redacted]...SLCMs armed with nonnuclear warheads would be useful against theater targets (such as US SOSUS<sup>436</sup> 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.<sup>437</sup>

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 Island<sup>438</sup> in May 1980 and in cooperation with the Syrians in July 1981 demonstrate an interest in and a modest capability for distant-area projection.<sup>439</sup>

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<sup>435</sup> 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.”

<sup>436</sup> 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.

<sup>437</sup> CIA, 40.

<sup>438</sup> Socotra is an island off of Yemen in the Indian Ocean.

<sup>439</sup> 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.”<sup>440</sup> 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,”<sup>441</sup> 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.<sup>442</sup>

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.

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<sup>440</sup> Ibid.

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

<sup>442</sup> 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."<sup>443</sup> 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."<sup>444</sup> 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,"<sup>445</sup> this concept is not expanded upon or addressed again throughout the rest of the 191-page document.

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<sup>443</sup> 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>.

<sup>444</sup> *Ibid.*, 17.

<sup>445</sup> *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.<sup>446</sup>

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.”<sup>447</sup> 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

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<sup>446</sup> Ibid, 24.

<sup>447</sup> 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.'<sup>448</sup>

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."<sup>449</sup> 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

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<sup>448</sup> Ibid, 3.

<sup>449</sup> FitzGerald, 15.

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

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.”<sup>451</sup> Desert Storm, a clash between the “the past (Iraq) and the future (the U.S.-led coalition)”<sup>452</sup> was a vindication of these theories, and represented “a new type of military operation: the ‘strike operation.’”<sup>453</sup>

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.<sup>454</sup>

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

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<sup>450</sup> Ibid, 20.

<sup>451</sup> Ibid, 26.

<sup>452</sup> Ibid, 32.

<sup>453</sup> Ibid, 35.

<sup>454</sup> 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.<sup>455</sup> 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.”<sup>456</sup> 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.”

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<sup>455</sup> McCarthy.

<sup>456</sup> 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."<sup>457</sup> 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

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<sup>457</sup> 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.<sup>458</sup>

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

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<sup>458</sup> Connolly, 10.

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

### 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).<sup>460</sup> 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.<sup>461 462</sup>

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

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

<sup>460</sup> 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.

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

<sup>462</sup> 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.<sup>463</sup>

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*).<sup>464</sup> 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.<sup>465</sup>

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<sup>463</sup> 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>.

<sup>464</sup> 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>.

<sup>465</sup> "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).<sup>466</sup> 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."<sup>467</sup> 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.<sup>468</sup>

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<sup>466</sup> 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.

<sup>467</sup> Connolly, 10.

<sup>468</sup> "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,<sup>469</sup> Russian media has consistently claimed a range of 2,500 kilometers.<sup>470</sup> 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 Navy<sup>471</sup> 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 weapons<sup>472</sup> (7,252 nautical miles), conducted a non-combatant evacuation operation off of

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<sup>469</sup> 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>.

<sup>470</sup> "4 Russian warships launch 26 missiles against ISIS from Caspian Sea"

<sup>471</sup> 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](https://www.uscc.gov/sites/default/files/Karotkin_Testimony1.30.14.pdf).

<sup>472</sup> "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>.

Libya<sup>473</sup> (7,641 nautical miles), and even took part in joint naval exercises with the Russian Federation Navy...in the Baltic Sea<sup>474</sup> (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 21<sup>st</sup>-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 70<sup>th</sup> anniversary celebrations.<sup>475</sup> From there it sailed southeast, conducting anti-

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<sup>473</sup> "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/>.

<sup>474</sup> 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>.

<sup>475</sup> 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.<sup>476</sup> 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.”<sup>477</sup>

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.”<sup>478</sup> 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”

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<sup>476</sup> “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>.

<sup>477</sup> 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>.

<sup>478</sup> 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 tons<sup>479</sup> – 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.<sup>480</sup>

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<sup>479</sup> “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/>.

<sup>480</sup> 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.”<sup>481</sup>

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.<sup>482</sup>

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<sup>481</sup> 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>.

<sup>482</sup> “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.”<sup>483</sup> Because those land attack missiles could include a nuclear-tipped warhead version of the *Kalibr*,<sup>484</sup> 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."

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<sup>483</sup> 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/>.

<sup>484</sup> 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).<sup>485</sup> Though louder than their diesel-electric counterparts, their nuclear propulsion allow these boats to travel farther and a 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).<sup>486</sup> 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.<sup>487</sup>

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

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<sup>485</sup> *The Military Balance 2021* (London, UK: Routledge, 2021).

<sup>486</sup> 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/>.

<sup>487</sup> *Ibid.*

combat systems,”<sup>488</sup> 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 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.<sup>489</sup>

## 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.<sup>490</sup>

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<sup>488</sup> 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/>.

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

<sup>490</sup> 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 problematic<sup>491</sup> 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.<sup>492</sup> 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)<sup>493</sup> than NATO’s workhorse ASCMs, the U.S.-produced *Harpoon* (Mach 0.85, 240 kilometer range, 224 kilogram warhead)<sup>494</sup> and the French-made *Exocet* (Mach 0.9, 180 kilometer range, 165 kilogram warhead).<sup>495</sup> In addition to a

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<sup>491</sup> 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/>.

<sup>492</sup> 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/>.

<sup>493</sup> “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>.

<sup>494</sup> 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/>.

<sup>495</sup> 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*),<sup>496</sup> 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

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<sup>496</sup> "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 ten<sup>497</sup> (or nine,<sup>498</sup> or twelve<sup>499</sup>) 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...”<sup>500</sup>

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.”<sup>501</sup>

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<sup>497</sup> “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/>.

<sup>498</sup> 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/>.

<sup>499</sup> 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](http://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/>.

<sup>500</sup> 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>.

<sup>501</sup> 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."<sup>502</sup> 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.<sup>503</sup>

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

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<sup>502</sup> 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>.

<sup>503</sup> 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,<sup>504</sup> nor send seventy-five percent of their operational naval striking power to the Sea of Japan due to threatening moves by North Korea,<sup>505</sup> nor leave one of its valuable flattops in the Persian Gulf over potential threatening moves by Iran.<sup>506</sup>

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,<sup>507</sup>

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<sup>504</sup> 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>.

<sup>505</sup> 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>.

<sup>506</sup> 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>.

<sup>507</sup> 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.<sup>508</sup>

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

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<sup>508</sup> 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.<sup>509</sup> 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’s<sup>510</sup> (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 *Grigovich*-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*.<sup>511</sup>) 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*.)<sup>512</sup> Putin would personally mention the Mach-9,

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<sup>509</sup> 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>.

<sup>510</sup> 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>.

<sup>511</sup> “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/>.

<sup>512</sup> 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.<sup>513 514</sup> 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*.<sup>515</sup>

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.”<sup>516</sup> 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.”<sup>517</sup>

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”<sup>518</sup> and “Russian Blue-Water Navy is a Pipe Dream”<sup>519</sup> highlighted problems in Russia’s shipbuilding industry and

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

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

<sup>515</sup> Putin, 2019.

<sup>516</sup> 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>.

<sup>517</sup> Ibid.

<sup>518</sup> 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/>.

<sup>519</sup> Thomassen.

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

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.”<sup>521</sup> 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.<sup>522</sup>

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.”<sup>523</sup> 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

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<sup>520</sup> Gorenburg, *Unrealistic*.

<sup>521</sup> 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.

<sup>522</sup> *Ibid*, 4.

<sup>523</sup> *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.<sup>524</sup> 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.<sup>525</sup>

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

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<sup>524</sup> 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>.

<sup>525</sup> "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 amphibians 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	
Pantaleyev	"	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**

Small Combat								
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	
Zeley 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
Saryy 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.<sup>526</sup>

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.<sup>527</sup>

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,

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<sup>526</sup> 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/](https://digital-commons.usnwc.edu/rmsi_research/2/), 2.

<sup>527</sup> *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 20<sup>th</sup> 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].<sup>528</sup>

The authors acknowledge that, although they believe Russia is currently a "great maritime power,"<sup>529</sup> 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*

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<sup>528</sup> 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.

<sup>529</sup> *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.*<sup>530</sup>

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)"<sup>531</sup> – 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].<sup>532</sup>

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].<sup>533</sup>

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

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<sup>530</sup> Ibid, 19.

<sup>531</sup> Ibid, 17.

<sup>532</sup> Ibid.

<sup>533</sup> 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.”<sup>534</sup> 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.

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<sup>534</sup> 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.”<sup>535</sup> 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.<sup>536</sup>

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.<sup>537</sup> 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

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<sup>535</sup> “Snake Island: Ukraine Says Soldiers Killed after Refusing to Surrender,” BBC News (BBC, February 25, 2022), <https://www.bbc.com/news/world-europe-60522454>.

<sup>536</sup> 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>.

<sup>537</sup> 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 14<sup>th</sup>, 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.<sup>538</sup> 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.<sup>539</sup> Additionally, a handful of other smaller Russian vessels have either been destroyed or damaged in a variety of other attacks.<sup>540</sup>

For their part, Russia has decimated the Ukrainian navy, already on its heels following Russian attacks during their 2014 invasion of Ukraine.<sup>541</sup> 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

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<sup>538</sup> “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>.

<sup>539</sup> 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>.

<sup>540</sup> 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>.

<sup>541</sup> Ibid.

months-long siege of that city.<sup>542</sup> 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,<sup>543</sup> 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.<sup>544</sup> 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.*

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<sup>542</sup> 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>.

<sup>543</sup> 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>.

<sup>544</sup> 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.<sup>545</sup>

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.<sup>546</sup>

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.<sup>547</sup> 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

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<sup>545</sup> 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>.

<sup>546</sup> 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>.

<sup>547</sup> "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.<sup>548</sup> 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.<sup>549</sup> 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."<sup>550</sup>

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

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<sup>548</sup> 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/>.

<sup>549</sup> 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>.

<sup>550</sup> 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."<sup>551</sup> 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."<sup>552</sup>

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

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<sup>551</sup> 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](https://www.usni.org/magazines/proceedings/2022/may/antiship-missile-lessons-sinking-moskva?check_logged_in=1).

<sup>552</sup> 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,<sup>553</sup> 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.<sup>554</sup> 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.<sup>555</sup>

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,

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<sup>553</sup> 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/>.

<sup>554</sup> Denis Krasnikov and Kostyantyn Gnennyi, "Вартість Підбитого Крейсера 'Москва' – \$750 Млн. Forbes Склав 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>.

<sup>555</sup> 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.<sup>556</sup> 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).<sup>557</sup> 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

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<sup>556</sup> 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>.

<sup>557</sup> 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 24<sup>th</sup>. 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.”<sup>558</sup> 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.<sup>559</sup> 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.”<sup>560</sup>

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.<sup>561</sup> 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-

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<sup>558</sup> 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>.

<sup>559</sup> 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/>.

<sup>560</sup> “Roster Announced the Launch of Mass Production of the Armata Tank,” *Interfax.ru*, December 24, 2021, <https://www.interfax.ru/russia/812466>.

<sup>561</sup> 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 21<sup>st</sup> 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 21<sup>st</sup> 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.”<sup>562</sup> 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.”<sup>563</sup> 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.”<sup>564</sup>

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.”<sup>565</sup>

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,

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<sup>562</sup> ONI, *Historic Transition*, iii.

<sup>563</sup> *Ibid*, iv.

<sup>564</sup> *Ibid*, iii.

<sup>565</sup> *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"<sup>566</sup>:

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

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<sup>566</sup> 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.<sup>567</sup> 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.<sup>568</sup>

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

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<sup>567</sup> “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](https://www.dia.mil/Portals/110/Images/News/Military_Powers_Publications/Russia_Military_Power_Report_2017.pdf), 34.

<sup>568</sup> 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.<sup>569</sup> 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...”<sup>570</sup> 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

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<sup>569</sup> 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>.

<sup>570</sup> 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](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.”<sup>571</sup> 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.<sup>572</sup>

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

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<sup>571</sup> 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>.

<sup>572</sup> 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.”<sup>573</sup> At an estimated \$2 billion per year,<sup>574</sup> this would definitely be considered sustainable, even in the long term. In 2013 Russia’s Gross Domestic Product (GDP) was approximately \$2.3 trillion;<sup>575</sup> if the \$2 billion estimate was correct,<sup>575</sup> 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.<sup>576</sup> Over that same time period, U.S. GDP combined year over year totaled approximately

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<sup>573</sup> 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>.

<sup>574</sup> Ibid.

<sup>575</sup> “GDP (Current US\$) - Russian Federation,” Data, accessed August 21, 2022, <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=RU>.

<sup>576</sup> 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 trillion<sup>577</sup> – 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*"<sup>578</sup> (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).<sup>579</sup> 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

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<sup>577</sup> 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>.

<sup>578</sup> Hall.

<sup>579</sup> 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).<sup>580</sup>

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.<sup>581</sup> 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

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<sup>580</sup> “Russian Losses after a Decade of Syria War,” Warsaw Institute, March 16, 2021, <https://warsawinstitute.org/russian-losses-decade-syria-war/>.

<sup>581</sup> 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.”<sup>582</sup> 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.<sup>583</sup>

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.<sup>584</sup> 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

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<sup>582</sup> “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>.

<sup>583</sup> 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>.

<sup>584</sup> “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."<sup>585</sup> 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."<sup>586</sup> The fact that every *Kalibr* land attack cruise missile (on small attack

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<sup>585</sup> Weitz.

<sup>586</sup> 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. 21<sup>st</sup>-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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