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The emerging red tide : current Soviet naval status

Rodger Williams Snow
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THE EMERGING RED TIDE: CURRENT SOVIET NAVAL
STATUS.

SAN JOSE STATE UNIVERSITY, M.A., 1981

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THE EMERGING RED TIDE:
CURRENT SOVIET NAVAL STATUS

A Thesis
Presented to
The Faculty of the Department of Political Science
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Rodger Williams Snow
May, 1981

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CHAPTER I

INTRODUCTION

The flag of the Soviet Navy flies over the oceans of the world. Sooner or later the United States will have to understand it no longer has mastery of the seas.

Admiral Sergei G. Gorshkov¹
Commander-in-Chief, Soviet Navy

Today the various fleets of the Soviet Navy have operational units in all corners of the world's oceans, thereby giving the Soviets a continuous presence capability, in peace-time, upon the high seas. In the words of Admiral Gorshkov, Commander-in-Chief of the Soviet Navy:

Now our armed forces comprise a fully modern ocean-going fleet, equipped with all its needs for successfully solving the tasks given it, in the expanses of the World Ocean, to ensure the security of our country and protection of its interests at sea.²

Just what are Soviet interests at sea? How this question is answered depends upon the reference frame that one utilizes to constrict and/or broaden one's horizons.

¹Sergei G. Gorshkov, Admiral of the Fleet of the Soviet Union, Red Star Rising at Sea, trans. by Theodore A. Neely, Jr. from a series of articles originally published in Morskoi Sbornik, ed. by Herbert Preston, Colonel, USMC (Ret.) (Annapolis: Naval Institute Press, 1974), p. 141.

²S. G. Gorshkov, The Sea Power of the State (Annapolis: Naval Institute Press, 1979 translation copyright c , 1979, Russian edition copyright c , 1976), p. 212.

In reviewing the problems of mastering the world's oceans, Admiral Gorshkov stresses the importance of the oceans, present and potential, as a source of resources that vastly exceeds the known resources to be found on land. These bountiful supplies of resources range from manganese nodules containing cobalt, nickel, copper, manganese, iron and rare earth elements to petroleum deposits to important reserves of animal protein that can be utilized to solve the world's food problem (if conservation measures are effected). Interestingly enough, Gorshkov echoes the traditional call of freedom of the seas as espoused by Hugo Grotius, father of International Law, in Mare Liberum in 1609. Furthering this concept within the proper Marxist conceptual framework, the words of Karl Marx are called forth: "The sea as a common highway of all nations cannot be under the sovereignty of . . . any . . . power."³ This concept is broadened so that not only the high seas, but also the seabeds are included within the conceptual framework of freedom of the seas. Thus, Gorshkov repeats the Soviet call for international controls over the riches of the oceans and ocean bottoms while also espousing a territorial sea of 12 nautical miles (NM).⁴ By reviewing the uses of the oceans and their

³ Gorshkov, The Sea Power of the State, p. 49.

⁴ Gorshkov, Red Star Rising at Sea, pp. 125-126; perhaps the Admiral's call for a narrow territorial sea is dictated more by self-interest than by anything else. If a 200 NM territorial sea was to become the universal norm the

potential, he also enumerates the elements of sea power as being oceanographic research, world-wide fishing fleets, a merchant marine and a navy. All of these elements are interrelated and have overlapping functions in that they are part of the whole. A lack of one element of sea power deprives the others of depth and weakens the sea power of the state.⁵

Others, however, view the situation differently. It is contended that there is no long-term master plan for co-ordinating Soviet maritime activities. In refuting the concept of a master plan of Soviet oceans policy a two-pronged analysis is put forth.

On the one hand, there is the question of allocating resources to diverse sectors of the national economy. Allocation of resources, by its very nature of granting resources to one segment of the economy and limiting or withholding resources from another segment, forms the central point of the planned economy. Planning is usually done on a long-term basis, and priorities are established via the method of categorizing needs and allocating resources to fulfill those needs. Since there is no overall maritime category the elements of sea power, as enumerated by Gorshkov,

Mediterranean Sea would become a closed sea effectively hampering Soviet naval activities. As it is, with a 12 NM territorial sea, 110 international straits would fall under the jurisdiction of littoral states.

⁵Ibid., pp. 128-131.

are spread out in various sectors of the economy. Hence, the competition for resources is intense at two levels, between the different sectors of the economy and again between different categories within each sector of the economy. Those resources being competed for are funds for investment, facilities, raw materials, technology, foreign exchange expenditures and manpower.⁶

Then, on the other hand, there is the inconsistency of Soviet foreign policy vis-à-vis the oceans. One of the basic tenets of Soviet foreign policy is to be aligned with the Third World nations against the exploitive designs of the "imperialist" powers of the West. By aligning their foreign policy with that of the Third World the Soviets gain influence, a measure of prestige, and fulfill their self-appointed role as protector and benefactor of the lesser developed nations. Is it coincidence that these Third World nations just happen to be suppliers of raw materials to the industrialized West?

Therefore, it seems logical that Soviet foreign policy interests would naturally align themselves with Third World calls for an expanded territorial sea of 200 NM or, at least, agree on the concept of a 12 NM territorial sea with a

⁶Michael McGwire, "The Navy and Soviet Oceans Policy," Soviet Naval Influence: Domestic and Foreign Dimensions, Michael McGwire and John McDonnell, eds. (New York: Praeger, 1977), pp. 134-136.

contiguous Exclusive Economic Zone (EEZ) of 188 NM. Such support, during the current United Nations Law of the Sea Conference (UNLOS), begun in 1974, does not appear to be forthcoming from the Soviet delegation to UNLOS. Such an idea is in direct conflict with the interests of two major users of the world's oceans, the Soviet fishing fleet and the Soviet Navy. All of the world's fishing grounds are within the 200 NM limit and such a territorial sea would make the Mediterranean Sea a "closed sea" thereby effectively bottling up the Soviet Black Sea Fleet.⁷ Even the implementation of a 12 NM territorial sea would have an adverse effect upon the Soviet Navy, as well as the Western navies, in that 110 international straits would become the sovereign waters of the littoral states. Consequently, at the UNLOS Conference the Soviets have aligned themselves not with the Third World position, as represented by the Group of 77, but with the traditional maritime position of the Western naval powers; that position being freedom of the high seas with a narrow territorial sea and free transit through

⁷A 200 NM territorial sea would not only bottle up the Soviet Black Sea Fleet, but would also severely limit the operational radius of the Baltic Fleet to the narrow confines of the Baltic Sea. The Northern Fleet, based on the Kola Peninsula, would still be an important base and be capable of providing an outlet to the open sea; however, its effectiveness would be limited due to its geographical location and meteorological conditions. The same can also be said of the Soviet Pacific Fleet.

international straits. This position has been slightly altered in regard to the EEZ. Nevertheless, emphasis is still placed upon freedom of transit through international straits and the EEZ.⁸ Based upon these conflicts of interest between Soviet foreign policy, the Soviet fishing fleets and the needs of the Soviet Navy, it is concluded by some that there is no coherent Soviet master plan for using the oceans.

Still other views hold that there is a Soviet master plan for world domination utilizing the West's vulnerable points and the high seas. The People's Republic of China (PRC), through its official news agency, Hsinhua News Agency, has stated that recent Soviet expansionist movements are apparently designed "to open an ocean highway from Siberia through the warm waters of the Indian Ocean to European Russia."⁹ This objective is being furthered with the co-operation of Viet-Nam in Southeast Asia and the instability of the Middle East. As instability in the Middle East continues, so do Soviet efforts to consolidate their gains in this region and at strategic points in Africa. Such consolidation would enable the Soviets to have the capability of controlling all transit routes from the Indian Ocean to the Mediterranean Sea, to Europe via the Cape of Good Hope and

⁸MccGwire, "The Navy and Soviet Oceans Policy," pp. 140-141.

⁹The Japan Times, December 31, 1978, p. 3.

endangering the Malacca Straits. Consequently, as a result of their strategic positioning, the Soviets could effectively shut off oil supplies to the West.¹⁰

Echoing the warnings of the PRC, General Sir Walter Walker, British Army, Retired, states that the Soviets regard their navy as an instrument of international power and have a master plan to outflank NATO at sea by controlling the oil routes, forging a sea-going chain stretching from the Black Sea to the Indian Ocean linked at the entrance to the Red Sea and spreading out into the Persian Gulf, and to eventually control the sources of the West's oil supplies.¹¹ Thus, in General Walker's view, there is a clear and present danger in Soviet naval activities coupled with Soviet foreign policy objectives.

These aforementioned views are but a sampling of opinions that are offered to explain Soviet naval growth. However, among all concerned, there is agreement that Soviet naval development has been prodigious to say the least. Her naval forces have grown both quantitatively and qualitatively due to continued effort and concentration of resources into the naval sector of the overall military strategic planning. This concentration of purpose has faltered at times, but

¹⁰Ibid.

¹¹General Sir Walter Walker, KCB, CBE, DSO, The Bear at the Back Door: The Soviet Threat to the West's Lifeline in Africa (Sandton: Valiant Publishers, 1978), pp. 140, 175.

it has never been abandoned. Now the years of unending concentration of effort have been rewarded. Today the Union of Soviet Socialist Republics, the "Socialist Motherland," has the world's largest navy, quantitatively speaking. In qualitative terms the Soviet naval forces are second to only the navies of select Western Powers in the area of technological advances. Through persistent breakthroughs in research and development this technological lead enjoyed by the Western navies is being eroded. Calculated in terms of overall strength, capabilities and technological development the Soviet Navy is second to only the United States Navy, and there are fears that this lead cannot be maintained at the present rate of growth of the Soviet's strategic naval forces.

What is this force that is viewed with alarm in western naval circles and awe in the western press? Is it really such a threat or is its awesome size necessary to provide adequate protection for the defense of this enormous Eurasian country? These questions need to be answered if a correct assessment of Soviet foreign policy is to be gained. In order to fully comprehend the present situation, it is necessary to examine the history of the Soviet naval buildup, review the stated objectives of Soviet foreign policy, examine the naval hardware, then synthesize this information so as to produce a rational analysis that, when applied to the current political situation, will either justify or

discredit present fears concerning Soviet foreign policy objectives.

CHAPTER II

HISTORICAL BACKGROUND

Historically, the borders of the former Russian State and Empire had been repeatedly violated by powerful adversaries; in the end, the violators were drained by the insurmountable task of conquering the vast Russian land mass, and each time Russia emerged stronger than ever.

When the events at Sarajevo, Serbia, in June, 1914, plunged Europe into war, Russia's Navy was ranked fourth among the world's navies. Basically, it was a coastal navy primarily concerned with defensive operations. However, the internal political conditions within Imperial Russia, the remembrance of the humiliating defeat during the Russo-Japanese War, the lack of preparedness for war and low morale in the Imperial Russian Navy undermined its effectiveness and sowed the seeds of discontent. This was particularly true of the Baltic Fleet and of the naval garrison at Kronstadt; for here, in the Czarist practice of recruiting the best for this service, lay the foundations of working-class militancy within the navy. During the 1905 Revolution and a later revolt in 1910 the sailors at Kronstadt proved to be a rebellious lot. This rebelliousness continued to simmer at Kronstadt until February, 1917, when the sailors

at Kronstadt revolted, occupied the city, executed some 200 reactionary senior officers and organized the first Soviet of Kronstadt.¹²

During the July Days and into the final days of the Kerensky Government the Kronstadt sailors aboard the warships Petropavlovsk and Sevastopol played an important role in aiding the Bolshevik rise to power in October, 1917, (November 7, 1917, according to the Gregorian calendar).¹³ This aid, coupled with the strategic positioning of the cruiser Aurora overlooking the Winter Palace, sealed the fate of the Provisional Government.¹⁴ Hence, in Trotsky's words, Kronstadt was "the pride and glory of the Russian Revolution" because of its revolutionary consciousness and indispensable aid in bringing the Bolsheviks to power.¹⁵

Once the Bolsheviks were installed in power it became increasingly evident to the new republic that measures would have to be taken to insure its continued survival; as there were enemies of the republic within as well as without

¹²Voline [Vsevolod Mikhailovich Eishenbaum], The Unknown Revolution: 1917-1921 (New York: Free Life Editions, 1975), pp. 443-445.

¹³Alexander Berkman, The Russian Tragedy (Over the Water, Sanday, Orkney: Cienfuegos Press Ltd., 1976), p. 74.

¹⁴Anatoly Plekhov, Guarding the Country's Sea Frontiers (Moscow: Novosti Press Agency Publishing House, 1978), pp. 3-5.

¹⁵Voline, The Unknown Revolution, p. 445.

the newly created socialist state. Recognizing the dangers, the Council of Peoples' Commissars adopted two decrees. The first decree concerned the organization of the Working People's and Peasants' Red Army and was signed by Vladimir Ilyich Lenin on January 28, 1918. On February 11, 1918, the second decree announced the disbanding of the Czarist Navy and the creation of the Working People's and Peasants' Red Navy.¹⁶

Though the Czarist Navy had been disbanded its former officers continued their duties in the service of the newly created Red Navy. This state of affairs continued for many years after the October Revolution and the trials of civil war. Former Rear Admiral of the Czarist Navy, V. M. Al'fater, occupied the newly created position of Commander of Naval Forces in September, 1918, and the services of the former specialists of the Czarist Navy proved to be invaluable during the years of civil war and foreign intervention.¹⁷

When peace came in 1921, the Soviet Navy was in shambles, and for all practical purposes the fleets of the

¹⁶ Marshal A. A. Grechko, The Armed Forces of the Soviet State, Soviet Military Thought, Vol. XII, trans. under the auspices of The United States Air Force (Moscow: The United States Air Force, 1975), p. 14. See also U.S., Congress, Senate, Committee on Commerce and National Ocean Policy Study, Soviet Oceans Development, S. Res. 222, 94th Cong., 2d sess., October, 1976, p. 50.

¹⁷ Soviet Oceans Development, pp. 50-51.

Pacific, the North and Black Seas ceased to exist. Only the Baltic Fleet remained representing a sorry sight of undermanned, lifeless ships sadly in need of repair. Spare parts were non-existent, and ship repair facilities, for the most part, were either destroyed, damaged or had deteriorated.¹⁸ Material efforts to rehabilitate the navy proceeded slowly during the 1920's as all sectors of the economy had suffered greatly and the navy, while important, was not a priority concern. Thus, only a token naval force was maintained as the base for defense orientated heavy industry was laid.¹⁹

Even though a "token navy" was maintained during the 1920's it was not allowed to stagnate. At the Tenth Communist Party Congress held in 1921 it was discussed and decided that, "In keeping with the general situation and the material resources of the Soviet Republic measures shall be taken to restore and strengthen the Red Navy."²⁰ It was also decreed by the Party Congress that all salvageable ships be raised from their watery tombs and be rendered serviceable again. Lenin stated that the scope of the 1922 ship

¹⁸Ibid.

¹⁹Defense Intelligence Agency, Exercise Sever: An Outgrowth of Soviet Maritime Policy (U) AP-230-2-10-69-INT, April 1, 1961, p. 1.

²⁰Plekhov, Guarding the Country's Sea Frontiers, p. 11.

repair program had to be defined by "the size of the navy which was necessary to keep for political and economic reasons."²¹

Also, the Fifth All-Russian Congress of the Young Communist League (YCL) passed a resolution at its 1922 meeting establishing patronage over the Soviet Navy, whereby the YCL would oversee the reconstruction of the Soviet Navy. Here, words were followed by actions; in 1922-23 the YCL sent 8,000 members to serve in the navy and aid in the repair program in progress. By 1923 the Baltic Fleet had recommissioned one battleship, one cruiser, one training ship, eight destroyers, nine submarines and twenty minesweepers. The Black Sea Fleet was reborn when a cruiser, two destroyers, two submarines and several smaller ships had been recommissioned.²²

While salvage operations were underway, an important meeting took place in April, 1922. In Moscow the first All-Union meeting of Communist Seamen took place to decide upon the method of restoring the Soviet Navy, the direction and type of navy it was going to be. Now proposals put forth by opposing groups were rejected by the meeting's participants. One would have built a "deep-ocean navy" built around the super dreadnoughts, and the other would have created a

²¹Soviet Oceans Development, p. 51.

²²Plekhev, Guarding the Country's Sea Frontiers, p. 11.

coastal defense force utilizing submarines and aviation with light coastal ships lacking mobility of range. What emerged from this meeting appears to be a merging of the two proposals as it was decided that the future navy should incorporate all classes of surface ships, submarines and aviation "acting aggressively in co-operation with the Red Army."²³ Out of this meeting came the groundwork upon which the future Soviet Navy was to be built. A navy that when "acting aggressively and in co-operation with the Red Army" would be primarily an inland and coastal navy, subordinated to the needs and desires of the army. This facet of the Soviet Navy proved itself to be a valuable asset during World War II as naval flotillas operated upon the numerous waterways of the Soviet Republic²⁴--if not in actual fact of action, then in the immense propaganda value that was to be reaped when recounting the exploits of the Soviet Navy during the "Great Patriotic War" and in establishing firm Soviet Naval traditions for later sailors to emulate. Since this navy was to include all classes of surface ships and submarines, it appears that the intention was also to create a "deep-water" fleet that would have long-range capabilities yet be utilized in such a way that all actions at sea would be co-ordinated to act in concert with the needs of land-based operations.

²³Soviet Oceans Development, p. 51.

²⁴Plekhev, Guarding the Country's Sea Frontiers, pp. 17-19.

Despite the economic travails of the 1920's many decisions were reached in regards to financing, rebuilding, refurbishing and expanding the Soviet Navy. Authorization to repair, refurbish and/or complete construction of warships started prior to the October Revolution came in an October, 1924 decision of the Council of Labor and Defense. As a result of this decision 35 million rubles were earmarked for ship restoration in 1925, and in 1926, 64 million rubles were appropriated.²⁵

Beginning in 1929, the Soviet Navy had three battle-ships, five cruisers, twenty-four destroyers, eighteen submarines and a large number of smaller combatant and auxiliary ships in operation. The year 1929 was important in other aspects as well for it was the midway point of the first 6-year Soviet ship-building program, and the second year of the first of many Soviet 5-year programs aimed at increasing the industrialization of the Soviet Union. Consequently the navy directly benefited from the forced industrial growth²⁶ and the Crash of 1929 which aggravated the international situation and helped touch off the 1930's arms race.

With the increased heavy industrialization came increased naval construction so that by 1935 the Soviet Navy

²⁵Soviet Oceans Development, p. 52.

²⁶Ibid.

was able to organize a Pacific Fleet, and by 1937 the Northern Fleet was added to the Soviet Naval arsenal.²⁷

While the navy was being expanded during the 1930's, its officer corps was being decimated by the purges that took place at the same time. During the purge of 1937-38 the Soviet Navy lost all eight of the full admirals and numerous other lesser ranking officers.²⁸ This "crash program" or "weeding out" had a rejuvenating effect on the officer corps as it replaced experienced "dead wood" with inexperienced "new blood" that could be said to be very loyal to their leaders in the Kremlin.

When war broke out in September, 1939, the Soviet Union had the world's largest submarine fleet, even larger than the combined submarine fleets of Germany and Japan. (The fleets numbered 65 and 59 respectively; Italy's submarine fleet numbering 104 vessels ran a close second in numbers compared to the approximately 150 submarines in the Soviet fleet.)²⁹ During the relatively short "alliance"

²⁷Plekhov, Guarding the Country's Sea Frontiers, p. 13.

²⁸p. H. Vigor, "The History of the Soviet Armed Forces," The Soviet War Machine: An Encyclopedia of Russian Military Equipment and Strategy (New York: Chartwell Books Inc., 1976), p. 125.

²⁹Francis E. McMurtrie, A.I.N.A., ed., Jane's Fighting Ships: 1939 (London: Sampson Low, Marston and Co., Ltd., November, 1939), p. viii.

that existed between the Soviets and Nazi Germany various war materials were exchanged between them. One of the most notable exchanges of war materials occurred in early 1940 when the Soviets transferred a large number of submarines to the German Navy in exchange for the cruiser Lützow.³⁰ Could this exchange have been part of Hitler's promise to Admiral Dönitz in October, 1939, upon the occasion of decorating Commander Gunther Prien whose submarine sank the battleship HMS Royal Oak in Scapa Flow, the "impregnable" British naval base in the Orkney Islands, to supply his service with more submarines?

On June 22, 1941, Nazi forces invaded the Soviet Union interrupting Stalin's dream of time to complete a balanced navy able to operate effectively in defense of the homeland. While the Soviet Navy did participate in World War II, its contribution was limited. Basically, the navy acted as an arm of the Red Army providing support and carrying out actions against the invader on the inland seas, lakes and river systems. When war came to the Soviets they had approximately 200 submarines in service of which 70 were based at Vladivostok and the subsidiary stations of Madny and Bering in the Komandirski Islands.³¹ A strong Soviet

³⁰Francis E. McMurtrie, A.I.N.A., ed., Jane's Fighting Ships: 1944-45 (London: Sampson Low, Marston and Co., Ltd., corrected to April, 1946), p. 383.

³¹Francis E. McMurtrie, A.I.N.A., ed., Jane's Fighting Ships: 1941 (New York: The Macmillan Company, 1942), pp. 373, 387.

fleet was maintained in the Barents Sea region, but it showed virtually no initiative or inclination to participate in nor assist the Allied convey system that brought war materials to Murmansk.³²

This attitude of insufficient action can be attributed to a number of factors. One, the Nazi onslaught overran the Western Soviet shipyards depriving the Soviet Navy of replacements and repair facilities. Two, the classical tenets of sea warfare were invalid due to the nature of the war and the composition of enemy forces. Even if classical naval warfare situations had existed the Soviet Navy would have been hard pressed to meet the challenge. Their Northern Fleet was the weakest, and reinforcements came late in the war. There were no amphibious ships, and formation of a naval infantry was slow in coming. Mine warfare wasn't fully developed until the end of the war, either offensively or defensively. Soviet naval gunnery was inadequate to provide anti-aircraft protection due to a lack of sufficient numbers of automated and multipurpose guns. Perhaps the main reason for lack of initiative on the part of the Soviet Navy can be traced to the 1937-38 purges when the top echelon of the navy was decimated and replaced by younger,

³²The Encyclopedia of Sea Warfare (New York: Thomas Y. Crowell Co., 1975), p. 110.

inexperienced officers. Thus, lack of experience coupled with an atmosphere of terror stifled independent action and brought forth timidity and inaction. This was particularly true of the Black Sea Fleet.³³ It should also be pointed out that this fear came about as the result of a dual command structure in the Soviet Navy. One was the traditional military chain-of-command based upon military rank, while the other command structure was political. These "political commissars" wore uniforms and held the same rank as the military officers, but they outranked their counterparts in that they represented the Party and all orders came from the Party. As a result, all details of an operation were worked out beforehand; if a situation arose that wasn't contained in the orders, initiative was paralyzed as it was dangerous to act in a way not mentioned in the orders, especially if that action was not completely successful.³⁴

World War II inflicted appalling destruction upon the Soviet Union, leaving vast areas utterly destroyed and depopulated. Her navy also suffered tremendous losses so that the figures available concerning the Soviet Navy's strength in 1945 and the post-war years vary widely. According to David Woodward, The Russians at Sea: A History

³³Soviet Oceans Development, p. 64.

³⁴Friedrich Ruge, Vice-Admiral, Federal German Navy (Ret.), The Soviets as Naval Opponents 1941-1945 (Annapolis: Naval Institute Press, 1979), pp. 193-195.

of the Russian Navy, Soviet naval strength in 1945 consisted of two or three cruisers of pre-war design, between twenty to thirty destroyers of the same vintage and approximately 100 submarines. However, these figures, while probably correct concerning Soviet built vessels, do not take into account the vessels that were attached to the Soviet Navy under the Lend-Lease Program. Most notable of these would be the Arkhangelsk (ex-HMS Royal Sovereign) and the former U.S. cruiser USS Milwaukee.³⁵ Also, when the Red Army entered Berlin, they had not only taken possession of the seat of German power but had also captured numerous German naval vessels. In the case of submarines, Soviet troops captured many completed and half-completed Walther-engined vessels as they overran Eastern Europe. Thus the Soviet Navy was provided with the best engineered and designed submarines available at that time and for many years to come.³⁶ Captured with the submarines were the German technicians and designers giving the Soviets technological expertise and lead time to develop even more potent naval weapons.³⁷

³⁵McMurtrie, Jane's Fighting Ships: 1944-45, p. vi.

³⁶The Encyclopedia of Sea Warfare, p. 233.

³⁷Donald W. Mitchell, A History of Russian and Soviet Sea Power (New York: Macmillan Publishing Co., Inc., 1974), p. 473.

Josef Stalin, on Navy Day, July 22, 1943, reaffirmed the pre-war goals of the Soviet Navy to create a navy that would allow the Soviet Union to break out of her enclosed coastal seas out onto the world's deep oceans where this navy could be an effective arm of Soviet foreign policy. A new policy was envisioned whereby fast cruisers and submarines would aid revolution (covertly and/or overtly) in various areas of the world.³⁸

While the war in Europe ended in May, 1945, there was still a gruelling war being fought in the Pacific Theater.. A double blow was dealt on August 9, 1945; first, Nagasaki was A-bombed. Second, the Soviet Union declared war on Japan with follow-up attacks on Japanese shipping by ships of the Soviet Pacific Fleet. Amphibious landings were conducted on the northeastern Korean coast in support of the advancing Red Army. Soviet naval forces also launched amphibious operations against southern Japanese-held Sakhalin Island and the Kurile Islands in the middle of August. These operations lasted until the end of the month and were highly successful despite strong resistance in some areas.³⁹

In the aftermath of World War II the enemies of the Soviet Union were conquered, their armies vanquished and

³⁸Ibid., pp. 470-471.

³⁹The Encyclopedia of Sea Warfare, p. 201.

their lands occupied by the Allied Forces. Land forces no longer posed a threat to the Soviet Union. Now, as seen through Soviet eyes, the threat to "Socialist peace and tranquility" lay beyond the shores of Eurasia, beyond the reach of the victorious Red Armies. The "enemy" was her former allies, the capitalist states of the world, that part of the world not occupied by the "liberating" influence of the Soviet Armed Forces.

However, Stalin's plans for the post-war Soviet Navy would have to wait. This navy had suffered grievous losses during the war and despite the added advantages in their steamroller drive westward of having acquired numerous German U-boats, engineers and technicians, Soviet industry was incapable of producing the needed materials. Once again, as was the case a quarter century before, the Soviet industrial sector lay shattered, strewn about the countryside in an emaciated condition, partially destroyed, yet rebuildable, while the Red Army occupied the rubble heap of Central Europe, formerly the Industrial Heartland of Europe. Therefore, the grandiose plans were relegated to the drawing boards while ship construction began anew utilizing pre-war ship designs. "Medium-type" submarines were primarily built during this period as the widely dispersed Soviet submarine yards were the only ones to survive the ravages

of World War II.⁴⁰ By 1948 there were approximately 260 submarines in service with 100 submarines scheduled to be delivered during the year. Under the then current naval building program it was hoped to have 1,000 submarines completed for service by 1950-51.⁴¹ Later, in 1949, this figure was revised downward to 750 submarines by the end of 1951.⁴² This intensive submarine stockpiling stemmed from a fear of seaborne invasion along the Baltic and/or Black Sea coasts during the post-war years under Stalin.⁴³

While the Soviet fleet was a sorry sight to behold in 1945, rebuilding, refurbishing and augmenting its power began almost immediately as ships of the defeated states were absorbed into the Soviet fleet. Thus a large proportion of the Finnish fleet was reportedly annexed by the Soviet fleet,⁴⁴ while large numbers of ex-German, ex-Japanese and ex-Italian warships became a part of the Soviet

⁴⁰Captain J. E. Moore, RN., "The Soviet Navy," The Soviet War Machine, p. 116.

⁴¹Francis E. McMurtrie, A.I.N.A., ed., Jane's Fighting Ships: 1947-48 (New York: The Macmillan Company, corrected to July, 1948), pp. v, A27, 276.

⁴²The late Francis E. McMurtrie, A.I.N.A., and Raymond V. B. Blackman, A.M.I.N.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1949-50 (New York: McGraw-Hill Book Company, Inc., 1949), p. A9.

⁴³Soviet Oceans Development, p. 81.

⁴⁴Francis E. McMurtrie, A.I.N.A., ed., Jane's Fighting Ships: 1946-47 (London: Sampson Low, Marston and Co., Ltd., corrected to April, 1947), p. vi.

Navy.⁴⁵ Hence, these "war prizes" doubled the size and effective fighting strength of the Soviet Navy, while also serving as "models" to be copied and redesigned to further advance Soviet naval architecture and technology. Thus Soviet naval power is deeply indebted to the former Axis Powers for her rapid ascendancy as a major sea-power. Even as late as 1957 major portions of the Soviet fleet's surface and submarine vessels were former Axis-owned warships.⁴⁶

All was not smooth sailing in the transition of the former Axis-owned warships into the Soviet naval arsenal. As Soviet sailors lacked expertise in certain technological areas of nautical skills and incompetence is forever to be found everywhere, the boilers of a couple of captured cruisers blew up and at least one U-boat was destroyed, and it is reported that Soviet sailors inadvertently destroyed the already badly damaged aircraft carrier Graf Zeppelin.⁴⁷ Other sources first mention the Graf Zepplin in 1947 when the incomplete hull of this ship, in damaged condition, was towed from Stettin to Kaliningrad. Under terms of the Tripartite Naval Agreement this vessel was to have been

⁴⁵McMurtrie, Jane's Fighting Ships: 1947-48, p. v.

⁴⁶Raymond V. B. Blackman, A.M.I.N.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1957-58 (London: Sampson Low, Marston and Co., Ltd., 1957), pp. 315-325.

⁴⁷Mitchell, Russian and Soviet Sea Power, p. 473.

destroyed, but it was reportedly completed, named after a Soviet airman and destined for service in the Far East.⁴⁸ After this report, nothing more was noted in official reports concerning the whereabouts or final disposition of the ex-Graf Zeppelin.

Due to the secretive nature of the Soviet Government, it is sometimes exceedingly difficult to gather reliable and verifiable information concerning the relative strength of Soviet Naval Forces. Hence, a lot of misinformation is disseminated to inflate naval strength figures and to create confusion by obscuring the true picture of the effective fighting capabilities of the naval forces. In secretive, militaristic orientated societies such obfuscation is deemed necessary so as to project an image of "machismo" in order to bluff the opposition and create the illusion of internal strength projected to the world stage. Thus the analyst has the not so easy job of separating fact from fantasy utilizing known factors to extrapolate probable data that is consistent, yet credible and accurate.

It had been reported that during the 1945-1950 five-year plan of the Soviet Navy, feverish activity was being

⁴⁸The late McMurtrie and Blackman, Jane's Fighting Ships: 1949-50, p. 274; later it was reported that the ex-German aircraft carrier Graf Zeppelin had been taken in for reconstruction as a special vessel for use in seatrials utilizing guided missiles. No verifiable reports pro or con have been made concerning the final demise of this aircraft carrier.

undertaken in Soviet shipyards and in those of the occupied countries.⁴⁹ There were persistent reports from various sources concerning the construction of the 35,000 ton battleship Sovietski Soyuz; these reports began in 1947. In 1950 it was being reported, with reservations, that the Sovyetski Soyuz⁵⁰ had been commissioned in 1950, and that sister ships had either joined her or were about to be completed soon.⁵¹ By 1953 reports concerning the construction or planned construction of battleships had been phased out of verifiable reports. There is reason to believe that these battleships had been planned, and construction had been started; but with the commencement of hostilities in 1941 this construction was either halted or destroyed in the ensuing fighting.

Sometimes persistent reports are accurate to a degree. As an example of this, the following is a case in point. Jane's Fighting Ships: 1939 reported that the Soviet Navy had one aircraft carrier, named Stalin. This vessel was first laid down in 1914 at Nikolaiev as a

⁴⁹Ibid., p. A9.

⁵⁰Sovietski Soyuz and the Sovyetski Soyuz are the same ship; a change in spelling the ship's name creates some confusion as to the identity of the vessel in question.

⁵¹Raymond V. B. Blackman, A.M.I.N.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1950-51 (London: Sampson Low, Marston and Co., Ltd., 1950), p. A26.

cruiser; construction was suspended until 1929 when she was re-designed as an aircraft carrier and extensive alterations were carried out. Construction was completed in 1939. Her former names were the Admiral Kornilov and Krasnaya Bessarabia. Her vital statistics as reported were the following:

Displacement:	9,000 tons
Speed:	30 knots
Dimensions:	. . .
Complement:	. . .
Machinery:	Geared turbines
Aircraft:	22 ⁵²

At the same time it was reported that the Soviets were building an aircraft carrier called the Kransnoye Znamya and were planning to begin construction of another aircraft carrier. Both were to have the same vital statistics and be laid down at Leningrad in 1939-40. They were reported as follows:

Displacement:	12,000 tons
Speed:	30 knots
Dimensions:	. . .
Complement:	. . .
Guns:	12 - 4 inch
Machinery:	Geared turbines
Aircraft:	40 ⁵³

These ships would have added range and depth to the capabilities of the Soviet Navy, providing air cover for Soviet warships operating beyond the range of land-based aircraft.

⁵²McMurtrie, Jane's Fighting Ships: 1939, p. 414.

⁵³Ibid.

A later issue of Jane's Fighting Ships suggested that it was unlikely that the Krasnoye Znamya was launched before 1941, and that construction of the second aircraft carrier, Voeoshilov, began in 1940. Both ships were said to be of American design.⁵⁴ By 1943 doubt and new verifiable information was added concerning Soviet aircraft carriers. Again, it was suggested that the Krasnoye Znamya was unlikely to have been launched prior to 1941, and it was postulated that this ship may have been a mere projection, while the existence of the Voroshilov was extremely doubtful. As far as the aircraft carrier Stalin was concerned, it proved to be a small seaplane carrier having a complement of 12 to 22 aircraft. She was also reported to have been a converted mercantile hull, while her speed of 30 knots was probably an exaggeration.⁵⁵

Later reports concerning the Krasnoye Znamya suggested that she was being completed, and that it was possible that she had been launched in 1945. Her displacement had been increased to 22,000 tons while her aircraft complement

⁵⁴McMurtrie, Jane's Fighting Ships: 1941, p. 380.

⁵⁵Francis E. McMurtrie, A.I.N.A., ed., Jane's Fighting Ships: 1942 (New York: The Macmillan Company, June, 1943), pp. 371, 387. See also Francis E. McMurtrie, A.I.N.A., ed., Jane's Fighting Ships: 1943-44 (New York: The Macmillan Company, 1945), pp. 374, 390.

was reduced to 22.⁵⁶ By 1947 her aircraft complement had been increased to 60, her displacement remained at 22,000 tons, and her dimensions were reported to be 722 X 92 X ? feet.⁵⁷ Krasnoye Znamya was last mentioned in Jane's Fighting Ships in the 1947-48 edition where it was reported that her hull was said to be 700 feet, and it was believed that the ship had been dismantled, and the material had been used in other construction, though it was acknowledged that the report may not have been entirely correct.⁵⁸

Still, persistent reports of Soviet aircraft carrier development and possible deployment continued. A new aircraft carrier named Letl I was reportedly built in dry dock at Leningrad, her hull having been laid in 1943. Supposition being that she had been commissioned by 1949. Her displacement was reported as being 23,000 tons and her dimensions as being 721 3/4 X 92 X 22 (approximate) feet.⁵⁹ Oddly enough, these statistics are nearly the same as those for the Krasnoye Znamya.

⁵⁶McMurtrie, Jane's Fighting Ships: 1943-44, p. 374. See also McMurtrie, Jane's Fighting Ships: 1944-45, p. 380.

⁵⁷McMurtrie, Jane's Fighting Ships: 1946-47, p. 270.

⁵⁸McMurtrie, Jane's Fighting Ships: 1947-48, p. 265.

⁵⁹The late McMurtrie and Blackman, Jane's Fighting Ships: 1949-50, p. 274.

	<u>Krasnoye Znamya</u>	<u>Letl I</u>
Displacement:	22,000 tons	23,000 tons
Dimensions:	722 X 92 X ? feet	721 3/4 X 92 X 22 (approximate) feet

Perhaps the Letl I was just a different version, with another name, of the various Krasnoye Znamya reports. Only the "originators" of these reports may know for sure. Since 1939 persistent reports concerning Soviet aircraft carrier development and deployment had continued to emanate from these nameless "originators." Even after it had been ascertained that the Soviet Navy had no aircraft carriers, persistent unverifiable reports continued to surface regarding possible construction plans of three aircraft carriers, each displacing 25,000 tons.⁶⁰ Of course these latest reports, aired in 1950, could have been in line with Stalin's grand design of establishing a "deep-water" navy that would project Soviet influence out into the high seas and onto the shores of distant continents.

While there may have been conflicting reports concerning the true status of certain types and classes of warships in the Soviet Navy, it was abundantly clear that there was a re-awakening of Soviet naval aspirations. Confirmable reports showed that an intensive naval ship-building program was in progress far in excess of Soviet

⁶⁰Blackman, Jane's Fighting Ships: 1950-51, p. viii.

defensive needs. Emphasis was placed on the construction of fast, heavy cruisers, heavy destroyers and ocean-going torpedo boats nearly equal in size to destroyers. Emphasis was particularly heavy in the construction, development and deployment of submarines. Here in this field of warship development the Soviets clearly benefited from the employment of the captured German U-boat designers and technicians. By 1950 between 350-370 submarines were in existence with 135 being stationed in the Baltic Sea. Almost half of these were former German U-boats; 110 were stationed in the Far East, 40 in the Black Sea and 30 in the White Sea. All ships were fitted with Schnorkel devices. These submarines were of four different types: an improved "K" Class submarine having a surface speed of 25 knots and 18 knots submerged, a fast mine-laying type II "K" Class (probably developed from an earlier "P" Class submarine), and two German types of submarines the XXI and XXIII.⁶¹

Developing, improving and maintaining a modern navy requires large amounts of money and in this respect the Soviets have not failed to provide adequate funds to complete the task. Soviet naval expenditures for the year 1950-51 were 15,400,000,000 rubles (about equivalent to \$3,750,000,000), compared to the United States naval appropriation of \$4,168,000,000 for the same time period. Soviet

⁶¹Ibid., pp. viii, 332.

naval expenditures were even more than the former ruler of the waves, Great Britain. Great Britain only expended £193,000,000 in the fiscal year 1950-51 while the Soviets expended £1,340,000,000.⁶²

Under Stalin expenditures for naval development of ocean-going warships rose and continued to rise even after his death in 1953. So that by fiscal year 1955-56 Soviet naval expenditures peaked at 22,500,000,000 rubles;⁶³ thereafter, naval expenditures plummeted to a low of 10,000,000,000 rubles during the following fiscal year. This abrupt change was due to a post-Stalin reevaluation that had been taken in 1954. The Soviet leadership under Nikita Khrushchev downgraded the dangers of a seaborne attack against the Soviet Union and gave first priority to the threat of a surprise nuclear attack. Thus, a radical readjustment of Soviet naval strategy took place, causing a shift from a large tactical mobile ocean-going fleet to one that would be a basically defensive coastal fleet with a primary reliance on long-range cruise missiles mounted on small to medium surface ships and diesel submarines and also delivered by aircraft.⁶⁴ Even with this shift in naval

⁶²Ibid., p. viii.

⁶³Blackman, Jane's Fighting Ships: 1957-58, p. 315.

⁶⁴Soviet Oceans Development, p. 81. "Cruise missile" as used in this context refers to surface-to-surface missiles that are guided to their target via radio controls, a radar guidance system, or an aerial relay system.

policy and strategy the Soviet Submarine Fleet numbered 475 of which a large number were long range boats of new construction. Also, by 1957 the Soviets had built more destroyers and cruisers than all the nations of the world combined.⁶⁵

While Soviet strategists were embarking on a new concept based on developing nuclear strategic capabilities on land and in the air, the oceans were not forgotten. Thus, even with the shift in Soviet strategic planning, priority was given to continued development of the strategic capability of the navy.⁶⁶ Therefore, when the range of carrier-based aircraft increased allowing U.S. carriers to launch nuclear weapons in comparative safety from the Eastern Mediterranean and South Norwegian Seas, Soviet strategists perceived a need to readjust their thinking to counter this threat to the security of the Soviet Union.⁶⁷ Nuclear-powered submarines were becoming available to be used as a deterrent against this distant threat only as a result of

⁶⁵Blackman, Jane's Fighting Ships: 1957-58, p. viii. The following is a listing of Soviet Naval Components:

1 Battleship	1000 Minesweepers
32 Cruisers	125 Patrol vessels
180 Destroyers	120 Landing craft
475 Submarines	160 Fleet auxiliaries
300 Frigates and escort vessels	
500 Motor torpedo and coastal craft	p. 315

⁶⁶Walter Darnell Jacobs, "Soviet Strategic Effectiveness," Journal of International Affairs, Vol. XXVI, No. 1 (1972), p. 63.

⁶⁷Soviet Oceans Development, p. 82.

prior planning combined with luck. As a result the Soviet shipyards were in the process of completing three atomic-powered submarines in 1958.⁶⁸ At the same time, 75 submarines were under construction in Soviet shipyards, consisting of the following five types:

1. Large nuclear-powered type with a very long range.
2. Large guided missile type with a high speed.
3. Ocean-going patrol type with a long range.
4. Minelaying type with a high speed.
5. Anti-submarine patrol type with a long range.⁶⁹

During this same period it was deemed necessary to extend the range of airborne Anti-Submarine Warfare (ASW) coverage in Arctic waters. This need generated the decision to begin research and development of a sea-going helicopter platform culminating in the planning and construction of the "Moskva" Class helicopter carrier, which is classified as an anti-submarine cruiser by the Soviets.⁷⁰

What was happening in the world of naval warfare that prompted these Soviet strategic policy decisions?

⁶⁸Raymond V. B. Blackman, A.M.I.N.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1958-59 (London: Sampson Low, Marston and Co., Ltd., 1958), p. 283.

⁶⁹Ibid. All types were equipped with the German developed Schnorchel.

⁷⁰Soviet Oceans Development, p. 82.

True, aircraft launched from U.S. aircraft carriers had an increased range of operation. Such vessels were a serious threat to the security of the Soviet Union; however, the defensive response of nuclear-powered submarines and Moskva Class ASW helicopter cruisers appeared to be an over-reaction on the part of Soviet planners and strategists, if other factors are not taken into consideration. On January 21, 1954, the USS Nautilus was launched, becoming the world's first nuclear-powered submarine.⁷¹ Later that same year, Soviet strategic planning underwent some changes with emphasis on land-based defensive operational centers creating a realignment of naval development. Interestingly enough, the Soviet submarine program continued as before with a slight change--the decision to produce nuclear-powered submarines. Four years later the first of these submarines was being completed.

Another breakthrough in naval weaponry took place in the United States Navy with the introduction of guided missiles as part of the defensive and offensive armament of aircraft carriers, battleships, cruisers, seaplane tenders and submarines. Three large fleet submarines were converted to guided missile submarines; these being the Carbonero and Cusk, equipped with the "loon" missile that was housed in a

⁷¹The Encyclopedia of Sea Warfare, p. 234.

watertight steel hangar and was launched from a ramp affixed to the aft deck, and the Tunny having the super-sonic guided missile "Regulus" which was approximately 30 feet in length.⁷² Soviet submarine design in the 1950's was greatly influenced by German design and technology; the "Whiskey" Class submarine was clearly modeled on the German type XXI U-boat, and from this class came eight variants with the same basic hull design. A larger variation, the "Z" or "Zulu" Class submarine was chosen as the first Soviet class of submarines to be converted to use guided missiles. In 1956 the first of six was completed, and it carried two SS-N-4 missiles. These missiles had a range of 300 miles, but in order to launch their missiles, the submarines had to surface, thus making the submarines "sitting ducks" in the event of actual combat. Regardless of this drawback they were effective in that they posed a danger to American coastal cities by placing them "under the gun." These vessels were diesel-electric powered, and their development was continued long after the first nuclear-powered submarines were delivered to the Red Navy during the years 1956-61.⁷³

⁷²Raymond V. B. Blackman, A.M.I.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1953-54 (London: Sampson Low, Marston and Co., Ltd., 1953), pp. vii, 420.

⁷³Moore, "The Soviet Navy," p. 116. See also The Encyclopedia of Sea Warfare, p. 234.

Other Soviet technological developments in the late 1950's served to create the illusion of a thoroughly coordinated Soviet Goliath that was unconquerable. This hallucination not only bluffed the Western Powers but also blinded the Soviet leadership to its own shortcomings. In October, 1957, Sputnik was launched into orbit thus reserving a respected seat for Soviet technology in the realm of science. This feat also demonstrated that the Soviet military establishment had the means at its disposal to launch nuclear-tipped intercontinental ballistic missiles (ICBMs), should the need exist. Having the technological know-how to do something and having the capability to do it are not the same. Western intelligence reports noted that by late 1959 the Soviet Union had only ten operational ICBMs (SS-6).⁷⁴

Closer to naval development was the completion and commissioning on September 15, 1959, of the world's first nuclear-powered icebreaker. Built by Kirov Elektrosila Works in Leningrad, the Lenin had a reinforced prow that enabled her to cut a swath through an eight feet thick solid ice pack 100 feet wide at a continuous speed of three to four knots. Her vital statistics were the following:

⁷⁴Dr. James E. Dornan Jr., "Strategic Rocket Forces," The Soviet War Machine, p. 207.

Displacement: 16,000 tons
 Dimensions: 440 X 90½ X 23 feet
 Machinery: 3 pressurized water cooled atomic
 reactors and 4 steam turbines
 Aircraft: 2 helicopters
 Personnel: Reportedly had accommodations for 1,000⁷⁵

Her atomic reactors allowed her to cruise for eighteen months without refuelling, and the Lenin's fuel consumption rate was reported to be five ounces daily.

There were reports that this ship was in reality a parent ship and support tender for the Soviet nuclear-powered fleet based in the northern areas.⁷⁶

The heady technological advances of Soviet science combined with the Western Powers passive posture during events of the middle and late 1950's engendered a false sense of "Big Power Equality" within the Soviet leadership as such equality applied to the U.S. It was felt that a policy of "minimum deterrence" would be adequate as the West would back down so as to avoid direct confrontation with the Soviet Union and to avoid the risk of nuclear war. Thus, Khrushchev believed that the balance of power had shifted in favor of the socialist camp.⁷⁷

⁷⁵Raymond V. B. Blackman, A.M.I.N.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1959-60 (New York: The McGraw-Hill Book Company, Inc., 1959), p. 321.

⁷⁶Raymond V. B. Blackman, A.M.I.N.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1963-64 (New York: The McGraw-Hill Book Company, Inc., 1963), p. 435.

⁷⁷Dornan, "Strategic Rocket Forces," pp. 205-206.

Enjoying this false sense of security concerning the strength of Soviet technology and weakness of spirit in the West, Khrushchev, in 1962, attempted to off-set American strategic nuclear superiority by implanting nuclear strategic missiles in the American backyard.

Soviet capabilities to implement this move were vastly over-rated, partly due to the naval strategic and overall policy shifts of 1954 and 1958 which left gaps in the Soviet's strategic forces. Secondly, Soviet naval strength and capabilities, though very high, were still undergoing the process of being built up. Soviet naval strength at the time of the "Cuban Missile Crisis" was as follows:

Cruisers:	22	
Destroyers:	165	
Submarines:	465	- Sixteen of these were nuclear powered, four "E" Class fitted with an estimated six guided missiles in launching tubes, eight "H" Class armed with guided missiles and four "N" Class Anti-Submarine or "Attack" type.
Frigates and escort vessels:	275	
Minesweepers:	1,000	
Patrol vessels:	245	
Motor torpedo boats (MTB):	1,000	
Landing craft:	120	
Fleet auxiliaries:	200 ⁷⁸	

⁷⁸Raymond V. B. Blackman, M.I.Mar.E., M.R.I.N.A., ed., Jane's Fighting Ships: 1961-62 (New York: The McGraw-Hill Book Company, Inc., 1962), pp. 400, 410.

While this naval force looks impressive on paper, it had short-comings that became very apparent during the "October Days" of 1962. Technologically speaking the Soviet Navy was out-classed as all of her submarines that had been sent to the Caribbean area were spotted immediately and then monitored throughout their stay. As it was, the Soviet military establishment had several faults: an emphasis on World War II type organization, comparative weakness in surface and underseas naval power, an inadequate mix of forces and the inability to support lengthy lines of communication and resupply. Furthermore, the Soviets were inferior in number and megatonage of deliverable nuclear vehicles. At the time of the Missile Crisis, the United States had available 294 ICBMs and 144 submarine launched ballistic missiles (capable of being launched while the missile-carrying submarine was submerged - SLBMs), whereas the Soviets could only muster 75 ICBMs and less than 100 SLBMs. The U.S. Navy enjoyed a clear operational superiority over the Soviet Navy, and it was apparent that the Soviet military establishment was unable to perform the political tasks that had been assigned to it.⁷⁹ While Soviet Strategic Naval Forces were still in an embryonic state, the events of the Missile Crisis only highlighted

⁷⁹Jacobs, "Soviet Strategic Effectiveness," pp. 61, 65.

the premature aspects of Soviet naval power. Marshall Rodin Malinovsky, Soviet Minister of Defense, said:

The Soviet Navy which is now built round atomic submarines equipped with rockets with nuclear warheads and homing torpedoes is able to fight effectively against an enemy navy on the distant approaches to the Soviet shores.⁸⁰

In an interview on October 31, 1962, the Admiral of the Fleet, Sergei G. Gorschkov, Soviet Navy declared:

Our navy is a modern fighting force, equipped with powerful rocket-nuclear weapons, capable of performing the duties entrusted to it far beyond our territorial waters. Ours is a fleet of modern, including nuclear-powered submarines, a fleet of rocket-carrying strike planes and a fleet of surface rocket craft. The navy by nature is its armament, its highly manoeuvrable forces and its combat facilities must be ready at anytime and anywhere in the world to ensure the defence of the interests of our State. We consider that the main striking force in the struggle at sea is the submarine fleet.⁸¹

Are these statements of Soviet naval capabilities merely a face-saving device employed by the Soviet Defense Chiefs, or is there a grain of truth in what they said?

Addressing a meeting of NATO parliamentarians in November, 1962, Vice-Admiral R. M. Smeeton, Royal Navy, who at the time was deputy to Saclant (Supreme Allied Commander Atlantic), expressed the following:

You all know that the Soviet have today the largest submarine force the world has ever known. We must assume that this force has a simple

⁸⁰David Woodward, The Russians at Sea: A History of the Russian Navy (New York: Fredrich A. Praeger, 1966), p. 11.

⁸¹Ibid.

mission . . . it is to divide and destroy the physical structure of N.A.T.O., not by frontal attacks on our defended periphery but by the infiltration of submarines into our geographical core and from there striking out at the soft and exposed area behind our fighting front. The mission of the Soviet submarine force is obvious, the danger to our alliance is ever present. Actually, the danger may be greater than we realize, for since World War II the Soviet have built a new powerful navy and a large modern merchant fleet. They have the largest trawler fleet in the world. They have ventured upon the high seas, something unusual in Russian history. The Communists are moving into the arena of sea power. They are no longer entirely "land animals."

We should first examine in a general way what measures we should take to cope with the Soviet submarine threat. It is obvious I think that N.A.T.O. should try to stop any Soviet submarines from getting into the Atlantic by closing the Baltic and Turkish straits and by establishing a control in the North Atlantic. Those submarines that are out in the ocean areas to begin with should be harried and destroyed. In an all-out war we would hope to prevent them from ever returning home and resupplying by destroying their facilities in the Northern sea area. To carry out this latter task it would be necessary to use nuclear weapons. The reason is quite simply the size of the job to be done and how many tools we have to do it with.

We simply do not have enough forces. Let me make this clear. Contingency operations of a limited nature, surveillance of the seas, harassment to make our purpose and resolve clear to an enemy, these we can do without using nuclear weapons. We can take steps to make sure the enemy is fully aware of where his course of action is leading him without using nuclears. But we cannot go to war that way. To conduct a non-nuclear war at sea, with hope of success, Saclant would need several times the present allocated number of anti-submarine vessels, escorts and maritime patrol aircraft. Several times the number presently earmarked for Saclant. Even to fight an all-out war in the Atlantic, Saclant needs more modern anti-submarine warfare vessels, more escorts and more maritime patrol aircraft.

Saclant's force requirements were set at the very minimum and they have not been met. The Soviet have a more modern navy than we do.⁸²

Judging from Vice-Admiral Smeeton's words, the Soviet Navy of 1962 was a potent force, a force that was held in abeyance only because of United States naval superiority and the inferior position of the Soviet Defense establishment in the face of total war.

While the Vice-Admiral's comments seem to contradict earlier statements outlining the weak points of the Soviet Navy, such is not the case. If anything, his comments, taken in conjunction with Malinovsky's and Gorschkov's, serve to emphasize the deficiencies that existed in the Soviets naval arsenal. These deficiencies would be an over-reliance on submarine warfare, inferior technology, and inadequate sea lines of communications (SLOC). Perhaps it should be added that the aforementioned drawbacks became immediately apparent to the Kremlin leadership because they had underrated the resolve of the man in the White House.

Many students of the Soviet Navy erroneously conclude that as a result of the 1962 "October Days" debacle the Soviet Union embarked on a "crash" of naval development and shipbuilding. Such an assumption is sheer nonsense, as Soviet naval development plans had been decided upon

⁸²Ibid., p. 234.

years before. Of course, Khrushchev, in the wake of his diplomatic defeat over implanting missiles in Cuba, authorized Admiral Gorshkov to accelerate naval development. Acceleration of an existing program is a far cry from embarking on a "crash" program. Gorshkov continued to follow his policy vis-à-vis developing the full potential of the Soviet Navy. Basically, it was/is a policy of capitalizing upon one's own strong points and exploiting the liabilities of one's opponent.⁸³ This he did quite effectively, and under his guidance the Soviet Navy continued to evolve into the present day force that it is.

When Khrushchev fell from power Admiral Gorshkov continued as head of the Soviet Navy. In 1965, when Brezhnev and Kosygin decided to substantially upgrade the quality and quantity of the Soviet Strategic Forces, they drew upon the plan that had been initiated by their predecessor Nikita Khrushchev.⁸⁴

Ever since 1962 the Soviets have been hard at work improving their strategic effectiveness. In 1962 the United States possessed 294 ICBMs versus the Soviet Union's 75 ICBMs. By 1971 the United States had 1,054 ICBMs, and the

⁸³Lawrence L. Whetten, "Recent Developments in the Soviet Navy," in The Future of Soviet Military Power, ed. by Lawrence L. Whetten (New York: Crane, Russak and Company, Inc., 1976), p. 98.

⁸⁴Jerome H. Kahan and Ann K. Long, "The Cuban Missile Crisis: A Study of Its Strategic Context," Political Science Quarterly, Vol. LXXXVII, p. 587.

Soviets possessed 1,510 ICBMs, a significant increase in strategic weapons for both parties.⁸⁵

At this point mention should be made of the Strategic Arms Limitation Talks (SALT), that have been negotiated between the Union of Soviet Socialist Republics and the United States of America. These negotiations are an effort by the two super-powers to lessen the threat of nuclear holocaust, put a ceiling on strategic arms deployment and hopefully phase out the strategic arsenals while maintaining peace and national security on a mutual basis.

The Interim Agreement on Strategic Offensive Arms prohibited the start of construction of additional land-based fixed ICBM launchers after May 26, 1972. Also prohibited are modernization and replacement of launchers of certain limitations. Thus, under the Interim agreement, the land-based, fixed ICBM strategic force is limited to 1,054 launchers for the United States and 1,607 for the Soviet Union.⁸⁶ Currently, a SALT II Treaty has been signed by the Soviet Union and the United States. This treaty would place a ceiling of 2,250 aggregate launchers

⁸⁵Jacobs, "Soviet Strategic Effectiveness," p. 65.

⁸⁶General George S. Brown, USAF, Chairman of the Joint Chiefs of Staff, presented to the Congress, On the Defense Posture of the United States for FY 1978, prepared January 20, 1977, pp. 7-8. (Hereinafter referred to as Defense Posture FY 1978.)

(ICBMs plus SLBMs equals aggregate launchers), on each nation.⁸⁷

Soviet SLBM development has also proceeded quite rapidly in terms of quantity and quality. In 1962 the Soviet naval arsenal consisted of less than 100 SLBMs, which could only be launched when the submarine was surfaced, with a range of 300 miles, compared to the United States arsenal of 144 SLBMs capable of being fired when submerged.⁸⁸ Only in 1967-68 was this handicap overcome when the first Soviet nuclear-powered ballistic missile submarine (SSBN), was completed and put into operational service. This "Y" or "Yankee" Class submarine was armed with sixteen SS-N-6 missiles having a range of 1,300 miles and capable of being fired while submerged.⁸⁹ By 1971 the Soviet SLBM force numbered 440 opposed to the United States SLBM force of 656.⁹⁰

⁸⁷"Launching the Great Debate," Time, July 23, 1979, p. 16.

⁸⁸Moore, "The Soviet Navy," p. 116.

⁸⁹The Encyclopedia of Sea Warfare, p. 234. See also Jean Labayle Couhat, ed., Combat Fleets of the World 1976-77: Their Ships, Aircraft, and Armament, trans. by Commander James J. McDonald, U.S. Navy (Ret.) (Annapolis: Naval Institute Press, 1976), p. 379.

⁹⁰Rodger Williams Snow, "A Study of the Soviet Navy Since 1945" (Ann Arbor: University Microfilm, 1978), p. 9.

Once again SALT talk negotiations have limited the "Balance of Terror." Under the terms of the Protocol to the Interim Agreement both sides are allowed to increase their SLBM force with the following proviso that an equal number of ICBM launchers deployed prior to 1964 or SLBM launchers on older submarines are dismantled or destroyed. Thus, at the time of the signing of the Protocol to the Interim Agreement the Soviets possessed 740 SLBMs versus 656 SLBMs in the arsenal of the United States. Furthermore, according to the terms of the Interim Agreement the United States would be permitted to have 710 SLBMs on 44 SSBNs; whereas the Soviets would be allowed to have 950 SLBMs on 62 SSBNs. Any increase over these figures required the dismantling and/or destruction of an equal number of ICBM or SLBM launchers.⁹¹

Starting in August, 1975, the Soviets began to reach for the SLBM figure of 950. Complying with the terms of the Interim Agreement the Soviets notified the United States of its actions and began dismantling an equal number of older ICBM and/or SLBM launchers. As a result the Soviet SSBN force continued to progress in size and capability due to growth and the sustained influx of technological development. Thus, by November, 1976, it

⁹¹Brown, Defense Posture: FY 1978, pp. 8, 12-13.

was calculated that the Soviet Navy had approximately 800 SLBMs on about 60 SSBNs in an operational status with almost 200 additional SLBMs on submarines that were in the process of being completed or being fitted out. There were also an additional 60 launchers on older submarines that did not come under the terms of the SALT Interim Agreement.⁹²

Chart 1

Source: General George S. Brown, USAF, Chairman of the Joint Chiefs of Staff, presented to the Congress, On the Defense Posture of the United States for FY 1978, prepared January 20, 1977, p. 15.

⁹²Ibid., p. 13.

The above chart illustrates the comparative numbers of SLBM launchers possessed by the United States and the Soviet Union from 1966 to the end of fiscal year 1977. The following chart presents scale drawings of Soviet and American SLBMs.

Chart 2

COMPARISON OF US AND USSR SLBMS

Source: General George S. Brown, USAF, Chairman of the Joint Chiefs of Staff, presented to the Congress, On the Defense Posture of the United States for FY 1978, prepared January 20, 1977, p. 14.

While the above charts barely skim the surface in detailing Soviet technological efforts in the development and use of strategic missilery, they do give an indication of the importance that is attached to the use of strategic missiles by the Soviets in their Strategic Naval Force. Therefore, it is important to remember that almost all sectors of the Soviet naval forces utilize missiles as an integral part of their armament. Each sector serves as a link, a hook-up, between the other sectors of the Soviet naval forces. This linkage resembles a chain stretching from the Soviet river systems to the coastal areas, then ever outward towards the deep-water oceans beyond the range of shore-based air-support and into the deep-water oceans themselves. Within the context of this section it appears to be apropos to mention the "Canal of Five Seas," as it is called by the Soviets.⁹³ This integrated river system of interior waterways is connected by an intricate system of canals, locks and reservoirs and has an economic aspect as a conduit of goods and materials to different sections of the country.⁹⁴ This system extends from the Volga River and, with the aid of canals, links together the Caspian

⁹³Couhat, Combat Fleets 1976-77, p. 375.

⁹⁴Paul E. Lydolph, Geography of the U.S.S.R. (2nd ed.; New York: John Wiley and Sons, Inc., 1970), pp. 553-554.

Sea with the Sea of Azov and Black Sea, the Baltic Sea and the White Sea,⁹⁵ thereby establishing a water-link through Soviet controlled territory between the Black Sea Fleet, the Baltic Fleet and the Northern Fleet. Hence, the transfer of small coastal ships from one fleet to another is readily available, and it is possible to have certain classes of nuclear-powered submarines transshipped through this system with the aid of specially made facilities. However, there are two drawbacks to the effectiveness of this elaborate system: winter and the vulnerability of its locks.

Navigation along this fine river system is interrupted from the beginning of November until mid-April due to freezing of the waterways and the break-up of drifting ice.⁹⁶ In order to better illustrate this disruption of river traffic during the winter months, the following table is presented to provide an overall picture as it affects other river systems and ports.

Patrolling the above mentioned river systems of the Soviet Union are approximately 75-80 "Schmel" Class river gunboats.⁹⁷

⁹⁵Couhat, Combat Fleets 1976-77, p. 375.

⁹⁶Ibid.

⁹⁷Ibid., p. 426.

Table 1

*Table 16-2 Average Annual Length
of Shipping Season, U.S.S.R., at Major
Rivers and Ports*

Location	Length of Season (Days)	Percentage of Time Navigable
<hr/> River <hr/>		
Dnieper at Kiev	267	73.2
Lower Volga	264	72.3
Upper Volga	224	61.4
Western Dvina	236	64.7
Northern Dvina	177	48.5
Ob at Salekhard	152	41.6
Irtys at Tobolsk	189	51.8
Yenisey at Krasnoyarsk	197	54.0
Southern (Upper) Lena	145	39.7
Northern (Lower) Lena	88	24.1
<hr/> Seaport <hr/>		
Odessa	328	89.9
Zhdanov	288	79.8
Taganrog	252	69.0
Astrakhan	238	65.2
Tallin	283	77.5
Leningrad	200	54.8
Murmansk	365	100.0
Archangel	175	47.9
Nizhne-Kolymsk	110	30.1
Vladivostok	255	69.9

Source: Paul E. Lydolp, Geography of the U.S.S.R. (2nd ed.; New York: John Wiley and Sons, Inc., 1970), p. 553, citing Holland Hunter, Soviet Transportation Policy (Cambridge: Harvard University Press, 1957), p. 13.

This, then, is a brief sketch outlining the growth of the Soviet naval arsenal. The naval arsenal's raison d'etre is to support the foreign policy objectives of the Soviet Union. It is also a highly visible reminder of the power and glory of the Soviet system of government.

CHAPTER III

SOVIET PERSPECTIVES

The goals of Soviet foreign policy . . . consist in ensuring, together with other socialist countries, favorable international conditions for the construction of socialism and communism; in consolidating the unity and cohesion of the socialist countries, their friendship and brotherhood; supporting the national-liberation movement and engaging in all-round co-operation with the young developing states; consistently standing up for the principle of peaceful co-existence between states with a different social system, giving a resolute rebuff to the aggressive forces of imperialism, and safeguarding mankind from another world war.⁹⁸

In 1971 the 24th Congress of the Communist Party of the Soviet Union (CPSU) enumerated the ideological and political goals of Soviet foreign policy. Basically, it is a policy of ensuring favorable conditions for the continued growth of socialism and communism through the co-operation of the allied socialist states. Support is to be rendered to national liberation movements, especially those of the former imperialist colonies, until a final

⁹⁸Boris Krotkov, The Land of Soviets Today and Tomorrow (Moscow: Novosti Press Agency Publishing House, 1976), p. 35. An account of the 25th Congress of the Communist Party of the Soviet Union.

victory has been won against the forces of reaction, simultaneously striving for peaceful co-existence between nations of differing social systems; i.e., capitalist versus socialist. Lastly, but not least, being the guardian of world peace.

Reporting to the 25th CPSU Congress, Leonid Brezhnev, CPSU General Secretary, stated the successful aspects of Soviet foreign policy.

In the domain of foreign policy the 24th Congress advanced a Peace Programme. Its main purpose was to achieve a turn in international relations with reliance on the might, unity and dynamism of world socialism, on its closer alliance with all progressive and peace-loving forces--a turn from cold war to peaceful coexistence of states with different social systems, a turn from explosive tensions to detente and normal, mutually beneficial co-operation. We followed the behest of the great Lenin, who called for the greatest possible number of decisions and measures 'that would certainly lead to peace, if not to the complete elimination of the war danger'. . . .

In this respect, the achievements of the past five years are of truly everlasting significance. Everything possible has been done to assure peaceful construction in our country and the fraternal socialist countries, to assure peace and security for all the peoples.⁹⁹

Briefly outlined, the Peace Program of the Soviet Union is as follows:

1. Abolition of the "hotbeds of war" via national-liberation movements.

⁹⁹Ibid., pp. 35-36.

2. European Detente, easing tension in Europe which is the major pressure point of conflict between capitalism and socialism. As tension is lessened in Europe it is also lessened in other areas. "In turn, this has helped among other things, to promote the national-liberation movement."¹⁰⁰

3. Measures to reduce nuclear and other dangerous arms races. Conclusion of agreements to limit strategic nuclear missiles and prohibit the production and stockpiling of bacteriological and toxin weapons.

4. Measures to stop all arms races. The Soviet Union proposed that the permanent members of the United Nations (U.N.) Security Council reduce their military budget by 10% and use the money saved to help developing countries. Also, the 30th General Assembly discussed the Soviet proposal "On the Prohibition of the Development and Manufacture of New Types of Mass Destruction Weapons and New Systems of Such Weapons." This proposal was approved by 112 countries.

5. Abolish the remnants of colonial slavery. When the fascist regime collapsed in Portugal, so did one of the last colonial empires in Africa with Soviet aid and support.¹⁰¹

¹⁰⁰Ibid., p. 41.

¹⁰¹Ibid., pp. 37-43.

Aid has also been given to the Marxist regime of Ethiopia to help repel the aggression of Marxist Somali and to crush the secessionist Marxist Eritrean guerrillas. This aid has been in the form of sophisticated military materials and approximately 1,000 Russian military advisors and technicians who are to train Addis Ababa's forces in the use of these weapons of war.¹⁰²

6. Promote peaceful co-operation between all countries without making concessions concerning national sovereignty and legitimate interests of the Soviet Union or of its allies and friends. As a result of this effort relations with the United States have changed from one of "cold war confrontations" to one of "peaceful co-existence." Smaller nations have benefited as it is now more difficult for the imperialists to interfere in their sovereign affairs.¹⁰³

However, all is not well with the socialist countries of the world. For the People's Republic of China (PRC) has been at odds with the Union of Soviet Socialist Republics (U.S.S.R.) openly since the 1960's. In the late '60's there were border clashes between Soviet and PRC troops along the Amur River where the U.S.S.R. and PRC share a common border. Throughout the 1960's and continuing

¹⁰²"A Little Help from Some Friends," Time, October 16, 1978, p. 23.

¹⁰³Krotkov, The Land of Soviets, pp. 44-45.

into the 1970's the two countries have verbally assaulted one another. Soviet leaders have chastised the PRC at various CPSU congresses and have openly denounced PRC revelations concerning the U.S.S.R.

Chinese propaganda assertions that the U.S.S.R. has entered into collusion with the USA and that the two super-powers have reached agreement on dividing up the world are totally absurd.¹⁰⁴

Recently, when a treaty of friendship and co-operation was signed between the U.S.S.R. and Viet-Nam on November 3, 1978, in the Kremlin, Vietnamese Communist Party Leader Le Duan charged that the forces of imperialism and reaction led by Peking:

. . . are doing everything they can to block the onward march of history.

Characteristically, the reactionary grouping in the ruling circles of Peking is establishing a new alliance with imperialism and fascist hangers-on, an alliance which is spearheaded against the Socialist system and the movement for national independence, and which is aimed at blocking the process of relaxation of tension and undermining the cause of world peace.¹⁰⁵

Therefore, it is sad to note that while positive progress towards establishing peaceful co-existence and international detente has been made, there continues to

¹⁰⁴Ibid., p. 44. A frequent ploy of the Soviet Union is to utilize the press releases of other countries to support Soviet policy views, to provide a forum where other socialist leaders may harangue the "enemies of socialism."

¹⁰⁵The Japan Times, November 5, 1978, p. 1.

exist within certain capitalist countries those circles which have refused to shed the blinders of cold war psychology. There are:

Influential forces in the United States, that have no interest either in improving relations with the Soviet Union or in international detente as a whole They portray the policy of the Soviet Union in a false light and refer to an imaginary 'Soviet threat' to urge a new intensification of the arms race in the USA and NATO.¹⁰⁶

H. Kahn, the American proponent of nuclear war, has declared that "militarism and aggression are only 'an inevitable reaction to the existence of communism.'"¹⁰⁷

Hence, in the words of CPSU Secretary-General Leonid Brezhnev, Soviet foreign policy is embodied in the following:

We are doing and will continue to do everything to develop and strengthen friendship with those who really want it. We and the vast majority of the states that arose on the ruins of the colonial system are united by a deep common allegiance to peace and freedom, and aversion to all forms of aggression and domination, and to exploitation of one country by another. This identity of basic aspirations is rich and fertile soil on which our friendship will continue to grow and flourish.¹⁰⁸

In pursuing these policy aims all efforts will be made to strengthen the bonds of the socialist community,

¹⁰⁶Krotkov, The Land of the Soviets, p. 58.

¹⁰⁷Col. A. M. Danchenko and Col. I. F. Vydrin, eds., Military Pedagogy: A Soviet View, Soviet Military Thought, Vol. VIII, trans. under the auspices of The United States Air Force (Moscow: The United States Air Force, 1973), p. 359. (Hereinafter referred to as Military Pedagogy.)

¹⁰⁸Krotkov, The Land of the Soviets, pp. 53-54.

as well as continuing peaceful co-existence and mutually advantageous economic co-operation between socialist and capitalistic countries. Actually the capitalist countries have embraced peaceful co-existence and mutually advantageous co-operation with socialist countries, because they see no alternative other than nuclear war. Capitalism is no longer the dominant force in international relations; socialism has replaced the dictates of imperialistic tyranny and aggression with an invincible alignment of economic and political forces portending the historical necessity of continuing crises in capitalist countries.¹⁰⁹

However, as was noted in the CPSU Central Committee (CC) Accountability Report to the 24th CPSU Party Congress:

The specific features of contemporary capitalism are largely explained by the fact that it is adapting to the new situation in the world. Under conditions of the struggle against socialism, the ruling cliques of capitalist countries now fear, more than ever before, that the class struggle will grow into a mass revolutionary movement. Hence derives the desire of the bourgeoisie to employ better camouflaged forms for exploiting and oppressing the worker and their readiness to make partial reforms in a number of cases in order to keep the masses under their own ideological and political control, if possible.¹¹⁰

¹⁰⁹Colonel I. Sidel'nikov, "Peaceful Coexistence and the Security of the People," Selected Soviet Military Writings: 1970-1975; A Soviet View, Soviet Military Thought, Vol. XI, translated and published under the auspices of the United States Air Force, 1976, pp. 37, 39.

¹¹⁰Danchenko and Vydrin, eds., Military Pedagogy, p. 348.

Therefore, it is only logical that the imperialist states seek to embrace peaceful co-existence and enjoy the economic benefits that detente has to offer. However, this is not to say that imperialism has changed or ceased to be imperialism. "Imperialism's class nature and socioeconomic essence remain unchanged because its foundation--private ownership of the means of production--remains unchanged."¹¹¹ Since this is the case, the class struggle between socialism and capitalism must continue. As long as capitalism exists there can be no peace or cessation of the struggle between socialism and capitalism. "The class struggle between socialism and capitalism is being waged and will continue in the economic and political fields as well as in the ideological field."¹¹²

Thus, on one hand the socialist states are committed to peaceful co-existence and the advantages of detente, while on the other hand they are committed to support wars of national liberation; i.e., Viet-Nam, Angola, the Eritrean secessionist movement led by the Moslem-Marxist Eritrean People's Liberation Front (EPLF) in the north of Ethiopia and the ethnic Somali insurgency in the southern Ethiopian

¹¹¹Sidel'nikov, "Peaceful Coexistence," p. 38.

¹¹²Ibid.

Ogaden Desert region.¹¹³

Naturally, since it is the policy of socialist states to support wars of national liberation, it stands to reason that an integral part of that policy is to render all necessary aid and support to maintain and preserve fellow socialist states in power against the encroachments of reactionary forces; i.e., Hungary, Czechoslovakia and East Germany in past years. At the same time support is being rendered to the Marxist government of Afghanistan in quelling the anti-socialist insurrection of Islamic tribesmen, while continued aid is being given to Viet-Nam and Kampuchea, formerly socialist Cambodia before being overthrown by forces aided and abetted by socialist Viet-Nam, to fend off attacks by "left extremist aggressors." In addition, massive amounts of war-materials and advisors have saved the Marxist Addis Ababa Government of Col. Mengistu from internal disintegration posed by the twin threats of the Somali insurgency in the Ogaden Desert and the EPLF in Eritrea.

¹¹³While the Soviets are committed to support socialism and wars of national liberation, there is no guarantee that such support will continue once the overall political situation has shifted. At one time the Soviets supported the Marxist-led EPLA in Eritrea when Ethiopia was allied to the West, now this same support is being given Marxist Ethiopia to help crush the EPLA. Marxist Somalia had been a client state of the Soviets for many years, but support for Somalia evaporated when a choice had to be made between Ethiopia and Somalia. Soviet support is based upon pragmatic considerations for the maxim appears to be: The enemy of today may well be tomorrow's friend and vice versa.

In protecting the integrity of socialist states against reactionary onslaughts and bourgeois forces, it has been necessary to create and maintain a superior military force, as well as to cultivate legends and myths concerning the class unity and invincibility of the Red Armed Forces. These indomitable forces are charged with:

Defence of the Sovialist Motherland In order to defend the gains of socialism, the peaceful labour of the Soviet people, and the sovereignty and territorial integrity of the state, . . . and to be in constant combat readiness, guaranteeing that any aggressor is instantly repulsed.¹¹⁴

These armed forces have not seen action since World War II.¹¹⁵ Whenever accounts are given concerning Soviet forces during this conflict they tend to exaggerate the exploits of the Soviet forces involved, even to the point of contradicting earlier accounts. Consequently, in the official Soviet version of World War II, called The Great Patriotic War, we find the following account explaining Soviet naval inactivity in the Baltic Sea during World War II:

¹¹⁴Union of Soviet Socialist Republics, Constitution (Fundamental Law) of the Union of Soviet Socialist Republics, Art. 31, (Moscow: Novosti Press Agency Publishing House, 1977), p. 33. Adopted at the Seventh (Special) Session of the Supreme Soviet of the USSR, Ninth Convocation, on October 7, 1977.

¹¹⁵Since December, 1979, when the Soviet Union engineered a palace coup in neighboring Afghanistan, Soviet troops have become embroiled in combat operations in an attempt to squelch the Islamic resistance to the current Marxist regime in Kabul.

Since only a limited number of submarines and MTBs was available, and since operations of the heavy surface ships were not possible, the Fleet could not fully blockade the Courland Group and other beseiged beachheads from the sea, and neither could it interrupt the sea communications of the enemy for any longer period.¹¹⁶

However, two pages later there is this contradictory entry:

The active operations of the Fleet did not leave any possibility of the enemy supporting the sea flanks of his land forces from the sea efficiently The operations of the Fleet substantially contributed to batter the German troops in the Baltic republics, in East Prussia, and in eastern Pomerania.¹¹⁷

This is precisely what did not happen especially during the last few months of the war when German land forces were in retreat before the advancing Red Army. At first East Prussia, later Pomerania and West Prussia, was cut off from the Reich by the Red Army. Hundreds of thousands of people were trapped only to be rescued by the German Navy via the Baltic. If the Red Fleet had been in control of the situation in the Baltic, as claimed in the "official history" of the war, then it would have been virtually impossible for the German Navy to evacuate the more than two million men, women and children that it did.

¹¹⁶Ruge, The Soviets as Naval Opponents, p. 192.

¹¹⁷Ibid.

Later, German troops were also evacuated. While it is true that losses of ships occurred due to the activities of Soviet submarines, it cannot be said that the Soviet Baltic Fleet inflicted severe losses upon the German land forces.¹¹⁸

Admiral Gorshkov, in his naval writings, is forever reminding the Soviet tacticians of the indispensability of the Soviet fleet during WWII and the laudable contributions made by the Soviet Navy in defeating Fascist Germany.

The Soviet Navy made a worthy contribution to the achievement of victory over Fascist Germany and imperialist Japan. It demolished the sea power of the foe on the Barents, Baltic and Black Seas, ensuring the stability of the strategic flanks of the land front and all-round support for our troops in defence and offence. In this most difficult of wars the fleet justified the hopes pinned on it, the high trust of the Soviet people, and completely discharge its duty to the motherland.¹¹⁹

Accolades for the Soviet Navy continue as Gorshkov contends that not only did the Soviet Navy play an active role in defeating German forces on the Eastern Front, but it also made a contribution of support to the navies of the Soviet Union's allies by forcing the German Naval Command to deploy naval forces to the Soviet naval front, thereby

¹¹⁸Cajus Bekker, The German Navy 1935-1945 (New York: The Dial Press, 1974), p. 188.

¹¹⁹Gorshkov, The Sea Power of the State, p. 148.

weakening German naval strength in other theaters and allowing the allies to win the "Battle of the Atlantic."¹²⁰

Throughout Gorshkov's writings, as well as among those of others concerning naval matters, there is a large degree of praise for Soviet naval exploits, praise that is well deserved albeit sometimes exaggerated or embellished beyond recognition. Yet, this embellishment of the facts underscores current Soviet thinking in regard to the oceans and sea power.

However, we must consider the most important component of the sea power of the state to be the Navy, whose mission is to protect state interests on the seas and oceans and to defend the country from possible attacks from the direction of the seas and oceans.¹²¹

Succinctly expressed then, the wartime mission of the Soviet Navy, as espoused by Admiral Gorshkov, is to defeat the West's naval forces, thereby depriving the West of the capability of using the seas as a means of communications and resupply, whereupon the Soviet Navy would exert force in all areas of the seas that it deemed important.¹²²

There is a peacetime mission of the Soviet Navy that is equally as important as the wartime mission. This

¹²⁰Ibid., pp. 149-150.

¹²¹Gorshkov, Red Star Rising at Sea, p. 128.

¹²²Ibid., "Introduction" by Admiral Elmo R. Zumwalt, Jr., U.S.N. (Ret.), p. v.

peacetime mission is as follows:

1. Counter-balance U.S. naval influence by deploying Soviet naval units in close proximity, in numbers that limit U.S. capabilities. This tactic is clearly seen in the stationing of Soviet naval forces in the Mediterranean Sea.

2. Establish a visibility factor that demonstrates the global interests of the Soviet Union by deployment of Soviet naval units to the seven seas.

3. Exert pressure via military presence, warships off the coasts of areas where the Soviets believe they have any interests, in support of political goals. This presence serves as an effective, silent reminder of the global reach of Soviet "interests."¹²³

This peacetime mission of the Soviet Navy serves as an extension of Soviet policy, policy as paraphrased from Lenin by Gorshkov:

. . . is a concentrated expression of the economy, the state of which primarily determines the power of such an important instrument of policies are the armed forces of the nation. It is precisely in the state of the armed forces of a given country that its economic power is reflected.¹²⁴

For Admiral Gorshkov the barometer that indicates the level of the economy of a country, the Soviet Union in

¹²³Ibid.

¹²⁴Gorshkov, The Sea Power of the State, p. 247.

particular, could well be the navy. In support of this contention Fredrick Engels is quoted as writing:

The modern fighting ship is not only the product of heavy industry but also at the same time its mode A country with the best developed heavy industry will enjoy almost a monopoly of building such ships Political strength at sea, based on modern warships is not at all 'direct' but on the contrary mediated by economic strength.¹²⁵

Hence, a modern, well-developed navy is only found in countries that have strong economies. Such an economy is to be found in the Union of Socialist Soviet Republics; therefore, the Soviet Union has a well-developed navy. Consequently, it behooves us to examine the Soviet Navy which is an indicator of Soviet economic strength.

¹²⁵Ibid.

CHAPTER IV

SOVIET SURFACE FLEET

Demonstrating economic and military power abroad; showing readiness for action; deterring potential enemies and encouraging friends; being so equipped that probable enemies see the futility of combat - this is a situation that has often in the past led to the settlement of political ends without recourse to military operations.

Admiral Sergei G. Gorshkov
Commander-in-Chief, Soviet Navy¹²⁶

When evaluating the potential destructive force of the Soviet Union an undue amount of scrutiny is affixed upon the Strategic Ballistic Missile Submarines (SSBMs) and developments concerning the major surface combatants, thereby obscuring the true nature and potential of the Soviet naval forces. These sectors of the Soviet Navy, while very important sectors, are only links in a chain stretching from shore facilities to the "blue-water" sector, and are weak links by themselves, of the Soviet naval forces. Thus, in evaluating a naval force all sectors, links, must be reviewed with an eye attuned towards gauging the integrating links overall effectiveness.

¹²⁶Couhat, Combat Fleets 1980-81, p. 523.

A major problem in evaluating naval strength is the lack of consistency in classifying the various classes of warships. This is especially a problem when confronted with borderline cases. A rule of thumb to use as a guide would be to note the characteristics and capabilities of the vessel in question. Unfortunately this system of classification is not without error for a vessel may have the characteristics and capabilities of one class yet be deployed where another class would be expected. Added problems occur if one maintains a too rigid classification system as, once again, there is a lack of consistency exhibited by the world's authorities when it comes to classifying these lethal inventories. Thus, a ship can be classified as a small combatant by one authority's classification system only to be called a frigate or corvette according to another classification system. How warships are classified probably depends upon the authorities' purpose in compiling information and statistics about the various navies of the world. If one wishes to present the view that a particular navy is expanding rapidly then one concentrates upon the ocean-going vessel and juggles the statistics by designating coastal craft as frigates; on the other hand, when one wishes to downplay a nation's "blue-water" capability, warships are classified as small combatants thus giving the illusion of a limited capability when viewed by the layman. Therefore, whenever statistics

are bandied about it is quite easy to derive fallacious conclusions from data that are correct but whose true value is obscured by misleading designations and/or labels. Consequently, it is possible that a class of warship may be found in more than one designated slot partially due to the inconsistencies of the authorities consulted but due mainly to the task allocations that have been designated to each class of warship. Therefore it is imperative, in order to maintain objectivity and consistency, that an arbitrary system of classification be utilized. This classification system will be primarily based upon two factors: size and use. If a ship has potential use in a different slot, then such potentiality shall be noted.

This section will be divided into five parts, each part being a link in the Soviet naval chain. For purposes of time and space, the vessels of the coastal link have all been designated as small combatants. Bearing the aforementioned in mind, a review of the Soviet Navy is in order.

Small Combatants

Small combatants are an essential part of every coastal state's navy and the Soviet Union is no exception, for she has in operation more missile, torpedo, patrol and

minecraft than the rest of the world's navies put together.¹²⁷ Interestingly enough, many of the small combatants designated as Patrol Craft are operated by the KGB Border Guard, while the Patrol Boats are manned by the Maritime Border Guard of the KGB.¹²⁸

One of the better known craft is the "Osa" Class of small combatants. These vessels are considered to be potent ship killers that are capable of launching missiles in a Force 4 sea (2 m waves). Over 100 Osas have been transferred to other navies. Iraq has received the Osa II Class whose SS-N-2 missiles are probably fitted with an infra-red homing device. Currently there are approximately 70 of the Osa I Class and 45 of the Osa II Class in service in the Soviet Navy. This vessel, due to its small size, is limited in range and lacks rough weather capabilities.¹²⁹

¹²⁷Director of Naval Intelligence (OP-009) and the Chief of Information (OP-007), Understanding Soviet Naval Developments, Unclassified, (3rd ed.; Washington, D.C.: Office of the Chief of Naval Operations, Department of the Navy, January 1978), p. 32. (Hereinafter referred to as D.N.I. and C.I., Understanding Soviet Naval Developments.)

¹²⁸Jean Labayle Couhat, ed., Combat Fleets of the World 1980-81: Their Ships, Aircraft, and Armament, trans. by A. D. Baker III (Annapolis: Naval Institute Press, 1980), pp. 581-583.

¹²⁹Couhat, Combat Fleets 1976-77, pp. 423-424. See also D.N.I. and C.I., Understanding Soviet Naval Developments, p. 32.

An apparent replacement for the Osa I Class appeared in 1978 with the introduction of the "Matka" Class. Basically, the Matka Class is a missile-armed version of the "Turya" Class hydrofoil torpedo boat with modifications. It is a small, lightweight vessel apparently designed for hit and run tactics. Its vital statistics are as follows:

Displacement:	215 tons (250 full load)
Speed:	40 knots
Dimensions:	40 X 12 (7.7 hull) X 1.9 (hull)
Complement:	30
Range:	400/36 - 650/20
Armament:	2/SS-N-2C (1 X 2); 1/76.2 mm DP; 1/Gatling AA (VI X 1)
Electronic Equipment:	Radars: 1 navigational, 1 square tie, ECM: 2 chaff launchers (XVI X 2), IFF: 1 Hole Pole B, 1 Square Head
Machinery:	3 M-504 diesels; 3 props; 15,000 hp ¹³⁰

Corvettes

Corvettes made their first appearance, represented by the 380 ton "Kronstadt" Class, in the Soviet Navy during the post-war years. By 1956, 230 ships of this class had been constructed. While construction of the Kronstadt Class was being phased out, plans for the development and construction of the "SO-I" Class at 250 tons were being drafted. Construction of this class began in 1957 and continued until the early 1960's.¹³¹

¹³⁰Couhat, Combat Fleets 1980-81, p. 578.

¹³¹Moore, "The Soviet Navy," p. 120.

During the late 1950's plans were being drafted for the construction of a class utilizing gas-turbine/diesel propulsion. Ships of this type were laid down in 1962 and were completed in 1963, culminating in the introduction of the "Poti" Class having a standard displacement of 560 tons and a full load displacement of 650 tons. Here diesels were used when cruising, and the gas-turbines utilized when maximum speed was necessary.¹³²

Beginning in 1969, the "Grisha-I" Class made its appearance in the Soviet Navy and was most likely planned and developed to utilize diesel and gas-turbine engines for propulsion.¹³³ Although it is the same size as the "Petya" and "Mirka" Classes' frigates, the Grisha Classes are designated as corvettes because that is the slot designation given them by the Soviet Navy: Mal'yy Protivolodochnyy Korabl' (small ASW ship).¹³⁴

In 1974 another version of the Grisha Class appeared being designated Grisha II. This version replaced the SA-N-4 system with another twin mounted 57 mm AA and has no Pop Group radar. Perhaps this modification was carried out to cut costs, or more probably, the modifications are more suitable to the purposes of the naval arm of the Komitet

¹³²Siegfried Breyer and Norman Polmar, Guide to the Soviet Navy (2nd ed.; Annapolis: Naval Institute Press, 1977), p. 230.

¹³³Couhat, Combat Fleets 1976-77, p. 421.

¹³⁴Couhat, Combat Fleets 1980-81, p. 577.

Gosudarstvennoy Bezopasnosti (Committee for State Security--KGB).¹³⁵ A Grisha III version was reported in 1976, purportedly having the same armament as the original Grisha with an additional six-barreled 23 mm gun.¹³⁶

In 1970 the first of the guided-missile corvettes made its debut in the ranks of the Soviet Navy, the "Nanuchka I" Class, Soviet designation being: Raketnyy Korabl' (missile ship).¹³⁷ Ships of this class, reportedly the heaviest armed vessel for a ship of its size, are said to be poor sea boats with very unreliable engines (paired M-504 diesels). During the early and mid-'70's the Nanuchka I Class was observed operating in regional seas. Production of this class ceased in 1976 though several have been modified with four SS-N-2C missiles and sold to India (Nanuchka II).¹³⁸

Production of the Nanuchka Class continues in the form of the Nanuchka III Class which entered naval service in 1977. Basically the same as the Nanuchka I, the Nanuchka III has an enlarged superstructure and higher pilothouse.¹³⁹

¹³⁵Breyer and Polmar, Guide to the Soviet Navy, p. 232. See also Couhat, Combat Fleets 1976-77, p. 421.

¹³⁶Breyer and Polmar, Guide to the Soviet Navy, p. 232. Original armament as follows: 2/57 mm /80 AA (II X 1); 1/SA-N-4 system (18 missiles); 4/533 mm TT (II X 2); 2/MBU 2500A RL; mines possible.

¹³⁷Couhat, Combat Fleets 1980-81, p. 577.

¹³⁸Ibid. See also D.N.I. and C.I., Understanding Soviet Naval Developments, p. 33.

¹³⁹Couhat, Combat Fleets 1980-81, p. 577.

Vital statistics of this class are the following:

Displacement:	780 tons (930 full load)
Speed:	34 knots
Dimensions:	60.3 X 12.2 X 3.1
Complement:	60
Range:	. . .
Armament:	6/SS-N-9 (III X 2); 1/SA-N-4 system (II X 1) with 18 missiles; 1/76.2 mm DP; 1/Batling AA (IV X 1)
Electronic Equipment:	Radars: 1 Peel Pair, 1 Band Stand, 1 Bass Tilt EMC: . . . IFF: 1 High Pole, 1 Square Head
Machinery:	6 diesels; 3 props; 30,000 hp ¹⁴⁰

Guided-missile corvette development continues as the "Tarantul" Class was introduced in 1979. Functional purpose of this vessel is unclear as, in many respects, this class is not as advanced or up to date as the Nanuchka Class. Perhaps the Tarantul Class is for export purposes only since the Nanuchka III Class continues to be produced.¹⁴¹

Warships that have been designated as corvettes, either conventional or guided-missile, have a variety of functions: serving as a small combatant, performing vital coastal patrol duties and being utilized as frigates as it is within their capacity to perform anti-submarine services and other pertinent operations.

Frigates

Soviet development of frigates, escort ships, was

¹⁴⁰Ibid.

¹⁴¹Ibid.

continued during the post-war period, and the "Kola" Class was introduced in the early 1950's. This class was based upon the german "Elbing" Class of World War II and was said to have had poor seagoing qualities. Improvements came in the mid-1950's with an emphasis on seaworthiness when the "Riga" Class entered the fleet to replace the larger Kola Class, which was phased out of service in the late 1970's.¹⁴²

A multipurpose ship, the "Petya" Class, designed for use in coastal waters appeared in 1963. This class has served as an escort ship, a submarine chaser and an anti-aircraft ship. It was the first large Soviet warship to utilize gas-turbine propulsion and one of the first warships in the world to have a combined diesel-gas-turbine propulsion system.¹⁴³

Two other variants of this class have appeared, improving upon the original design, strengthening their anti-submarine capabilities and correcting faults in design. Petya II has a more powerful anti-submarine component while the Petra III, arising in the early 1970's, is fitted with a Variable Depth Sonar (VDS).¹⁴⁴

The "Mirka" Class was originally slated to be a successor to the Petya Class; however, its propulsion system

¹⁴²Breyer and Polmar, Guide to the Soviet Navy, p. 219.

¹⁴³Bill Gunston, "Soviet Warships," The Soviet War Machine, p. 143.

¹⁴⁴Breyer and Polmar, Guide to the Soviet Navy, pp. 223-224.

presented problems that necessitated changes in the design of the superstructure, the end result being an inferior class of warship not suited to replace the Petya Class. Perhaps the greatest disadvantage of this class is the exhaust cloud that spews forth from the stern when the vessel is traveling at top speed rendering its position visible at a great distance.¹⁴⁵

Basically, the Mirka Class is the same as the Petya Class it was supposed to replace. The main differences are: two diesels instead of one, capability of 34 knots versus 30 knots and the Mirka II carries a Hormone helicopter equipped with sonar. There are some differences in armament and electronic equipment capabilities while displacement, dimensions (according to sources) and range are nearly identical.

Perhaps one of the more interesting and confusing aspects of warship classification, is that once classified and assigned a specific slot in a navy's ocean-going arsenal, no agreement exists among the various authorities as to the warship's true designation. This confusion is compounded when the warship is rerated and moved to another classification. Such is the situation concerning the "Krivak I" and "Krivak II" Classes. These classes were originally rated as Bol'shoy

¹⁴⁵Ibid., p. 228.

Protivolodochnyy Korabl' (large ASW ship) and were classified as destroyers. The Krivak I Class was probably intended to be a replacement for the "Skorky" Class as it has a multiplicity of weapons systems allowing vessels of this class to act as general purpose destroyers. Combined with the cost-analysis assets of simple construction and small size, they are relatively reasonable to build economically speaking.¹⁴⁶

When Admiral Hyman G. Rickover testified before the House Armed Services Committee, he stated that warships of this class are ". . . probably the most heavily armed and most capable warship of its size ever built."¹⁴⁷ In comparing the Krivak Class warship to its American Naval counterpart, Admiral Rickover used the following set of statistics:

	<u>KNOX</u> (U.S.)	<u>KRIVAK</u> (U.S.S.R.)
Displacement:	4100 tons	3800 tons
Propulsion:	single crew, steam	twin screw, gas- turbine
Speed:	27 knots	over 30 knots

¹⁴⁶ Ibid., pp. 204-206.

¹⁴⁷ House of Representatives, Committee on Armed Services, Hearings on Military Posture and H.R. 5068 (H.R. 5970) and H.R. 1755, Department of Defense Authorization for Appropriations for Fiscal Year 1978, Seapower and Strategic and Critical Materials Subcommittee - Navy Shipbuilding and Conversion SCN Program for Fiscal Year 1978, Torpedoes and Other Weapons, part 4 of 6 parts, 95th Cong., 1st sess., hearings held Feb. 3-4, 7-9, 16-18, 21-23, 1977, p. 704. (Hereinafter referred to as H.A.S.C. 95-4.)

Guns:	1/5"	4/3"
ASW	1/ASROC, 4/torpedo tubes, 1/Heli-copter	2/ASW rocket launchers, 8/torpedo tubes, 1/Helicopter pad
Anti-Air:	Point Defense Missile*	1/Twin launcher
Anti-Surface:	NONE	1/Quadruple launcher

*Installed on 30 of 46 units¹⁴⁸.

What is interesting in Admiral Rickover's testimony is that he classifies the warships in the Krivak Class as being frigates fully one year before the Soviet Navy rated the class to Storozhevoy Korabl' (patrol ship). Apparently the Admiral's classification guide was based solely upon tonnage. Unfortunately, his statement to the House Armed Services Committee (H.A.S.C.) did not include line drawings of the warships he was talking about.

At the opposite end of the descriptive spectrum are the vital statistics that are offered by Bill Gunston, "Soviet Warships" in The Soviet War Machine:

Displacement:	3,800 tons (4,200 full load)
Speed:	38 knots top speed
Dimensions:	123.4 X 14 X 5 meters
Armament:	1/SS-N-10 system; 2/SA-N-4 systems; 2/MBU launchers; 4/76 mm (II X 2); 4/30 mm (II X 2); 8/533 mm TT (IV X 2)
Machinery:	8 sets of gas-turbines; 112,000 shp; 2 shafts

It is said by this authoritative source that this class of warship perfectly exemplifies the present-day Soviet

¹⁴⁸Ibid.

thinking concerning surface ships: heavy on weaponry, electronics and power, fitted into a small hull. There is the acknowledgement that although warships of this class are designated as destroyers, their armament is heavier than that of almost any Western cruiser.¹⁴⁹

The aforementioned vital statistics represent the extremes in delineating the characteristics and capabilities of the warships in this class. Obviously the former description was an abstract merely intending to highlight certain aspects of the class. However, the accuracy of the information given is extremely suspect. While the information given in the latter set of statistics is more comprehensive than the former, it too is highly suspect. Even though it is more precise in giving an accounting of the Krivak Class' armaments and doesn't mistakenly call the VDS covering a helicopter pad, it does seem to exaggerate the extent of this class' propulsion system. Vessels of this class are large ships but not large enough to house a propulsion system necessary to generate 112,000 hp to produce a top speed of 38 knots.¹⁵⁰

Generally speaking, the previously cited sources are considered reliable; however, in this instance they are

¹⁴⁹Gunston, "Soviet Warships," p. 136.

¹⁵⁰Breyer and Polmar, Guide to the Soviet Navy, pp. 205-206.

flawed. Therefore it is necessary to consult other more reliable sources of statistical information concerning the make-up of this class. Inasmuch as no two sources are in complete agreement with the other, two sources will be cited. They will not be in total agreement; however, their differences as well as similarities will serve to complement each other:

Displacement:	3,200 tons standard (3,900 tons full load)
Speed:	32 knots
Dimensions:	122 X 14 X 5 meters
Complement:	about 210
Armament:	1/SS-N-14 system (IV X 1) (4 missiles); 2/SA-N-4 systems (II X 2) (36 missiles); 4/76 mm AA (II X 2); 8/533 mm TT (IV X 2); 2/2500A RL; mines possible
Electronic Equipment:	1 Head Net C, 1 Don, 2 Eye Bowl, 2 Pop Group, 1 Owl Screech, 1 High Pole, sonar dome in the bow, VDS
Machinery:	gas-turbines; 72,000 hp; 2 props
Displacement:	3,600 tons full load
Speed:	33 knots
Dimensions:	122 X 14.3 X 5 (avg.) meters
Complement:	275
Range:	4,000/18
Armament:	1/SS-N-10 system (IV X 1) and 4 missiles; 2/SA-N-4 systems (II X 2); 4/76 mm TT (IV X 2); mines
Electronic Equipment:	Radars: 1 Don, 1 Head Net C, 2 Eye Bowl, 2 Pop Group, 1 Owl Screech Sonar: 1 hull-fitted and 1 middle frequency towed
Machinery:	gas-turbines; 50,000 hp; 2 props ¹⁵¹

In 1976 the Krivak II Class made its first appearance and is basically the same as the Krivak I Class with some

¹⁵¹Couhat, Combat Fleets 1976-77, p. 413.

subtle differences. All of the vital statistics are the same as the Krivak I Class except for one small alteration in the Armaments section: 2/100 mm AA (I X 2) instead of the 4/76 mm AA (II X 2).¹⁵²

These ships were probably demoted to another classification due to their limited endurance at high speeds.¹⁵³

Destroyers

This next sector of Soviet naval development should really be divided into two sub-sectors as the destroyer sector of the Soviet Navy is one of the linchpins that provide the link between the coastal defense forces and the "deep-water" surface fleet. One subsector consists of conventional destroyers while the other is composed of guided-missile destroyers.

There are two classes of conventional destroyers in the Soviet Navy today; they are the "Skory" Class and the "Kotlin" Class.

Skory Class destroyers were a post-war development based upon pre-war design, yet were the first to be influenced by World War II German design and engineering. It is a more powerful destroyer than any of its predecessors

¹⁵²Couhat, Combat Fleets 1980-81, p. 571.

¹⁵³Ibid., p. 572.

in that it had a greater sea-going capability, more torpedo armament and stronger air defenses. In 1958 a program of modernization was begun, but it was discontinued possibly because of the expense involved and the need for yard capacity for new construction. Those destroyers that were modernized between 1958 and 1961 are designated as being "Skory-Mod" Class. They are armed with modern 57 mm anti-aircraft guns and anti-submarine rocket launchers.¹⁵⁴

Last of the conventional destroyers are the ships of the Kotlin Class. These ships were designed in the early 1950's, and this class was based upon the Tallin Class albeit on a smaller scale.¹⁵⁵ Originally 36 ships were planned, and 32 keels were laid; of these four were converted during construction to become the "Kidlin" Class (guided-missile destroyer class). Twenty-eight were completed, and nine of these were converted into guided-missile destroyers of the "Kotlin-SAM" Class.¹⁵⁶

Modernization developments began to occur in 1962 when the Wasp-Head fire-control system was altered and

¹⁵⁴Breyer and Polmar, Guide to the Soviet Navy, pp. 209-210.

¹⁵⁵A destroyer class built in the early 1950's. Only one was completed with obvious German influence. This class was phased out in the late 1970's.

¹⁵⁶Breyer and Polmar, Guide to the Soviet Navy, p. 211.

anti-submarine capabilities of this class were strengthened. Those vessels that were overhauled were re-designated the "Kotlin-Mod" Class.¹⁵⁷

All of the aforementioned destroyer classes are conventional warships. Hereafter, all destroyer classes that follow are unique in that they represent a turning point in warship development. These warships are fitted with surface-to-air missiles as well as being fitted with anti-submarine devices.

It was in June, 1962, that the first of the converted Kotlin Class destroyers were sighted in the English Channel. This vessel, later identified as the Bravy, was characterized by her pyramid shaped aftermast, with the funnel set well aft, and adjacent to the funnel was a missile magazine with a launcher on top of it.¹⁵⁸ This warship, the Bravy, apparently was an experimental proto-type as it underwent several conversions and modifications. Some of these modifications can be detected on later Kotlin-SAM Class destroyers while other modifications have been omitted.

While ships of this class were some of the world's first guided-missile destroyers the distinction of being the world's first guided-missile destroyer belongs to the Kildin Class destroyers. Vessels of this class were

¹⁵⁷Ibid., p. 212.

¹⁵⁸Ibid., p. 187.

originally intended to be constructed as Kotlin Class destroyers but were converted to the Kildin Class at varying points of construction. In fact, the Bedovy, the first ship of this class, is a conversion of an almost completed Kotlin destroyer. Thus, this warship differs from her sister ships in that she retains many features of the Kotlin Class.¹⁵⁹ Vital statistics of this class are:

Displacement:	3,500 tons full load
Speed:	34 knots
Dimensions:	126.5 X 12.9 X 4.6 (avg.) meters
Range:	1,200/30 - 4,100/18
Armament:	1/SS-N-1 system (I X 1) and 6 Scrubber missiles; 16/45 mm AA (IV X 4); 2/MBU 2500 RL; 4/533 mm TT (II X 2)
Electronic Equipment:	Radars: 1 Slim Net or Flat Spin, 1 Top Bow, 1 Sun Visor, 2 Hawk Screech
Machinery:	GT; 72,000 hp; 2 props ¹⁶⁰

As originally constructed destroyers of the Kildin Class were the weakest ships in the Soviet guided-missile destroyer armory. This dubious distinction was rectified in the early 1970's when the Bedovy and the Neuderzhimy underwent conversion and modernization processes. Therefore, the vital statistics of the aforementioned guided-missile destroyers are the same as those that have previously been with changes taking place in the areas of armaments and electronic equipment.¹⁶¹ Modified vital statistics are

¹⁵⁹Ibid., p. 191.

¹⁶⁰Couhat, Combat Fleets 1976-77, p. 416.

¹⁶¹Ibid. See also Breyer and Polmar, Guide to the Soviet Navy, p. 192. It is interesting to note that Breyer

as follows:

Armament: 4/SS-N-11 systems (I X 4); 4/76 mm AA
(II X 2); 16/45 mm AA (IV X 4)

Electronic
Equipment: Radars: 1 Head Net C, 1 Owl Screech,
2 Hawk Screech
Sonar: 1 hull-fitted high frequency¹⁶²

As a result of the modernization modifications and replacement of the SS-N-1 missile system with the SS-N-11 missile system in the early 1970's, these vessels have been transformed into some of the strongest warships in the world.¹⁶³

Construction of the "Kruplin" Class was to have begun in 1958. This class was to have replaced the Kotlin Class; however, when it became apparent that the SS-N-1 missile system was proceeding ahead of schedule, the construction program was revised. Construction plans were redrafted resulting in the "Krupny" Class guided-missile destroyer. These were the first Soviet warships to have helicopter landing pads. Eight vessels of this class were built, but only two remain in service as the other six were modernized and converted into the "Kanin" Class when the decision was

and Polmar state that the Bedovy and the Neulovimy underwent modifications; while Couhat designates the Bedovy and Neuderzhimy as the two ships that were modernized.

¹⁶²Couhat, Combat Fleets 1976-77, p. 416.

¹⁶³Breyer and Polmar, Guide to the Soviet Navy, p. 192.

made in 1966 to phase-out and replace the SS-N-1 missile system. It is highly probable that the two remaining Krupny Class destroyers will be converted to Kanin Class destroyers by undergoing the conversion process of having their anti-aircraft armaments strengthened, the surface-to-surface missile systems removed and being lengthened.¹⁶⁴

Beginning in 1963 the first ships of a new class were being completed. Called the "Kashin" Class, these were the first Soviet destroyers to be fitted with surface-to-air missiles from the time of their construction. They were also the largest warships to have a gas-turbine propulsion system. In design, these warships are quite distinctive in that they differ from previously designed Soviet warships. Their funnels are arranged in pairs and are canted aft and to either side (port funnels canted aft and port while starboard funnels are canted aft and starboard), so that the exhaust gases have as little effect as possible on the ship's array of electronic equipment. This array of sensitive electronic antennas is larger than that deployed on earlier classes and is positioned in six locations. Another feature of the Kashin Class is that all vertical surfaces of the deck structure are sloped; thereby, allowing wash-down water to flow off easily in the event

¹⁶⁴Ibid., pp. 196-197.

of a nuclear, biological or chemical (NBC) attack. Some authorities in the field suggest that warships of this class were to be deployed with "Kynda" Class guided-missile cruisers providing anti-aircraft and anti-submarine protection.¹⁶⁵

Starting in 1971 a number of vessels were converted to "Kashin-Mod" Class. This modification operation involved the strengthening and addition of anti-aircraft and anti-submarine capabilities as well as lengthening the vessel by three meters to accommodate the additional weaponry.¹⁶⁶

One of these converted warships, the Otvazhny, sank in the Black Sea on August 31, 1974, following an internal explosion and fire that has never been explained.¹⁶⁷

Cruisers

Cruisers form the next category of warships in the Soviet naval arsenal. Once again, older classes have been retained, put to other uses or modified and phased-out to make way for warships that are more in line with current naval needs.

¹⁶⁵Ibid., pp. 201-204.

¹⁶⁶Couhat, Combat Fleets 1976-77, pp. 410, 412.

¹⁶⁷Ibid., p. 410. See also Breyer and Polmar, Guide to the Soviet Navy, p. 203.

There are two classes of conventional cruisers ranging from the "Chapaev" Class, displacing 15,000 tons with a full load to the "Sverdlov" Class, having a full load displacement of 20,000 tons.¹⁶⁸ There is one Chapaev Class cruiser in service that is currently being utilized as a training ship. This vessel, the Komsomolets, was completed in 1950; hence, the Sverdlov Class, which was based upon the Chapaev Class, was the first cruiser class to benefit from the experiences of World War II.¹⁶⁹ Ships of this class have proven themselves to be durable as they have remained in service, been transferred to other navies,¹⁷⁰ or have been modified to fulfill current Soviet naval needs as command cruisers or guided-missile cruisers.

Conversion of the Zhdanov and Admiral Senyavin to command cruisers began in 1970 and was completed by 1973. Basically the following alternations have been made to both ships:

1. Mine rails have been removed and the after section has been turned into a helicopter landing pad.

¹⁶⁸Couhat, Combat Fleets 1976-77, pp. 408-409.

¹⁶⁹Breyer and Polmar, Guide to the Soviet Navy, pp. 180, 183.

¹⁷⁰In 1962 the Orzhonikidze was transferred to the Indonesian Navy and remained in service as the Irian until 1972 when she was decommissioned since replacement parts were no longer being supplied by the Soviet Union.

2. They are armed with an SA-N-4 pop-up missile system.

3. Additional electronic equipment has been installed, both radar and fire-control systems.¹⁷¹

While both warships have helicopter landing pads, only the Admiral Senyavin has a helicopter hangar, suggesting the permanent presence of helicopters.¹⁷²

Last of the Sverdlóv line is the Dzerzhinski, the only warship of the "Sverdlov-Mod" Class. This warship was remodelled in 1961 and fitted with an SA-N-2 missile system. It is the only ship in the Soviet Navy to be fitted with this missile system.¹⁷³

However, the "Kynda" Class cruisers were the first Soviet cruisers to be armed with rockets and the first surface warships to carry the SS-N-3 missile system. They were originally intended to be conventional cruisers but were redesigned to carry fewer guns so as to make room for the SS-N-3 missile system. When it first appeared on the high seas this class attracted a lot of attention, for it had all the weaponry necessary for modern naval warfare and could operate independently over a relatively wide area.¹⁷⁴

¹⁷¹Breyer and Polmar, Guide to the Soviet Navy, p. 177.

¹⁷²Ibid., p. 178.

¹⁷³Couhat, Combat Fleets 1976-77, p. 407. See also Breyer and Polmar, Guide to the Soviet Navy, p. 164.

¹⁷⁴Gunston, "Soviet Warships," p. 137. See also Breyer and Polmar, Guide to the Soviet Navy, p. 165.

Successor to the Kynda Class is the "Kresta I" Class guided-missile cruiser. This class has a better mixture of armaments, fewer surface-to-surface missiles, a stronger anti-aircraft component and strengthened anti-submarine capabilities. Her superstructure is built around the exhaust stack, and the surface-to-surface missiles are placed on either side of the superstructure and under the bridge wings. These missiles can be elevated to a firing position but cannot be trained onto a target.¹⁷⁵ Ships of this class were the first Soviet warships to be equipped with a helicopter hangar and to have a helicopter control booth located on the port side aft.¹⁷⁶

In line with the Soviet tradition of continued development and innovation, the Kresta II Class guided-missile cruiser made its debut in 1970. This class is a follow-up to the Kresta I Class, thereby representing the third generation of large missile ships in the Soviet naval arsenal. Her surface-to-surface missiles are not on the same level but are arranged in an over-and-under arrangement--two above and two below. She has a stronger air defense system with her rapid-fire machine guns and the latest model SA-N-3 missile system. The helicopter landing pad has been raised to the height of a deck, while the

¹⁷⁵Couhat, Combat Fleets 1976-77, p. 403.

¹⁷⁶Breyer and Polmar, Guide to the Soviet Navy, p. 170.

helicopter hangar's height has been lowered by half by sinking it into the second deck.¹⁷⁷

Warships of this class are heavily loaded with electronic equipment and weaponry when compared with Western naval vessels of the same hull size. These are formidable warships and construction of this series continues to add tremendous throw-weight to the Soviet naval arsenal.¹⁷⁸

Cruisers of the Kresta II Class and the "Kara" Class are designated "large anti-submarine warships" by the Soviets. This classification is based upon the wide array of electronic equipment and weaponry that is literally crammed into every available nook and cranny on board these ships and their designated role in the realm of naval warfare.

Kara Class warships are one of the latest innovations in Soviet naval development. This class first appeared in the Mediterranean Sea in March, 1973, shortly after it was completed. At that time, and at the present time, no warships in any of the Western navies could remotely begin to match the array of electronic systems and weaponry that this class carries.¹⁷⁹

These warships are based upon the guided-missile cruisers of the Kresta II Class and the guided-missile frigates of the Krivak Class. They differ from the Kresta

¹⁷⁷Ibid., p. 171.

¹⁷⁸Gunston, "Soviet Warships," p. 135.

¹⁷⁹Ibid., p. 134.

II in that the Kara Class ships are larger, the funnel has returned to a more traditional profile, and they are powered by gas-turbines.

This warship class is a formidable opponent and becomes even more so as the SS-N-10 missile systems are phased out, being replaced by the SS-N-14 missile system which has a longer range.¹⁸⁰

Currently, Soviet research and development has four cruiser construction programs underway with a total of twelve cruiser-sized combatants to be delivered in the early 1980's. Briefly stated the construction programs are as follows:

1. Three ASW cruisers of 8,400 tons are reported to be under construction at an unidentified facility, with the first to be completed in 1981 and two others a year later.

2. The gas-turbine-powered follow-on class to the Kara construction program at Nikolayev displaces 12,500 tons and includes at least three ships, with the first to be completed in 1981. Armament will include cruise missiles and guns.

3. At least four 7,800 ton cruisers are being built

¹⁸⁰Kenneth W. Gatland, "Soviet Missiles," The Soviet War Machine, p. 213. See also Breyer and Polmar, Guide to the Soviet Navy, p. 74.

presumably at Zhdanov shipyard, Leningrad. The first will be completed in 1980, with the others following at the rate of one per year. Armament includes cruise missiles, long-range guns, mines and "modern defensive weapon systems."

4. The first "Kirov" Class nuclear-powered cruiser is expected to go to sea for the first time early in 1980, with the second following in 1982. Armament includes vertically launched missiles.¹⁸¹

What is surprising is the Soviet development of the Kirov Class nuclear-powered cruiser. This class, at 25,000 tons displacement, is derived from the strike cruiser type, a development that was given up by the U.S. Navy, and whose tonnage recalls the battle cruisers of an earlier era.¹⁸² Not much is known about this class; however, the known vital statistics are as follows:

Displacement:	25,000 tons
Speed:	30 knots
Dimensions:	240 X 28 X 8
Complement:	. . .
Armament:	. . .
Electronic	
Equipment:	Radars: at least 1 Top Sail, 1 Top Steer
	Sonars: bow-mounted, hull; towed VDS
	nuclear reactors; steam turbines;
Machinery:	. . . props; . . . hp

Remarks: These are the first Soviet nuclear-powered surface combatants. They will be armed with surface-to-surface, surface-to-air and ASW missile systems, several gun mounts, short-range ASW ordnance, and one or more helicopters. The Top Sail radar is a new variant incorporating a Big Net. This class has a massive superstructure with two tower mast, both

¹⁸¹ Couhat, Combat Fleets 1980-81, p. 793.

¹⁸² Ibid., p. vii.

surmounted by a forest of radar, communications and ECM antennas.¹⁸³

As more knowledge is acquired concerning the Kirov Class' specifications, then perhaps a clearer understanding can be gained as to why the Soviets are constructing these vessels, and at that time their purpose should also be clearly understood.

Thus far, only surface warships ranging from small coastal patrol vessels to large ocean-going cruisers, often called ASW ships, have been noted here. Basically, modern Soviet warships of all classes are more heavily armed and carry a wider range of gun and ASW armaments than do their Western counterparts.¹⁸⁴ Gradually over the past 30 years the Soviet Navy has developed from a coastal naval power to an ocean-going power whose missions are the following:

1. Strategic deterrence - the ability to deter the enemy from employing his weapons systems in combat. It is safe to say that the Soviet Navy exerts control over its contiguous seas.

2. Naval presence - the capability to project sea-power to distant shores and ports for "peaceful" purposes and free advertising in the foreign press. This has been achieved.

¹⁸³Ibid., p. 554.

¹⁸⁴Defense Posture FY 1978, p. 71.

3. Sea denial - the capacity to deny the free use of the oceans to the enemy. In this area the Soviet Navy is quite capable of denying an enemy the use of waters contiguous to its shores and those of peripheral seas.¹⁸⁵

An important fact to remember is that all major surface combatants that have been assigned to the Soviet Navy since 1967 have been categorized as ASW warships of one class or another according to Soviet naval designations. While these ships are designed for ASW, they also have important roles in naval force air defense, anti-ship warfare and an advertisement factor in extolling the long-range might of the Soviet Union.¹⁸⁶

Conspicuously absent from the Soviet naval lexicon has been the use of the terms "aircraft carrier" and "carrier." Since 1950 there have been no reports emanating from Soviet naval officials classifying any of their warships as carriers or aircraft carriers. Nevertheless, there remain two classes of major surface combatants that entered the Soviet naval service in 1967 or after. In accordance with the Soviet naval classification system these last two

¹⁸⁵U.S., Congress, Senate, First Concurrent Resolution on the Budget FY 78, Vol. 1, 95th Cong., 1st sess., March 3, 4, 8, 1977, The Military Balance Between NATO and the Warsaw Pact, pp. 232-233. (Hereinafter referred to as Budget FY 78.)

¹⁸⁶U.S., Congress, Senate, Appropriations Committee, Fiscal Year 1978 Authorization for Military Procurement, Research and Development, and Active Duty, Selected Reserve, and Civilian Strengths, Part 2: Authorizations, 95th Cong., 1st sess., January 27, February 1, 3, 8, 10, 1977, p. 945. (Hereinafter referred to as FY 1978 Authorization.)

classes of warships are described as "large anti-submarine cruisers."

These large anti-submarine cruisers first appeared in 1967 in the form of the "Moskva" Class. This class appears to be based upon the French cruiser helicopter ship Jeanne d'Arc which has multi-purpose capabilities.¹⁸⁷

Ships of this class resemble ASW cruisers forward, and the aft section is that of a helicopter carrier, thereby allowing for flexibility in deployment. Following is a line drawing of the Moskva Class helicopter cruiser:

Source: Siegfried Breyer and Norman Polmar, Guide to the Soviet Navy (2nd ed.; Annapolis: Naval Institute Press, 1977), p. 116.

¹⁸⁷Couhat, Combat Fleets 1976-77, pp. 85, 386.

The vital statistics of this class are as follows:

Displacement:	14,500 tons (19,200 full load)
Speed:	30 knots
Dimensions:	190 X 34 (flight deck) 26 (waterline) X 7.6
Complement:	850
Range:	2,500/30 - 7,000/15
Armament:	2/SA-N-3 systems (II X 2) with 44 Goblet missiles; 1/SUW-N-1 system; 4/57 mm AA (II X 2); 2/RBU 6000 rocket launchers; 16 Hormone-A helicopters
Electronic Equipment:	Radars: 3 Don, 1 Top Sail, 1 Head Net C, 2 Head Lights, 2 Muff Cobb Sonars: 1 low-frequency hull-mounted, 1 medium-frequency towed VDS ECM: 8 Slide Globe, 2 Top Hat, several Bell series, 4 chaff launchers (II X 2) IFF: High Pole B
Machinery:	2 sets geared-turbines; 2 props; 100,000 hp
Boilers:	4 ¹⁸⁸

These ships have a flight deck measuring 86 X 36 m and have two elevators on the flight deck. Their Russian type designation is Protivolodochnyy Kreyser (ASW cruiser).¹⁸⁹

These helicopter cruisers were probably designed and built to counter the United States Navy's Polaris submarines. They were first laid down in 1963, and by their completion in 1967, the Polaris submarine had switched to the longer range A-3 Polaris missile,¹⁹⁰ thereby reducing the effectiveness of the ASW capabilities of the Moskva Class

¹⁸⁸ Couhat, Combat Fleets 1980-81, p. 552.

¹⁸⁹ Ibid.

¹⁹⁰ Gunston, "Soviet Warships," p. 128. See also Breyer and Polmar, Guide to the Soviet Navy, p. 115.

against the Polaris submarines.

In all probability plans for the ships of the "Kiev" Class¹⁹¹ ASW cruisers were on the drawing board when the Moskva (Moskva Class ASW cruiser) underwent sea trials in the Black Sea in 1967.

The Kiev, the first ship of the Kiev Class to be completed, was laid down in 1971 and launched in 1976.¹⁹² She and her sister ships are designated as large ASW ships by the Soviets although their appearance is that of an aircraft carrier, and their armament provides them with strong ASW anti-ship and anti-aircraft capabilities. The following line drawings are of the Kiev Class ASW cruiser:

Source: Siegfried Breyer and Norman Polmar, Guide to the Soviet Navy (2nd ed.; Annapolis: Naval Institute Press, 1977), p. 112.

¹⁹¹Formerly known as the "Kuril" Class.

¹⁹²Breyer and Polmar, Guide to the Soviet Navy, p. 112.

There is no clear-cut explanation as to why the Soviets have deemed it appropriate to classify the Kiev Class warships as large anti-submarine cruisers. However, one can speculate and the following explanations come to mind:

1. That is her mission.
2. Politically, it is not acceptable to designate any Soviet warship as an aircraft carrier in view of the years of denigrating statements by Soviet military writers concerning Western aircraft carriers.
3. It may be a Soviet desire to present this class of warship as part of an evolutionary trend in ASW warfare development and not based upon Western carrier concepts.
4. Lastly, it may be because the Soviets wished to circumvent some interpretations of the Montreux Convention which proscribes warship passage through the Turkish Straits.

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A statement by Captain John E. Moore, RN. FRGS., editor of Jane's Fighting Ships: 1974-75, notes that:

At 35,000 tons she must be the largest cruiser ever built, and the strictures on aircraft carriers' movements through the Turkish Straits, as laid down in the Montreux Convention, come rather unkindly to mind. With a capability for operating both VTOL aircraft and helicopters, she will provide a much needed strengthening of the "balance" in the Soviet Fleet.

Vital statistics of this class are the following:

Displacement: 36,000 tons (44,000 tons full load)

Speed:	32 knots
Dimensions:	275 (249.5 waterline) X 50 (38 waterline) X 9
Complement:	1,700
Range:	4,000/30 - 13,500/18
Armament:	8/SS-N-12 (II X 4); 2/SA-N-3 systems (II X 2) with 72 Goblet missiles; 4/launchers for SA-N-4 (II X 2); 4/76.2 mm DP (II X 2); 8/30 Gatling AA (IV X 8); 10/533 mm TT (V X 2); 2/SUW-N-1 systems (II X 1); 2/RBU-6000 rocket launchers; 23/Hormone A and Hormone B helicopters; 12/Forger aircraft
Electronic Equipment:	Radars: 1 Don Kay, 2 Don 2, 1 Top Sail, 1 Top Steer, 2 Head Lights, 2 Pop Group, 2 Owl Screech, 4 Bass Tilt, 1 Trap Door Sonars: 1 low-frequency, hull mounted, 1 medium-frequency, towed VDS ECM: 8 Slide Globe, 4 Top Hat B, 4 Rum Tub, 2 Bell Clout, 4 chaff launchers (II X 2)
Machinery:	4 sets geared-turbines; 4 props; 140,000 hp
Boilers:	. . .
Fuel:	7,000 tons

These ships are designated as Tyazholyy Protivolodochyy
Kreuzer (heavy ASW cruiser) by the Soviet Navy and obviously
have the capability for sea-denial and sea-control missions.¹⁹⁴

Persistent reports have surfaced in the Western press
concerning Soviet plans to construct a Western-style, nuclear
powered, conventional aircraft carrier having a displacement
of 60,000 tons full load, equipped with catapults and arrest-
ing gear. Likely construction sites mentioned are Nikolayev
and Severodvinsk. Completion of these units in the near
future is not likely.¹⁹⁵

¹⁹⁴Couhat, Combat Fleets 1980-81, p. 533.

¹⁹⁵Ibid.

If, in fact, the Soviets are building a Western-style aircraft carrier it seems likely that the vessel would be constructed in a shipyard that has free and clear access to the open sea. The Nikolayev shipyard is located on the Black Sea, thus any carriers built there would be virtual "prisoners" of the Black Sea due to the provisions of the Montreux Convention proscribing warship passage through the Turkish Straits. All of the construction centers are covered and heated allowing for year-round construction. One major problem is that Severodvinsk has been a major producer of submarines ever since its construction as a shipyard in the 1930's.¹⁹⁶ Consequently, if aircraft carriers are to be built at Severodvinsk, the Soviets either have to or had to institute major changes in the shipbuilding facilities there.

Regardless of where these aircraft carriers are built, one fact remains: they will be an important link in the surface Soviet naval command--a link that can provide its own air-cover and also be able to project its power to distant shores. As Soviet naval development continues, her naval forces become more awesome as her surface naval command forges new and stronger links in the quest for mastery of the sea.

¹⁹⁶Breyer and Polmar, Guide to the Soviet Navy, p. 548.

CHAPTER V

MASTERY OF THE SEA ANALYSIS

Why the imperative quest for mastery of the seas in the era of nuclear power? Surely the military strategists realize that in the event of an all-out nuclear war the traditional function of the navy to gain mastery of the seas and conduct interdiction operations would depend wholly on the duration of said war. In all likelihood such a war would be over before effective operations of these traditional functions could begin to show results, especially when one considers the potential destructive power that is kept harnessed, straining at the leash, awaiting the call to wreak mutual havoc and suicide upon the combatants. However suicidal, contingency plans must be readied for just such an eventuality, and if such an event does occur, there is the realization that land-based transportation systems will be thrown into total chaos. Therefore, the nation that is the ruler of the world's seas before a nuclear holocaust could conceivably emerge from this chaos as the inheritor of the spoils of war, because its navy was able to deliver the death blow against its adversary. How would this be possible considering that the range of warships is somewhat limited to the oceans? Carrier based aircraft

could be used to project power against the foe and bring the hostilities to a close.

Currently the Soviet Navy is in the process of constructing more Kiev Class aircraft carriers, though it appears probable that only a total of four aircraft carriers will be built. There is the strong possibility that a third generation, larger class aircraft carrier will be introduced in the 1980's.¹⁹⁷ However, it will take many more years for the Soviets, at the present rate of technological development, to overcome the Western lead in aircraft carrier technology, expertise and numbers to fully maximize carrier effectiveness.

Yet, not so long ago, in answering a rhetorical question as to why the Soviet Navy had no "strike" carriers, George Fielding Eliot, a military affairs authority, stated the following in Victory Without War:

. . . the Soviet Navy is not designed for the positive purpose of seeking control of the sea, but for the negative purpose of trying to deny the use of the sea to its opponents - especially the United States. Therefore the Soviet Navy does not build "sea-control" weapons systems, but "sea-denial" weapons systems such as submarines and raiding cruisers, supplemented by land-based aircraft and minelaying. The history of warfare teaches us that such attempts have uniformly ended in failure, though the idea continues to have a seemingly irresistible attraction for the

¹⁹⁷"Now the Minsk," Time, October 29, 1979, p. 19.

statesmen of more habituated to land than to sea warfare, such as Russia or Germany, in World Wars I and II.¹⁹⁸

Thus far, only the supporting cast of the Soviet Navy has been introduced and briefly examined. This supporting cast is rapidly coming into an ascendant position within the overall framework of the Soviet fleet. Nevertheless, continued attention focused upon the Soviet surface fleet only serves to intensify a myopic tunnel-visioned picture of the capabilities of the Soviet Navy. By focusing in upon this distorted view of the overall Soviet fleet, one is overwhelmed by the potential for anti-ship, ASW, aircraft and anti-aircraft warfare. Literally speaking this view is only the tip of the iceberg and like the iceberg, danger lurks beneath the cold, ice-blue waters.

A cursory analysis of naval statistics indicates that the Soviets have maintained a preponderant submarine fleet ever since naval construction began in the late 1920's with the activation of the first 5-year program in 1928. Upon closer examination it becomes clear that whatever the prevailing opinions were concerning the type of navy that would best suit the Soviet cause, submarine construction never abated.¹⁹⁹ By examining Soviet naval construction

¹⁹⁸Robert Waring Herrick, Commander, U.S. Navy (Ret.), Soviet Naval Strategy: Fifty Years of Theory and Practice (Annapolis: Naval Institute Press, 1968), p. 151.

¹⁹⁹Soviet Oceans Development, pp. 52-54.

programs and naval production output it becomes increasingly evident that the submarine service was to be the backbone of the Soviet Navy. Furthermore, the primary mission of the submarine service was to interdict all enemy seaborne communications and prevent enemy warships from intruding into Soviet coastal ocean areas.

Soviet naval experts studied the lessons of naval warfare emanating from World War II and concluded, quite rightly, that a balanced fleet was necessary if the Marxist-Leninist goals of world domination were to be achieved. Imperial Japan possessed powerful attack forces, but lacked capability for prolonged ASW warfare. Hence, American submarine forces were able to decimate the Japanese merchant marine and disrupt sea communications in the Pacific Theater.²⁰⁰ Nor were the lessons gained from the Atlantic Theater ignored:

For each German U-boat, there were 25 British and U.S. warships and 100 aircraft, and for every German submariner at sea there were 100 British and American antisubmariners. . . . this significant numerical superiority of defenders was insufficient to force the attackers to fully curtail their operations. . . . forces is of great interest even under present-day conditions . . .²⁰¹

Fortunately, for the Allied naval command, the German High Command underestimated the value of submarine warfare,

²⁰⁰Gorshkov, Red Star Rising at Sea, pp. 103, 108.

²⁰¹Ibid., p. 101.

and the German Naval Command, under Admiral Karl Dönitz, operated their U-boat fleet under severe handicaps. Instead of being concentrated in the Atlantic where Allied shipping was most vulnerable, U-boats were ordered dispatched to other theaters of operation; e.g., the Arctic and Mediterranean Seas.²⁰² Perhaps the greatest hindrance to the success of the German U-boat campaign in the Atlantic lay in the fact that the German U-boats acted alone without co-ordination with surface warships and aircraft. As a consequence, they were forced to seek out and destroy enemy shipping relying upon visual observation. Such an observational technique restricted the range of vision, from the U-boat to the intended target, to less than 20 miles, thereby enabling Allied convoys to slip through the U-boat net.²⁰³

Commenting upon this state of affairs the Commander-in-Chief of the Soviet Navy, Admiral Gorshkov, has said:

. . . a modern navy, whose mission is to conduct combat operations against a strong enemy, cannot be only an undersea navy. The underestimation of the need to support submarine operations with aircraft and surface ships cost the German high command dearly in the last two wars.²⁰⁴

²⁰²Bekker, The German Navy: 1939-1945, pp. 140-141.

²⁰³Ibid., p. 73.

²⁰⁴Gorshkov, Red Star Rising at Sea, p. 130.

There is a continuing realization in Soviet naval circles that mastery of the sea cannot and will not be obtained solely by submarines. Today submarine warfare can produce decisive results against an opponent that is dependent upon ocean shipping for raw materials to fuel his war machine. Nonetheless, while denying use of the high seas to their opponents, submarines do not and cannot open important shipping routes to one's own mercantile fleet or troop transports. Thus, exclusive submarine warfare, in spite of its advances, remains the weaker form of naval warfare indicative of a renunciation of mastery of the sea and the assumption of a strategic naval defensive position.²⁰⁵

Thus, to achieve mastery of the sea, a strategic naval offensive posture is necessary. This offensive posture can only be reached by timely construction and deployment of adequate numbers of surface warships necessary to ensure a successful conclusion of their mission. At this juncture it seems apropos to remember that when evaluating naval strength it can be quite misleading to evaluate a nation's naval strength based solely upon numbers of warships and tonnage displacements. Such statistics have the sound of authority behind them, but they do not express

²⁰⁵Edward Wegener, The Soviet Naval Offensive, trans. by Henning Wegener (Annapolis: Naval Institute Press, 1975), pp. 6-7.

the character of a navy nor its deployment capabilities in actual combat situations. Instead, the proposed mission of the navy must be analyzed and within that framework its strengths and weaknesses are to be calculated, thereby arriving at a positive or negative performance rating.

When then is the mission of the Soviet Navy as seen by their Commander-in-Chief, Admiral Gorshkov? This mission, as envisioned by Admiral Gorshkov, is to provide a naval presence in waters contiguous to Soviet waters and support for ground operations, maintain a strong strategic defense capability and flex muscles with a strategic offense composed of nuclear-powered ballistic submarines.²⁰⁶ Can the present-day Soviet Navy perform the tasks assigned to it by their Commander-in-Chief? There is only one answer, "YES."

In terms of strategic deterrence the Soviet Navy has a wide capability range with special emphasis on strategic defense. As for naval presence, that is quite evident in seas contiguous to the Soviet mainland and in the Mediterranean Sea and Indian Ocean. Unfortunately, at the present time, this naval presence cannot be translated into sea control in all areas of presence. At best,

²⁰⁶Gorshkov, "Some Problems in Mastering the World Ocean," Red Star Rising at Sea, commentary by Vice Admiral Stansfield Turner, U.S. Navy, p. 136.

the Soviet Navy can effectively exert a denial of use of the ocean with the strong probability of interdiction of enemy (U.S. and Western Europe) sea lines of communication. Assertion of sea control can be concretely displayed only in contiguous coastal zones protected by an umbrella of land-based airpower. Soviet naval capabilities to project power ashore are somewhat limited. Capabilities do exist to support ground forces in any conventional action; however, the Soviet Navy lacks the wherewithal to project power upon distant shores and to maintain that projection of power.²⁰⁷ Thus, the Soviet Navy is a highly defensive force with the capability to transform itself into a formidable offensive force, given time to complete select construction programs and the establishment of a system of overseas bases with free access to the oceans.

Perhaps one of the greatest areas of misunderstanding concerns naval design priorities. During hearings before the House Armed Services Committee, Representative Patricia Schroeder of Colorado remarked that:

. . . when we build a new carrier such as the Nimitz, the things that we put most emphasis on are having vacuum power, freshwater johns and when the Soviets built the Kiev they put weapons on it. . . . you could take all of the ships whether they are for V/STOL's, helicopters or

²⁰⁷Ibid. See also Budget FY 78, pp. 232-234.

anything and shove them over the deck and the ship is still an excellent ship per se. Whereas, if we took ours and shoved them over the deck, you kind of had a floating washtub, a couple of 5-inch guns around and a couple of this or that. . . . No. 1, no matter how much money we spend on shipbuilding in this country we are not getting anything to equal what you were talking about when you started talking about the Kiev and the things it had aboard.²⁰⁸

Inevitably, whenever people address themselves to military power and the projection of that power, the discussion centers upon the military hardware, logistics systems and projected paper analyses of force levels. Forgotten, in the avalanche of statistics, details, mechanical descriptions and detailed analyses, is the most important element without which any discussion of power is useless; this vital element would be the human factor. Misjudging the importance of this factor has been battles lost and times lost. Iran in February, 1979. How a single individual within that organization also a fine-weather gauge of warship design priorities.

During World War II when the United States was in the process of mass-producing warships for the war effort, design priorities were weapons, propulsion, electronics, range and lastly habitability. Interestingly enough, after

²⁰⁸H.A.S.C. 95-4, p. 44.

mastery of the seas had been achieved by the close of the Second World War, design priorities of American warships underwent a radical change. Today American warship design emphasizes the following priorities: electronics, habitability, range, weapons and propulsion. Oddly enough, Soviet warship design priorities are the same as those of the United States Navy during World War II: weapons, propulsion, electronics, range and last of all, habitability.²⁰⁹ A comparative study of United States and Soviet warship design was undertaken recently by the U.S. Naval Ship Engineering Center, and the results of that study can be briefly summarized in the following:

1. Certain classes of U.S. warships have doubled in size since 1945, whereas the size of Soviet warships has not noticeably increased. The main factor in the increasing size of U.S. warships is space for fuel, ammunition and living quarters. In large part this divergence of warship size is based upon each country's viewpoint of the navy's role in that country's military and foreign policy framework.

2. Payload (weaponry, ammunition, aircraft and electronic equipment) of each navy is relatively the same, rising from 10% to 15-20% of the total volume of the warship's hull.

²⁰⁹Breyer and Polmar, Guide to the Soviet Navy, p. 111.

3. Electronic systems used by the Soviet Navy have a lower workload capacity than those utilized by the U.S. Navy, thus resulting in a lower rate of return on investment in terms of resources and volume displaced. Introduction of Top Sail, a three-dimensional radar, signals an advancement in electronic technology that, as more advances are made, requires an expansion of Soviet warship size.

4. Weaponry density is 2:1 in favor of the Soviets. Soviet naval architects sacrifice crew living quarters space for weapons placement and ammunition magazines. Ship design is based upon weight and available deck space. Weapons systems have no influence on the size of Soviet warships. Just the reverse is true for U.S. warships. Size is based upon inner volume, and weapons systems definitely influence size.

5. Living conditions aboard present-day American warships are considerably superior to those on Soviet warships. During World War II destroyers of the "Allen M. Sumner" Class allowed 6 cubic meters of space per individual for sleeping, sanitation, health care facilities, eating and administration. Today, frigates of the "Oliver Hazard Perry" Class allot 19 cubic meters per man. Soviet warships have increased the living space areas of their warships but not to the same extent as U.S. warships. Soviet destroyers of the "Skory" Class allotted 6.4 cubic meters per man in the late 1940's. Presently, the "Kara" Class guided-missile

cruisers allow for approximately 12 cubic meters per man.

There is a direct correlation between living conditions and the length of time a warship stays at sea. Thus, when living space below deck is sacrificed there is a corresponding shortening of time spent on station at sea. Correspondingly less time spent at sea reduces the overall effective readiness of each warship.²¹⁰

Currently, under present conditions of naval warfare, surface warships are an indispensable element necessary to ensure mastery of the sea. Nevertheless, they are extremely visible targets when current target-finding technology is utilized. Thus, surface warships need to coordinate their activities with land-based aircraft and optimally provide their own aircover when operating beyond the range of land-based aircraft, thereby providing protection for their mercantile fleet. Thus far, two elements necessary to gain and keep mastery of the sea have been mentioned: surface warships and effective aircover. A third element that utilizes surprise in its arsenal is the submarine.

In the past, submarines were considered to be weapons of the weaker maritime nations, as submarines had only one mission, that being sea-denial. Today submarines have replaced the surface raider of yesterday as surface warships

²¹⁰Ibid., pp. 109-111.

have lost their effectiveness when employed as an interdiction weapon. That role has become the prerogative of the silent threat from beneath the waves, the submarine. Moreover the role of the submarine, in today's navy, has increased to the point that:

. . . missile-carrying submarines, owing to their great survivability in comparison with land-based launch installations, are an even more effective means of deterrence. They represent a constant threat to an aggressor who, by comprehending the inevitability of nuclear retaliation from the direction of the oceans, can be faced with the necessity of renouncing the unleashing of a nuclear war.²¹¹

²¹¹Gorshkov, Red Star Rising at Sea, p. 131.

CHAPTER VI

UNDERSEA ARMADA

Mastery of the sea refers to control of the ocean's surface within a given sector; it does not pertain to control of the air above nor to the waters beneath the surface. Air control and subsurface control of the ocean is a desirable end but not always obtainable. Therefore mastery of the sea may be obtained by one power, but the submarines of its opponent will be able to penetrate its ASW defenses and conduct raider warfare. This penetration becomes acute when nuclear-powered submarines are utilized, for these submarines have greater range, speed and endurance as opposed to conventionally powered submarines. They also emit less noise than conventional submarines and also carry sensitive sensors that allow them to detect any potential hunters before it itself is detected. Hence, the advanced nuclear-powered submarine is capable of detecting its potential pursuer prior to the submarine's detection and utilizing its speed to avoid being located and pinpointed as a target. Consequently, only ASW forces that could not be detected by the submerged submarine are effective. This prerequisite, at the current levels of ASW technology, can only be met by ASW helicopters equipped with passive

dunking-sonar devices and passive sonar buoys.²¹² Considering these facts a paradoxical situation appears to arise. On one hand the importance, capabilities and role of the submarine in naval warfare have been steadily increasing, and on the other hand the total effectiveness of the submarine as a tactical weapon of surprise has been negated as a result of ASW counter-measures in the form of improved technology and ASW helicopters. Conceivably the massive deployment and utilization of ASW helicopters would connote the demise of the strategic role of the submarine. Such is not the case, as there are several drawbacks in the use of ASW helicopters; some of these being:

1. Submarine-hunting helicopters can only search a limited area, and if protection is to be provided for a convoy, large numbers of ASW helicopters must be deployed over a wide area. This surveillance must be maintained 24 hours a day to be effective.

2. In the case of a rapidly moving convoy or task force, helicopters cannot conduct search operations and keep pace with the advancing convoy. Consequently search operations have to be curtailed for some time, thereby being unable to guarantee the safety of the convoy.

²¹²Wegener, The Soviet Naval Offensive, pp. 14-15.

3. Cruising speed of anti-submarine (AS) torpedoes is only slightly more than that of fast nuclear-powered submarines. Hence, such a submarine, if it is aware that an AS torpedo has been launched against it, has a good chance to escape.

4. Stationary ASW surveillance can only be conducted in areas where one has mastery of the sea and controls the airspace above and is designed to ensure the safety of oceanic intersections, straits, areas adjacent to harbors and military bases.²¹³

Perhaps it is well to remember that as long as submarines exist, research and development (R&D) of ASW capabilities will continue. As new technology is introduced to upgrade ASW capabilities R&D commence to affect evasion tactics and capabilities on the part of submarines. As one well-known naval authority has stated:

The basic advantage of seaborne missiles, since they are mobile, is that they cannot be pre-targeted for a preemptive missile attack. An attack on land-based missiles would not destroy a seaborne deterrent force. This is a simple concept and the public understands it. As long as we have seaborne ballistic missiles left which cannot be destroyed by a surprise attack, the attacker knows he is vulnerable to being destroyed himself. Therefore, this becomes the best deterrent we have. But for them to remain a credible deterrent we must assure that the anti-submarine warfare capability of a potential enemy never becomes good enough to make a preemptive

²¹³Ibid., p. 15.

strike against our sea-based missiles. Since we cannot stop his technical developments, we must have adequate numbers of submarines able to operate beyond the range of his ASW forces and still cover their targets.²¹⁴

Today the Soviet Union maintains and operates the world's largest submarine fleet, a lead they have enjoyed for over 40 years. In past years the edge was in quantity; now, however, there is both quantity and quality in the Soviet Submarine Fleet endowing it with multi-purpose capabilities that pose a constant threat to potential adversaries. Currently these vessels are fitted with diesel propulsion as well as nuclear propulsion systems.

As of January, 1980, the estimated breakdown of the Soviet Submarine Fleet, according to propulsion units and mission classification, was as follows:

Diesel Electric Propulsion

Ballistic Missile Submarines (SSB)	19
Guided-Missile Submarine (SSG)	21
Attack Submarines (SS)	159
Total Conventional-Powered Submarines	199

Nuclear Propulsion

Ballistic Missile Submarines (SSBN)	71
Guided-Missile Submarines (SSGN)	44
Attack Submarines (SSN)	43
Total Nuclear Powered Submarines	158
Total Submarines	357 ²¹⁵

²¹⁴Admiral Hyman G. Rickover, quoted in Drew Middleton, Submarine: The Ultimate Naval Weapon - Its Past, Present and Future (Chicago: Playboy Press, 1976), p. 236.

²¹⁵Couhat, Combat Fleets 1980-81, pp. 524-525.

These statistics shed some light upon the submarine fleet of the Soviet Navy in terms of numbers of units classified for a given mission and propulsion utilized. Nevertheless, a clearer insight can be gained by briefly examining the different classes of submarines that are categorized according to propulsion and mission.

Basically, there are three categories of submarines in the Soviet Naval Fleet; the first category is the ballistic missile submarine. This category's role in naval warfare is somewhat odd as it serves no clear naval functions. The submarine's targets are not to be found at sea but on land. Missiles that are carried can be fitted with either conventional or nuclear warheads.²¹⁶ In all likelihood, these submarine missiles are fitted with nuclear warheads.

In the second category are the guided-missile submarines, (also known as cruise missile submarines). Submarines of this category have a dual-purpose. They can launch their missiles against land targets or surface warships and they also utilize the submarine's traditional weapon, the torpedo.²¹⁷

Lastly, there are the attack submarines. Submarines within this category have the traditional submarine mission-- attack the enemy's surface and subsurface ships.

²¹⁶Wegener, The Soviet Naval Offensive, p. 10. See also Couhat, Combat Fleets 1976-77, p. 379.

²¹⁷Couhat, Combat Fleets 1976-77, p. 379.

These then are the three categories of the Soviet Submarine Fleet. Some classes within each category may have undergone changes and/or modifications. In some cases such modifications have placed the submarine in a wholly different category.

Taking a cursory look at the inventory sheet of the Soviet undersea arsenal, it can be ascertained that there are 11 designations of diesel-electric powered submarines and 11 designations of nuclear-powered submarines. In reviewing the underwater arsenal of the Soviet fleet attention will first be given to inventorying the conventionally-powered submarines within each category, followed by a review of the submarines that are nuclear-powered.

Conventional-Powered Submarines

SSB

Originally "Golf" Class submarines were to be large attack vessels suitable for ocean deployment. Planning began in 1952, but the plans were later changed, and the Golf Class submarines were completed along lines similar to that of the "Zulu V" Class. When the first Golfs were launched in 1961, they had one major drawback, namely they could only launch their SS-N-4 ballistic missiles while surfaced. This handicap was overcome during 1964-65 when half of the existing boats were refitted with SS-N-5 missiles and

alterations were carried out on the vessel's sail, giving rise to the Golf II Class.²¹⁸ Later alterations gave rise to the Golf III and Golf IV Classes. Around 1967, the Golf III was converted from a Golf I as a trials ship for the SS-N-6; then around 1970 another conversion took place resulting in the Golf IV. In this case, the hull was lengthened, as well as the sail, and six torpedo tubes were added in order to conduct trials with the SS-N-8 system.²¹⁹ Vital statistics of these classes are basically the same. The only differences that can be found are in armaments, dimensions and tonnage. They are as follows:

Displacement:	Golf I:	2,300 tons surfaced, 2,700 tons submerged
	Golf II:	2,300 tons surfaced, 2,700 tons submerged
	Golf III:	2,500 tons surfaced, 2,700 tons submerged
	Golf IV:	2,500 tons surfaced, 2,900 tons submerged
Speed:	12 knots (submerged)	
Dimensions:	100 X 8.5 X 6.6	
	Golf IV:	118 X 8.5 X 6.6
Range:	9000/5	
Armament:	Golf I:	3/SS-N-4; 10/533 mm TT (6 forward, 4 aft)
	Golf II:	3/SS-N-5; 10/533 mm TT (6 forward, 4 aft)
	Golf III:	3/SS-N-6; 10/533 mm TT (6 forward, 4 aft)
	Golf IV:	6/SS-N-8; 10/533 mm TT (6 forward, 4 aft)

²¹⁸Breyer and Polmar, Guide to the Soviet Navy, p. 120.

²¹⁹Couhat, Combat Fleets 1980-81, p. 541.

Electronic
 Equipment: Radar: 1 Snoop Tray
 Machinery: diesel-electric drive; 3 props
 Endurance: 70 days²²⁰

During 1968 a Golf Class submarine suffered a series of unexplained explosions in the Pacific Ocean and sank in waters 6,000 meters deep. Her position was located by the U.S. Navy, and the U.S. Central Intelligence Agency (C.I.A.) chartered Howard Hughes' Glomar Explorer in an attempt to recover the submarine. Salvage operations were a partial success as half of the submarine was recovered.²²¹

SSG

Currently there are two classes in this category: the "Whiskey Long Bin" and the "Juliett" classes.

Whiskey Long Bin Class--This is an adaption of the highly prolific and adaptable "Whiskey" Class attack submarine. These boats were converted from SS to SSG status by being cut in half and having a 10 meter section built-in, joining the cut sections. At the same time the sail, containing four missile tubes, was broadened and fixed at an elevation of 15°. They carry four SS-N-3 surface-to-surface missiles with a firing arrangement similar to that of the Osa Class guided-missile patrol boats. Submarines of this

²²⁰Ibid., pp. 541-542.

²²¹Breyer and Polmar, Guide to the Soviet Navy, p. 120.

class must surface in order to launch their missiles. These Whiskey Long Bin conversions are now probably being retained for training purposes.²²²

Juliett Class--This is a medium-sized submarine having a long superstructure fin and a high surface free-board. The hull was first laid down in 1961, and the prototype was completed in 1962.²²³ Vital statistics of this class are the following:

Displacement:	2,800 tons surfaced; 3,550 tons submerged
Speed:	19/8 knots
Dimensions:	87 X 10 X 7
Range:	9,000/7
Armament:	4/SS-N-3; 10/533 mm TT
Electronic Equipment:	Radars: 1 Snoop Slab, 1 Front Piece, 1 Front Door
Machinery:	diesel-electric; 2 props
Endurance:	70 days ²²⁴

SS

Whiskey Class--This is perhaps the most prolific submarine class in the Soviet Navy. During the 1950's, 236 submarines of this class were produced with a delivery rate of approximately 40 submarines a year. These vessels, built in prefabricated sections, have proved to be durable, strongly built ships and quite satisfactory. These medium-

²²²Ibid. See also Couhat, Combat Fleets 1980-81, p. 545.

²²³Raymond V. B. Blackman, M.I.Mar.E., M.R.I.N.A., ed., Jane's Fighting Ships: 1967-68 (New York: McGraw-Hill Book Company, 1967), p. 451.

²²⁴Couhat, Combat Fleets 1980-81, p. 544.

range patrol boats were heavily based upon World War II German U-boat designs, significantly, the German Type XXI. Many of this class have been transferred to the navies of Albania, Bulgaria, People's Republic of China (PRC), Egypt, Indonesia, North Korea and Poland. Deck guns that were mounted on the earlier variants of this class have been removed from the surviving units. Modifications of this class included conversions to the SSG category; e.g., the Whiskey Turn Cylinder and Long Bin classes. Some were modified to radar picket (SSR) configurations, otherwise known as the "Canvas Bag" Class. Currently, most of the Whiskey Class submarines are held in reserve, while the others are used for training purposes.²²⁵

Zulu Class--Once again the influence of the design of the German Type XXI submarine can be found. Extensive use of German engineering and design know-how went into the production of this class, as well as parts that had been captured during the closing days of World War II. Not able to solve the problems associated with the German Walther turbine system, the Soviets replaced it with diesel-electric engines. There were five variants of this class, but now only the Zulu IV Class remains and it will probably

²²⁵D.N.I. and C.I., Understanding Soviet Naval Developments, p. 79. See also Couhat, Combat Fleets 1976-77, p. 397, Gunston, "Soviet Warships," p. 130, and Breyer and Polmar, Guide to the Soviet Navy, p. 139.

be scrapped soon.²²⁶

Quebec Class--Apparently this class was specifically designed for operations in the Baltic and Black Seas as it constitutes the only small submarine built by the Soviets in the post-war period. The submarine has a cruising range of only 7,000 miles with a displacement value of 650 tons.²²⁷

Foxtrot Class--This class constitutes a fleet-type submarine that has been widely used since its introduction in 1959 and is still being built at the present time. Currently there are approximately 60 of these submarines on active duty in the Soviet Navy.²²⁸ Vital statistics of this class are the following:

Displacement:	1,950 tons surfaced; 2,400 tons submerged
Speed:	16/15.5 knots
Dimensions:	96 X 7.5 X 6 meters
Complement:	8 officers, 70 men
Range:	11,000/8 (snorkel); 350/2 (submerged)
Armament:	10/533 mm TT (6 forward, 4 aft); 22 torpedoes or 44 mines
Machinery:	diesels and electric motors; 3 props; 6,000 hp
Endurance:	70 days ²²⁹

²²⁶Breyer and Polmar, Guide to the Soviet Navy, p. 144. See also Gunston, "Soviet Warships," p. 130, and Couhat, Combat Fleets 1980-81, p. 551.

²²⁷Raymond V. B. Blackman, A.M.R.I.N.A., A.I.Mar.E., ed., Jane's Fighting Ships: 1960-61 (New York: The McGraw-Hill Book Company, Inc., 1960), p. 409.

²²⁸D.N.I. and C.I., Understanding Soviet Naval Developments, p. 55.

²²⁹Couhat, Combat Fleets 1980-81, pp. 549-550.

Romeo Class--This class consists of coastal patrol submarines that were introduced in 1960 as a new type of submarine--a direct by-product of the Whiskey Class submarine development: They are longer than the Whiskey Class, have eight torpedo tubes and also are capable of a minelaying role. They have a limited cruising range of 7,000 miles.²³⁰

Bravo Class--These submarines have been known to exist since 1967. However, their role (future role?) in the Soviet naval arsenal is unknown. They are thought to be a "submarine killer" submarine; however, they are more likely to be a training submarine that is also utilized as a target submarine in ASW training exercises.²³¹

Tango Class--Last of the conventionally-powered SS submarines to be developed, these vessels indicate that the Soviets have a continuing interest in diesel-electric power development. Vital statistics of this class are as follows:

Displacement:	3,000 tons surfaced; 3,500 tons submerged
Speed:	20/16 knots
Dimensions:	96 X 9 X 6.5
Complement:	72
Armament:	. . ./SS-N-15; . . ./553 mm TT
Electronic Equipment:	Radar: 1 Snoop Tray

²³⁰Gunston, "Soviet Warships," p. 132. See also D.N.I. and C.I., Understanding Soviet Naval Developments, p. 77.

²³¹Breyer and Polmar, Guide to the Soviet Navy, p. 152. See also Couhat, Combat Fleets 1976-77, p. 396.

Machinery: diesels and electric motors; 3 props;
 6,000 hp
 Endurance: . . .²³²

Nuclear-Powered Submarines

SSN

Ever since the first nuclear-powered submarine became operational and joined the Soviet Navy in 1959, there has been a steady turnover of submarines as newer models, fitted with nuclear-propulsion units, augmented the formidable conventionally-powered submarine fleet. As older submarines were converted to other roles or transferred to other navies allied and/or friendly to the Soviet Union, the Soviet naval inventory of nuclear-propelled submarines gradually, but steadily increased. Today approximately half of the Soviet Submarine Fleet is nuclear-propelled. Nevertheless, there is continuing interest in improving the technological aspects and performance of conventionally-powered submarines. Perhaps the Soviets harbor a desire to remain flexible in their choice of propulsion units for their undersea strategic offense and defense. Regardless of the reasoning for maintaining such a large conventionally-powered submarine fleet, two points stand out. First, it is large and presents a serious challenge to its potential

²³²Couhat, Combat Fleets 1980-81, p. 548.

foe. Second, it is extremely vulnerable to ASW counter-measures and is very dependent upon air support and coordination with surface warships. Thus, the range and uses of these submarines appear to be rather restricted to those areas where the Soviets enjoy mastery of sea or could conceivably be employed in areas where sea and/or air control could be wrested from an adversary. The main role in any major conflict would be one of defense with some interdiction and attack functions when conditions are favorable for such action.

Then there is the nuclear-propelled submarine fleet. Technological know-how necessary for construction of nuclear powered submarines has existed in the Soviet Union since 1955, primarily based upon intelligence information garnered from U.S. sources. At that time the advantages of the streamlined "spindle" hull were not appreciated in Soviet naval design circles, and various modifications in design were carried out.²³³

Consequently, the first nuclear-powered submarines in the Soviet submarine arsenal were those of the "November" Class categorized as nuclear-powered attack submarines (SSN). These were swift fleet submarines that were designed to be

²³³ Gunston, "Soviet Warships," p. 132.

anti-submarine hunter killers. Construction of this submarine program ended in 1965 after 15 units had been built.²³⁴

Vital statistics of this class are as follows:

Displacement:	4,000 tons surfaced; 4,800 tons submerged
Speed:	30 knots
Dimensions:	109 X 9 X 7.7
Complement:	75-80
Armament:	8/533 mm TT forward; 4/400 mm TT aft; 32 torpedoes or mines
Electronic Equipment:	Radar: 1 Snoop Tray
Machinery:	1 nuclear reactor; steam-turbines; 2 props four- or six-bladed ²³⁵

A November Class submarine, the Leninski Komsomol, commanded by Captain 2nd Rank Lev Zhiltsov with Rear Admiral Aleksandr Petelin as flag officer in charge, cruised under the Arctic icepack. On July 17, 1962, the Leninski Komsomol cruised beneath the North Pole; later the submarine surfaced a little way from the North Pole. Here, in the tradition of all navies, the crew enjoyed a few hours of "shore leave."²³⁶

Sometime in April of 1970 a November Class submarine sank in the eastern Atlantic. All crew members had been

²³⁴Raymond V. B. Blackman, C. Eng., M.I.Mar.E., M.R.I.N.A., ed., Jane's Fighting Ships: 1968-69 (New York: McGraw-Hill Book Company, 1968), p. 483.

²³⁵Couhat, Combat Fleets 1980-81, p. 547.

²³⁶Plekhov, Guarding the Country's Sea Frontiers, pp. 37-39.

safely removed before the submarine sank.²³⁷

Echo Class--These are long range submarines that were originally constructed as nuclear-powered guided-missile submarines (SSGN). During the early 1970's these submarines were converted to the SSN category of submarine. This class was a prototype for the Echo II Class SSGN that went into production very shortly after the appearance of the Echo I Class.²³⁸ Current vital statistics of this class are as follows:

Displacement:	4,600 tons surfaced; 5,600 tons submerged
Speed:	25/20 knots
Dimensions:	114 X 9 X 7.5
Complement:	75
Armament:	10/533 mm TT (6 forward, 4 aft)
Electronic Equipment:	Radar: 1 Snoop Tray
Machinery:	1 nuclear reactor; steam turbines; 2 five-bladed props ²³⁹

Victor I Class--This submarine is the first Soviet class to be designed with a "tear drop" hull. These are especially fast submarines that have an increased diving depth, while retaining the upper deck casing with free flood holes. (This feature makes this class noisier than

²³⁷D.N.I. and C.I., Understanding Soviet Naval Developments, p. 77.

²³⁸Raymond V. B. Blackman, MBE, CEng, MIMarE, MRINA, ed., Jane's Fighting Ships: 1971-72 (New York: McGraw-Hill Book Company, 1971), p. 597.

²³⁹Couhat, Combat Fleets 1980-81, p. 547.

comparable Western submarines.)²⁴⁰ Vital statistics of this class, which first appeared in 1967-68, are the following:

Displacement: 4,300 tons surfaced; 5,100 tons submerged
 Speed: 30 knots
 Dimensions: 93 X 10 X 7
 Armament: 8/533 mm TT; . . . /SS-N-15
 Machinery: 1 nuclear reactor; steam turbines;
 1 five-bladed prop and 2 small two-bladed
 props for slow speeds²⁴¹

Victor II Class (also known as "Uniform")--This class, when first spotted in the waters of the Northern Fleet in 1973, was first designated as Uniform. Later it was redesignated to Victor II due to its close resemblance to the Victor I Class. Basically the vital statistics for both classes are the same with the following differences:

Displacement: 4,500 tons surfaced; 5,700 tons submerged
 Speed: 28 knots
 Dimensions: 100 X 10 X 7
 Complement: 80
 Armament: . . . /SS-N-15; 8/533 mm TT
 Machinery: 1 nuclear reactor; steam turbines;
 1 five-bladed prop²⁴²

²⁴⁰Breyer and Polmar, Guide to the Soviet Navy, p. 258. See also Gunston, "Soviet Warships," p. 129.

²⁴¹Couhat, Combat Fleets 1980-81, p. 546. Questions remain concerning this vessel's armament. All sources are agreed in that there are 8/533 mm TT but are unsure as to the purpose of those torpedo tubes. Obviously they are to be used to launch anti-ship torpedoes A/S, but some sources suggest that the SS-N-15 missiles are launched from the torpedo tubes. See also Breyer and Polmar, Guide to the Soviet Navy, p. 158, D.N.I. and C.I., Understanding Soviet Naval Developments, p. 78, and Gunston, "Soviet Warships," p. 129.

²⁴²Couhat, Combat Fleets 1980-81, p. 546.

Construction and development of this class continues with the most recent models being still longer. These are being classified as Victor III.²⁴³

Alpha Class--A prototype for this class was first produced in 1968-70. By 1976 it is possible that a second prototype was built and in operation. From all available information these were probably experimental models.²⁴⁴ Currently, the prototypes have been scrapped, but this class has entered production as the world's fastest combatant submarine that can also dive the deepest. These ships are extremely quiet and are highly automated, and their pressure hulls are constructed of titanium.²⁴⁵ Vital statistics for this class are as follows:

Displacement:	3,900 tons surfaced; 4,250 tons submerged
Speed:	40 knots
Dimensions:	80 X 10 X . . .
Complement:	. . .
Armament:	. . ./SS-N-15; . . ./533 mm TT
Electronic	
Equipment:	Radar: 1 Snoop Tray
Machinery:	1 nuclear reactor; steam turbines;
	1 prop ²⁴⁶

These then are the known SSNs of the Soviet Submarine Fleet. It would not be incorrect to assume that Soviet naval

²⁴³Ibid.

²⁴⁴Breyer and Polmar, Guide to the Soviet Navy, p. 160.

²⁴⁵Couhat, Combat Fleets 1980-81, p. 546.

²⁴⁶Ibid., pp. 245-246.

designers are drafting new ideas for further conversions and developments in this category.

SSGN

Echo II Class--As was mentioned earlier, this class is a follow-up to the Echo Class SSN (formerly Echo Class SSGN) and was lengthened by 3 meters to accommodate 8/SS-N-3 missiles instead of 6/SS-N-3 missiles as in the former Echo SSGNs.²⁴⁷ Vital statistics are the following:

Displacement:	4,800 tons surfaced; 5,800 tons submerged
Speed:	20/23 knots
Dimensions:	120 X 9 X 7.5
Complement:	75-80
Armament:	8/SS-N-3 or SS-N-12; 6/533 mm TT (forward), 4/400 mm TT (aft)
Electronic Equipment:	Radar: 1 Snoop Tray, 1 Front Piece, 1 Front Door
Machinery:	1 nuclear reactor; steam turbines; 2 four-bladed props ²⁴⁸

These submarines were completed between 1962 and 1967. A major drawback of this submarine is that it must surface in order to launch its complement of SS-N-3 missiles.²⁴⁹

Charlie Class--This class is the successor of the Echo II Class and has some readily noticeable improvements to include a fat spindle-type hull for higher speed generated

²⁴⁷Raymond V. B. Blackman, C.Eng., M.I.Mar.E., M.R.I.N.A., ed., Jane's Fighting Ships: 1969-70 (London: Sampson Low, Marston and Co., Ltd., 1969), p. 534.

²⁴⁸Couhat, Combat Fleets 1980-81, p. 544.

²⁴⁹D.N.I. and C.I., Understanding Soviet Naval Developments, p. 134.

by a high performance, albeit smaller propulsion system. Their free-flood holes located under the deck casing make them a noisier running ship than their Western counterparts.²⁵⁰ Vital statistics of this class are as follows:

Displacement:	4,000 tons surfaced; 4,900 tons submerged
Speed:	27 knots
Dimensions:	94 X 10 X 8
Complement:	80
Armament:	8/SS-N-7; 6/533 mm TT
Electronic	
Equipment:	Radar: 1 Snoop Tray
Machinery:	1 reactor; steam turbines; 1 five-bladed prop ²⁵¹

Perhaps the main improvement embodied in this class is that the SS-N-7 missile system carried on this submarine can be launched while the submarine is submerged. These units became operational in 1968.²⁵²

Improvements are constantly being sought, and to further that end two Charlie II Class SSGNs were commissioned in late 1976. They are primarily an improved version of their predecessor with the following basic differences:

²⁵⁰Gunston, "Soviet Warships," p. 133.

²⁵¹Couhat, Combat Fleets 1980-81, p. 543. According to Breyer and Polmar, Guide to the Soviet Navy, p. 136, there are the following differences:

Displacement:	4,000 tons standard; 4,700 tons surfaced, 5,100 tons submerged
Speed:	20 knots surfaced, 30 knots submerged
Armament:	8/533 mm TT

Also see Gunston, "Soviet Warships," p. 133.

²⁵²Breyer and Polmar, Guide to the Soviet Navy, p. 136.

Displacement: 4,300 tons surfaced; 5,100 tons submerged
 Speed: 26 knots
 Dimensions: 103 X 10 X 8
 Complement: 80
 Armament: 8/SS-N-7; . . ./SS-N-15; 6/533 mm TT
 Electronic
 Equipment: Radar: 1 Snoop Tray
 ECM: 1 Stop Light
 Machinery: 1 nuclear reactor; steam turbines;
 1 five-bladed prop²⁵³

There is a high probability factor that there will be continued R&D work centered upon this class, either to develop a third variant of the class or to launch a new class series within the SSGN category.

Papa Class--only one submarine of this class was built. Little is known about the vital statistics of this submarine. Suffice it to say that it is nuclear-powered and is possibly a prototype for submerged-launch cruise-missile submarines.²⁵⁴

These aforementioned categories, SSN and SSGN, are the traditional ships of a modern up-to-date submarine fleet. They fulfill the strategic and tactical naval missions that are traditionally assigned to submarines. Both categories are equally suited for oceanic warfare in terms of anti-ship operations. Nonetheless, it would seem logical that the SSGNs are assigned to long-range defensive positions, and the SSNs are responsible for interdiction operations

²⁵³Couhat, Combat Fleets 1980-81, p. 543.

²⁵⁴Ibid., p. 542.

while also being utilized as hunter/killer submarines.

SSBN

Then there are the nuclear-powered ballistic missile submarines (SSBNs) that have no naval warfare operations. True, because they are armed with 533 mm torpedo tubes, these submarines are capable of anti-ship operations, but to risk losing these strategic submarines prior to having launched their nuclear payload seems to be out of the question. The main role of the submarines of the SSBN category is to remain on station until such time their nuclear-tipped missiles are to be launched in the event of an all-out nuclear war. A potential aggressor is aware of this "hidden" strategic force and is not so mad as to think that, should he launch a nuclear attack against land-based nuclear forces, he would escape a retaliatory nuclear strike launched by the SSBNs. Therefore, these submarines act as a strategic deterrence force and must be kept operating to ensure maximum deterrence.

Hotel Class--Submarines of this class were the first long-range SSBNs in the Soviet Navy and were built from 1958 to 1962. Originally these submarines were fitted with the SS-N-4 missile system having a range of 300 miles. It was necessary for the vessel to surface when firing this system. Later, between 1963 and 1967, the SS-N-4 system was replaced by the SS-N-5 missile system having a range of 700 miles and the capability of being launched while

the submarine was submerged. Shortly after this refitting, the redesignated Hotel II Class SSBNs were deployed off both coasts of the United States and Canada.²⁵⁵ Vital statistics of the Hotel II class are as follows:

Displacement:	4,500 tons surfaced; 5,500 tons submerged
Speed:	23 knots surfaced, 20 knots submerged
Dimensions:	116 X 9 X 7 meters
Armament:	3/SS-N-5; 6/533 mm TT forward; 2/400 mm TT aft
Machinery:	1 reactor; steam turbines; 2 props ²⁵⁶

Sometime during 1972 a Hotel II submarine encountered difficulties in the North Atlantic; within 24 hours approximately 19 Soviet merchant ships and warships converged on the area. It is believed that this submarine was able to reach safety by steaming to port upon the surface.²⁵⁷

As was previously noted, SSBNs serve no functional naval role; instead their main purpose is to act as caretakers of the Soviet Union's seaborne counter-strike nuclear force. This is especially true for the remaining SSBNs ("Yankee" and "Delta" classes) due to their advanced technological development. Thus, because of their strategic deterrence role, there has been speculation that the SSBNs

²⁵⁵Captain John E. Moore, RN FRGS, ed., Jane's Fighting Ships: 1974-75 (New York: Franklin Watts Inc., 1974), p. 537.

²⁵⁶Couhat, Combat Fleets 1976-77, p. 390. Jane's Fighting Ships: 1974-75 suggests that these submarines have ASW capabilities. Only one Hotel III Class SSBN has been built and was used as a trial ship for the SS-N-8 missiles. This submarine has the same characteristics as the Hotel II SSBN but carries 6/SS-N-8 missiles.

²⁵⁷The Encyclopedia of Sea Warfare, p. 236.

of the Yankee and Delta classes are not under the command of the Soviet Navy but rather under the command of the Soviet Strategic Rocket Forces.²⁵⁸

When the first units of the Yankee Class SSBN were first sighted in 1968, it ushered in a turning point in Soviet naval strategy. Units of this class were armed with 16/SS-N-6 missile systems having a range of 1,300 nautical miles that could be launched while the submarine was submerged. Originally these submarines were dispatched to take up patrol duties off the Eastern seaboard of the United States. Later, as more units became available, submarines were stationed off the coast of California. Thus, both coasts were effectively covered by seaborne nuclear-tipped SLBMs.²⁵⁹ Vital statistics of this class are as follows:

Displacement:	7,900 tons surfaced; 9,500 tons submerged
Speed:	27 knots
Dimensions:	128 X 12 X 8.7
Complement:	100
Armament:	16/SS-N-6; 6/533 mm TT (18 torpedoes)
Electronic	
Equipment:	Radar: 1 Snoop Tray
Machinery:	1 nuclear reactor; steam turbines;
	2 five-bladed props ²⁶⁰

²⁵⁸Breyer and Polmar, Guide to the Soviet Navy, p. 124.

²⁵⁹Captain John E. Moore, RN, FRGS, ed., Jane's Fighting Ships: 1975-76 (New York: Franklin Watts, Inc., 1975), p. 555.

²⁶⁰Couhat, Combat Fleets 1980-81, p. 540. In one experimental unit the 16/SS-N-6 missiles and tubes were replaced by 12/SS-N-17 missiles and tubes. This unit, called Yankee II, doesn't appear to be a permanent part of the Soviet undersea arsenal, as two units were operational in 1967, up to eight in 1970, then down to one in 1974.

Delta Class--Construction of the Yankee Class was terminated in 1975 as units of the Delta Class, a redesigned Yankee Class, entered operational service. These first Deltas carried 12/SS-N-8 missiles as the SS-N-8 missiles are larger than the SS-N-6 missiles.²⁶¹

Parallel planning and construction of the Delta II Class were apparently in progress at the same time as the Delta I Class design and construction programs were formulated. Whatever the case, both the Delta I and Delta II SSBNs made their first appearance in the Soviet Navy within a few months of each other, the former in late 1972 and the latter in 1973.²⁶² Vital statistics of the Delta I and Delta II classes are as follows:

DELTA I

Displacement:	8,100 tons surfaced; 9,700 tons submerged
Speed:	25 knots
Dimensions:	137 X 12 X 8.7
Complement:	100
Armament:	12/SS-N-8; 6/533 mm TT (18 torpedoes)
Electronic Equipment:	Radar: 1 Snoop Tray
Machinery:	1 nuclear reactor; steam turbines; 2 five-bladed props ²⁶³

²⁶¹SS-N-6 dimensions = length: 12.8 meters
diameter: 1.75 meters
SS-N-8 dimensions = length: 13.7 meters
diameter: 1.8 meters

Possibly because of the dimensional differences in the two missiles the designers only allotted 12 launchers in the first Delta series. Later series designs would carry 16/SS-N-8 missiles with a range of 4,200 miles, thereby placing the continental United States under the gun, so to speak.

²⁶²Captain John E. Moore, RN. FRGS., ed., Jane's Fighting Ships: 1977-78 (London: Jane's Yearbooks, 1977), p. 672.

²⁶³Couhat, Combat Fleets 1980-81, p. 540.

DELTA II

Displacement: 9,700 tons surfaced; 11,300 tons submerged
 Speed: 24 knots
 Dimensions: 152.5 X 12 X 8.7
 Complement: 100
 Armament: 16/SS-N-8; 6/533 mm TT (18 torpedoes)
 Electronic
 Equipment: Radar: 1 Snoop Tray
 Machinery: 1 nuclear reactor; steam turbines;
 2 five-bladed props²⁶⁴

These submarines of the Delta category are the largest submarines in the Soviet undersea arsenal. For that matter, they are the largest submarines in the world and cannot be matched, in size, by any other submarine.²⁶⁵

Delta III--This class is the Soviet Navy's largest submarine at present. Its known vital statistics are:

Displacement: 13,250 tons submerged
 Speed: 24 knots
 Dimensions: 155.5 X 12 X 8.7

²⁶⁴Ibid.

²⁶⁵Currently, the U.S. Navy's "Trident" submarine, "Ohio" Class, SSBN 726 Ohio is the world's largest submarine with the following vital statistics:

Displacement: 15,750 tons surfaced; 18,750 tons submerged
 Speed: 25 knots submerged
 Dimensions: 170.69 X 12.8 X 11.13
 Complement: 16 officers, 117 men
 Armament: 24/Trident I missiles; 4/533 mm MK-68 TT (forward)

Electronic
 Equipment: Radar: BPS-15; Sonar: BQQ-6;
 ECM: WLR-8(v)
 Machinery: 1 GE S8G pressured-water reactor; steam geared turbines; 1 prop; 60,000 hp

However, the SSBN 726 is scheduled to make its first operational patrol in 8/81. Hence, the Deltas are still the world's largest submarines on operational patrols.

Complement:	120
Armament:	16/SS-N-8; 6/533 mm TT (12 torpedoes)
Electronic Equipment:	Radar: 1 Snoop Tray
Machinery:	1 nuclear reactor; steam turbines; 2 five-bladed props ²⁶⁶

Typhoon Class--This class is in response to the U.S. Navy's Ohio Class with its Trident I C-4 missiles and is derived from the Delta III. The existence of this class has not been confirmed, and it was not mentioned by the Director of Naval Intelligence during his annual report to Congress (2/14/79).²⁶⁷ Nevertheless, given the past Soviet track record, it would be safe to assume that this class does exist and will make its appearance soon. All in all, Soviet Research and Development continues to make progress.

Progress has been made in reducing radiated noise from the Soviet Navy's newest units; however, all Soviet submarines are noisier than their Western counterparts. Great strides have been made in the area of diving capabilities, but their detection equipment still cannot match the sonars of the U.S. Navy's submarines. Other advances have been made in the area of the range of Soviet ballistic missiles; the SS-N-8's of the Delta I and II have a range of 4,200 nautical miles, while the SS-N-18 MIRV type missiles of the Delta III's have a similar range. However, Soviet

²⁶⁶Couhat, Combat Fleets 1980-81, pp. 539-540.

²⁶⁷Ibid., p. 539.

ballistic missiles are not as sophisticated as their American counterparts in that they still have liquid propellants, with the exception of the SS-N-17. Some of the latest SSN's have tactical missiles that can be launched underwater at a longer range than the active sonars of their potential opponents can reach--a feature that poses a serious threat in times of hostility, especially coupled with the fact that most modern Soviet submarines have an anechoic hull coating that effectively absorbs the echoes of sonars, thereby reducing the intensity of reflected echoes.²⁶⁸ Consequently, countermeasures will be taken by the West to offset recent Soviet developments and Soviet R&D will continue to produce new and innovative weapons systems. This cycle makes R&D, both in the East and West, an ongoing affair with the fruits of victory going to the side that is most imaginative and properly funded.

Changes in R&D methods have been noticed. Previously, the Soviets had committed themselves to full-scale production of new submarine classes incorporating untried technological developments in an attempt to achieve parity with the West. This accelerated production schedule was effective in that it produced the desired results but at a high cost. Economically speaking, the cost was high as

²⁶⁸Ibid., pp. 525-526, 539.

defects were built into the submarines before they could be detected and corrected, thereby incurring added expenditures and refitting time to eliminate these defects. Currently, the Soviets appear to be confident that they are not behind the West in submarine design. Consequently, to all appearances, they have constructed two submarine prototypes: the Papa and Typhoon classes. These classes are probably designed to test changes in hull design and technological advances in the unit's propulsion system.²⁶⁹

Considering the expenditures involved and the technological advances made in the areas of hull design and propulsion systems, it does not seem improbable that the Soviets will introduce another nuclear-powered submarine class. In all likelihood this new class of submarine may well be powered by a nuclear plant coupled with a magneto-hydrodynamic (MHD) propulsion system.²⁷⁰ Development and deployment of a combined nuclear-MHD-powered submarine class will add a new dimension to an already formidable submarine fleet.

²⁶⁹K. J. Moore, Mark Flanigan and Robert D. Helsel, "Developments in Submarine Systems, 1956-76," Soviet Naval Influence, pp. 174-175. A third prototype, the Alfa Class, has already gone into production and is the world's deepest diving submarine.

²⁷⁰MHD's operation is based on the interaction of currents induced in seawater by a magnetic field that provides the thrust necessary for the submarine's propulsion. A magnetic field is created by electromagnets in the submarine.

CHAPTER VII

PRESENCE IN PERIPHERAL SEAS

Since the close of the Second World War the Soviet Navy has undergone phenomenal changes in terms of its mission in the defensive/offensive strategy of the leaders in the Kremlin. No longer the neglected stepchild of the Soviet Army, relegated to the end of the appropriations line, the Soviet Navy has become an integral part of Soviet foreign policy. Under the leadership of Admiral Sergei G. Gorshkov, the surface and submarine components have evolved from being a coastal defensive auxiliary of the army to a deep-water naval power.

Admiral Gorshkov became Commander-in-Chief of the Soviet Navy in late 1955 when he replaced Admiral Kuznetov, formerly Stalin's naval minister. His task was to oversee the dismantling of the Soviet Navy's planned surface fleet and to revert to a submarine orientated defensive posture. Curiously enough, Gorshkov not only didn't proceed to oversee the demise and scrapping of the Soviet surface fleet, but also was able to have the majority of cruisers that were then under construction and slated for scrapping, completed

and delivered to the Soviet Navy.²⁷¹

Prior to Admiral Kuznetov's dismissal as naval minister there was a reevaluation of Soviet defense policy that determined that the primary threat to Soviet security came, not from a land or seaborne invasion, but from a surprise nuclear attack by the Strategic Air Command (SAC) using ballistic missiles and heavy bombers. This line of thinking resulted in reorganization of the Soviet defense structure. This reorganization was based upon the idea of countering the threat of the West's navies with a coordinated attack by "long-range cruise missiles, to be carried by surface ships, diesel submarines, and (land-based) aircraft."²⁷² There was also the view that in the modern nuclear age a navy, as a separate service, was next to useless. It was reasoned that ground troops having nuclear weapons had no need of naval support even for amphibious landings. There were also frequent assertions that missiles emplaced in ground launching sites were capable of defending against surface strike forces and submarines.²⁷³ Faced

²⁷¹Herrick, Soviet Naval Strategy, p. 71.

²⁷²Oles Smolansky, "Soviet Policy Toward Aircraft Carriers," Soviet Naval Influence, p. 223, citing Michael MccGwire, "The Evolution of Soviet Naval Policy: 1960-74," Soviet Naval Policy: Objectives and Constraints, Michael MccGwire, Ken Booth, John McDonnell, eds. (New York: Praeger, 1975), p. 506.

²⁷³Herrick, Soviet Naval Strategy, p. 68.

with this opposition from the Soviet leadership and the traditional land-based mentality of the Soviet military, it is surprising that Admiral Gorshkov's views prevailed. Throughout the late 1950's and early 1960's Gorshkov conducted a low-key campaign to gain acceptance for surface warships in the Soviet Navy. Whenever statements were made concerning the uselessness of surface warships, he agreed with his leaders, but he used words that were sufficiently qualified so as to restore respectability without giving offense. In 1960 Khrushchev told the Supreme Soviet that "submarine forces assume great importance while surface ships can no longer play the part they once did." Gorshkov was quick to affirm this view with the following statement: ". . . surface ships can no longer play as important a role as they played in the past."²⁷⁴ Utilizing this means of subterfuge Gorshkov was able to follow the party line, yet keep surface warships within sight of the country's leaders. In this way he was able to change the Kremlin's perception of the Soviet Navy and the usefulness of surface warships. Thus by mid-1963, acceptance had been gained for surface warships in the inventory of the Soviet naval armory.

Perhaps such an outcome would be expected given the fact that reasonable men are able to discuss the pros and

²⁷⁴Ibid., p. 72.

cons of the utility of a given weapons system logically. However, such is not the case. Military doctrine is formulated by the theorists of the Communist Party, as stated in the Soviet Officer's Handbook:

All questions of the defense of the socialist fatherland, of military development, of military theory and practice, today as in the past, are decided in precise conformity with the ideology and policy of the party, on the basis of the directives and instructions formulated in the resolutions of congresses, of plenums of the party CC, and of the Politburo of the CC CPSU.²⁷⁵

This is the "official theory" of how policy-making is rendered in the U.S.S.R., while in practice this theory is somewhat modified in that government agencies, i.e., the military, have a say in making policy decisions and in implementing policy decisions. The Politburo retains final authority by accepting, rejecting or modifying proposals put forth. Hence, policy making is a process that includes proposal, approval and implementation. However, since the Politburo makes the major decisions concerning policy, it would be correct to say that the Party makes policy.²⁷⁶ This policy formulation ranges from the general to the specific type and number of weapons systems to be employed when, where and by what armed service. In a February, 1964, article in Kommunist Vooruzhennykh Sil the

²⁷⁵John McDonnell, "The Organization of Soviet Defense and Military Policy Making," Soviet Naval Influence, p. 62.

²⁷⁶Ibid.

following illustrated the control that the Party theorists have over policy decisions in the Soviet Union:

The strengthening of our Army and Navy in significant measure depends on the development of military-theoretical ideas. Military scientific cadres of the Central Committee of the Party deeply study and elaborate the new process of armed combat, the character and characteristics of contemporary war. On this basis has been worked out Soviet military doctrine, that is, the objective and complete system of views on the essence and character of contemporary warfare, on the means, equipment, and methods of successful defense of our state and of the entire socialist camp from imperialist aggression, which has been adopted by the Party and government. In correspondence with them, new regulations and procedures have been worked out which teach the characteristics of possible nuclear-missile warfare.²⁷⁷

Thus, given the nature of decision-making in the Party system, it was quite an accomplishment for Admiral Gorshkov to restore respectability to surface warships. Indeed, he not only gained acceptability for surface warships but also respectability for the Navy as a whole. Thus, 1965 marks the period when Gorshkov received the praises of the main sources of power in the Soviet Union: the Party, government, ideologists and the army--his main opponent in the annual battle for the defense ruble. Later Gorshkov was promoted to the newly created rank of "Admiral of the Fleet of the Soviet Union," thereby achieving equality of rank with the

²⁷⁷Herrick, Soviet Naval Strategy, p. 75.

commanders of the Strategic Rocket Forces and the Ground Forces, thus reflecting the growing importance of the Soviet Navy within the Soviet Armed Forces. During the same year that Marshal Grechko was appointed Minister of Defense, 1967, the Moskva Class helicopter cruiser and the Yankee Class ballistic missile submarine entered service in the Soviet Navy, and the Eilat, an Israeli destroyer, was sunk by missiles fired from a Soviet-made missile boat.²⁷⁸

Beginning in 1967 Admiral Gorshkov was continually and regularly emphasized the navy's role in securing international prestige and increasing the power of the state by constant readiness to fulfill strategic tasks and combat duties in any part of the World's oceans.²⁷⁹ Perhaps more important than the words is the fact that the Soviet Navy is currently deployed in scattered areas around the world maintaining a continuous presence in those areas that are deemed important to the Soviets and/or their socialist allies.

This continuous presence, for the most part, is mainly centered in waters adjacent to the Soviet Union and Eastern Europe. Consequently, the Soviets, due to the geographical configurations of their country and its

²⁷⁸Gorshkov, Red Star Rising at Sea, concluding chapter by John G. Hibbits, "Admiral Gorshkov: Architect of the Soviet Navy," p. 145.

²⁷⁹Ibid.

coastline, maintain four fleets in contiguous waters. These are the Northern Fleet, the Baltic Fleet, the Black Sea Fleet and the Pacific Fleet. Each fleet is sufficient to fulfill the role that has been assigned to it. Equally important is the fact that each fleet can be maintained and refurbished independently as there is an industrial base situated in close proximity to the fleets. In order to fully appreciate the defensive/offensive strategic nature of the Soviet Navy, it is imperative that a brief look is given to the strategic situation surrounding each fleet.

Northern Fleet--This fleet's headquarters are located at Severomorsk on the Kola Peninsula near Murmansk. Its surface forces are located and supported at numerous bases scattered along the Kola and Murmansk fjords. Submarines, especially SSBNs, are scattered along the Murmansk coastline at well-protected bases that are kept ice-free the year-round by the North Cape Gulf Stream, which is an extension of the Gulf Stream.²⁸⁰ Thus, this is the Soviet's most important fleet as it has access to the Atlantic Ocean via the Norwegian Sea.

However, Norway, as a member of NATO, is a stumbling block in the path of Soviet naval aspirations via the

²⁸⁰Couhat, Combat Fleets 1976-77, p. 375. See also Breyer and Polmar, Guide to the Soviet Navy, pp. 510-511.

Norwegian Sea. Thus, the Northern Fleet can be bottled up in the Barents Sea while its nuclear submarines can be hunted down in the Norwegian Sea and points beyond. For NATO to achieve this end they must control the sea and the air space above. They don't. Norway's Navy is primarily a coastal defensive force consisting of: 15 submarines with a displacement of 370 tons, 5 frigates displacing 1,450 tons, 3 corvettes at 600 tons displacement and 49 missile and torpedo boats.²⁸¹ Clearly this is no match for the Soviet Northern Fleet. In the event of war it is conceivable that Norway would be overrun by Soviet forces via land, air and sea strikes unless support was immediately forthcoming from Norway's NATO allies. At the present time such aid is highly unlikely given the current deficiencies in Western naval strength. If Norway were to fall, then the Danish Straits would be threatened from another direction.

Baltic Fleet--Originally limited to the area around Leningrad and stationed at Kronstadt, the Baltic Fleet now has bases at Tallin, Riga, and Liepaja, in the Baltic Republics and also at Baltisk, formerly in East Prussia. Some facilities are even available at Swinoujscie on the East German-Polish frontier. By extending naval bases along their Baltic coastline the Soviets have ensured for themselves

²⁸¹Couhat, Combat Fleets 1980-81, p. 390.

control of the Baltic.²⁸² Once again Soviet naval forces, while powerful and capable of overcoming any potential opposition in the peripheral sea, are bottled-up. This time it is by Denmark and the Danish Straits at the western approach to the Baltic Sea. Since these straits are fairly shallow, submarines must surface in order to traverse the straits in entering or exiting the Baltic Sea.²⁸³

Therefore, so long as Denmark and Norway remain in NATO hands mastery of the North Sea belongs to NATO. If either Norway or the Danish Straits, or both, fall into Soviet hands mastery of the North Sea would be lost and NATO's sea lanes of communication with the North Sea ports could conceivably be severed isolating continental Europe from its trans-Atlantic ally, the United States.

Black Sea Fleet--This fleet, by virtue of its existence with headquarters at Sevastopol, ensures the defense of the Soviet coastline along the Black Sea. In essence, the Black Sea is a Soviet "lake," and its fleet there can be used for offensive actions against the Anatolian coast while also supporting a land attack against the Dardanelles. Currently, this fleet provides the surface warships for the Soviet Mediterranean "Eskadra," (submarines are procured

²⁸²Couhat, Combat Fleets 1976-77, p. 375.

²⁸³Ibid.

from the Northern Fleet), and also provides the Soviet naval force in the Indian Ocean with ships. However, in the event of hostilities, so long as the Dardanelles and the Bosphorus Straits are controlled by Turkey, (NATO), the Black Sea Fleet is bottled-up and the Mediterranean Eskadra is cut-off from resupply and support. If the Straits come under Soviet control, then the Black Sea Fleet would move westward, becoming the Soviet Mediterranean Fleet and effectively alter the strategic balance of power in the Middle East.

In each of these fleets, the Northern, Baltic and Black Sea Fleets, the defensive strategy is basically the same. This defensive strategy is based upon the concept of "decreasing concentric rings" or as it is more commonly known "three waves." Each of these concentric rings sets up an "obstacle course" through which an opposing naval/ carrier task force must pass before reaching its objective.

Obstacle #1, or the first ring, consists of missile bombers having an operational radius²⁸⁴ of 220 NM to an operational radius of approximately 2,000 miles at supersonic speeds for the Backfire bomber (TU-22M). These operational radii are increased to approximately 3,780 miles with refueling at subsonic speeds.²⁸⁵ This first ring would

²⁸⁴The operational radius is roughly 60% of the radius given by one-half of the range.

²⁸⁵Couhat, Combat Fleets 1980-81, pp. 538-539.

be a high risk factor for any naval/carrier force venturing into range, and the risk factor would increase in geometric proportions as that force approached its objective and reduced the range between it and the Soviet air bases.²⁸⁶

Obstacle #2 is the submarine threat that lurks beneath the waves waiting for its unwary prey. This obstacle presents the greatest threat to Western aircraft carriers and surface vessels. As long as the Soviet undersea arsenal consisted mainly of conventional-powered submarines, Western ASW forces were adequate to counter the threat. However, as this undersea arsenal is predominantly nuclear-powered, hence, with their greater underwater cruising speeds they are able to approach any incoming carrier with greater stealth and speed. Thus, this amplifies the risks for an incoming carrier force. This is especially true for the Norwegian and Mediterranean Seas where the risk factor increases proportionately in relation to the stationing time of the submarines in their patrol areas.²⁸⁷

Obstacle #3 consists of the surface fleet of the Soviet Navy and their ship-to-ship missiles. This defensive ring is particularly potent in the Baltic Sea and mastery of the sea east of Bornholm has been ceded to the Soviets; only in the area west of the island does NATO contest

²⁸⁶Wegener, The Soviet Naval Offensive, p. 31.

²⁸⁷Ibid., pp. 31-32.

mastery of the sea. In the face of an all-out attack this Western mastery of the western Baltic could be short-lived, especially if the first ring of defense was successful in stalling or thwarting support from an aircraft carrier task force via the North Sea. Thus, by keeping U.S. forces out of the area, the threat of the conflict escalating into a nuclear conflict is thereby reduced. Only U.S. naval forces possess nuclear armaments. Neither NATO naval forces nor Denmark's defensive structure has these arms.²⁸⁸ Perhaps it should be added that the same situation exists in the Norwegian Sea, and that Norway neither has nor wants nuclear weapons stationed there.

As was mentioned earlier the Black Sea is virtually a Soviet "lake," and the fleet there, though definitely over-strength, would be useless in any East-West conflict as the fleet is effectively bottled-up by the Dardanelles and Bosphorus Straits. However, this scenerio would be completely changed if Soviet forces were to gain control of these strategic Straits. For then, the pathway to the Eastern Mediterranean Sea would be open allowing the Black Sea Fleet to move westward to join the Soviet Mediterranean Eskadra. True, the U.S. 6th Fleet is fully capable of sweeping the Soviet Mediterranean Eskadra off the surface

²⁸⁸Ibid., pp. 35-36.

of the Mediterranean sea. Even this scenerio has its flaws as the main core of Western naval forces in the Mediteranean are U.S. aircraft carriers. Aircraft carriers are potent naval weapons on the open sea, but in a closed sea like the Mediterranean there are some drawbacks, these being the first and second rings of Soviet defense. Carrier-based aircraft, in an air battle above the sea, are at a disadvantage in that their home base, the aircraft carrier, could be sunk at any time while the airfields of land-based aircraft cannot be effectively eliminated using conventional weapons. Added to the threat from the air is the danger lurking beneath the waves--nuclear-powered submarines. Since the U.S. 6th Fleet is permanently stationed in the Mediterranean it is relatively easy for the Soviet nuclear-powered submarines to locate and tail the aircraft carriers of the U.S. 6th Fleet. It would make no difference whether these nuclear-powered submarines were pinpointed or not. Timing is in the hands of the attacker, while the intended victim can only wait and pray that the coming attack can be blunted, if not side-stepped completely. Given the current strategic naval balance the U.S. 6th Fleet's ability to operate in the Eastern Mediterranean is at best uncertain at this time.²⁸⁹ If, in the event of

²⁸⁹FY 1978 Authorization, p. 948.

hostilities, mastery of the Eastern Mediterranean is gained by Soviet naval forces, then the sea lanes of communications with Greece and Turkey would be severed and the Arab countries of the Middle East would be highly inclined to align themselves firmly with Eastern Bloc, thereby cutting off the main source of Western oil supplies.²⁹⁰

Pacific Fleet--This fleet, with its main headquarters at Vladivostok, is the only Soviet fleet to have direct access to the open sea albeit of a limited nature as ice breakers must be employed during the winter months to keep the ports and sea lanes open for navigation. Command of this fleet is split into two components. The Southern Group (the 5th Fleet) is based at Vladivostok, the eastern terminus of the Trans-Siberian railway. Thus, Vladivostok is also the main supply depot for the Pacific Fleet. Nearby, at Nakhodka, additional surface warships and submarines are stationed.²⁹¹

Petropavlovsk, situated on Kamchatka Peninsula is the headquarters for the second component of the Soviet Pacific Fleet known as the Northern Group (the 7th Fleet). It is here that the Soviet Navy has direct access to the open sea on a year-round basis, with the aid of icebreakers.

²⁹⁰Wegner, The Soviet Naval Offensive, p. 48.

²⁹¹Barry M. Blechman and Robert P. Berman, "The Naval Balance in the Western Pacific," Guide to Far Eastern Navies, Barry M. Blechman and Robert P. Berman, eds. (Annapolis: Naval Institute Press, 1978), p. 40.

Further west, at a minor base on the Sea of Okhotsk, is Magadan, where submarines are primarily based even though its harbor is ice-choked for six months of the year.²⁹²

Ice is not the only barrier confronting the Soviet Pacific Fleet. There is an island chain that "guards" the East Asian coastline and inhibits rapid deployment of Soviet naval forces. Beginning in the north with Kamchatka Peninsula the island chain stretches southward along the Kuril Islands, under Soviet control, to the four main islands of Japan: Hokkaido, Honshu, Shikoku and Kyushu. Then it continues southward along the Ryukyus to Taiwan and lastly, the Philippine Archipelago. Thus, once again, freedom of movement for Soviet naval forces is dependent upon her neighbors--neighbors who do not share the same ideological goals and are aligned with her potential enemy, the United States.

Japan, lying athwart the Sea of Japan, controls the main straits that determine Soviet access, in force, to the open sea; only the Kuril Straits are under direct Soviet control providing access to and from the Sea of Okhotsk. These "choke points," from north to south are:

1. Soya Straits (La Perouse): a 25-mile wide strait that separates Soviet Sakhalin from Hokkaido, the northern-

²⁹²Ibid.

most Japanese island.

2. Tsugaru Strait: a navigable channel between Hokkaido and Honshu Islands.

3. Kanmon Channel: a navigable channel between Honshu and Kyushu Islands, which is one of the main shipping routes between the Sea of Japan and the Pacific.

4. Tsushima and Korea Straits: straits that separate Korea and Japan. These straits are separated by two islands, Tsushima under Japanese sovereignty and Cheju under South Korean sovereignty.²⁹³

Each year approximately 300 Soviet warships traverse the Soya, Tsugaru and Tsushima Straits.²⁹⁴

In terms of defense of the Soviet mainland, the Pacific Fleet is more than adequate for the task. Any amphibious assault against eastern Siberia would come to naught. Given the current conditions of power in the region, such an attack seems highly unlikely. Offensively speaking, there is the potential of attack as this fleet's importance is underscored by the numbers of SSBN's (12-16) and SSN's (25), as well as convential submarines (70) in its naval arsenal.²⁹⁵ As long as these submarines are contained in the Sea of Okhotsk and the Sea of Japan the U.S. 7th Fleet,

²⁹³Ibid., p. 5.

²⁹⁴Japan, Defense of Japan ("Nippon no Boei") (Japanese Defense Agency, 1978), p. 34.

²⁹⁵Couhat, Combat Fleets 1976-77, p. 379.

with the aid of land-based aviation, can control the naval situation in the Western Pacific. However, Soviet naval strategists are not so accommodating, and their submarines are deployed into the Western Pacific. Hence, if hostilities were to erupt the U.S. Navy would be able to keep the sea lanes open to Alaska and Hawaii, but there is doubt that the sea lines of communications into the Western Pacific could be maintained under present circumstances.²⁹⁶

Briefly summarizing the overall Soviet naval situation, it can be concluded that the Soviet Navy has fulfilled its defensive mission and has moved into the naval offensive sphere in the areas adjoining the Northern, Baltic and Black Sea Fleets. The potential for an offensive posture in the Pacific is high and cannot be discounted by Western naval strategists. As Soviet mastery of her peripheral seas is complete, it is only natural that her navy should expand into regions that the Kremlin considers important; i.e., the Mediterranean Sea, or to fill-in a vacuum created by Western naval withdrawal, i.e., the Indian Ocean.

²⁹⁶FY 1978 Authorization, p. 948.

CHAPTER VIII

EXTERNAL PRESENCE AND DEPLOYMENT

Naval presence is one of the prerequisites for super-power status today and tomorrow. It also requires that the deploying power be capable of sustaining and maintaining an adequate naval presence, not only in contiguous waters, but also in distant waters where it is perceived that the deploying power has a vested interest. This presence serves to remind nations that a super-power is really a super-power and even though its borders are thousands of miles away it is always close at hand. In times of regional crises a naval squadron can quietly appear off the shores of a coastal state, a silent reminder of the interests and power of the nation that deployed them. When it is time, these same ships disappear just as quietly.

However, a problem remains concerning the method of establishing a naval presence in distant waters. For while a large and modern navy is an impressive sight as one of its squadrons steams into the waters of a developing country, its allure is soon lost if that is all a developed nation has to offer. Armaments of themselves do not aid in establishing an industrial base in a developing country nor do they generate hard currency transactions via international trade. It can be assumed that the Soviets were aware of this reality

when reconstruction plans were being made for their "post-war world." A more important consideration for the Soviets concerning their merchant fleet (now fifth in world ranking) is that it is primarily utilized as an earner of hard currency rather than as the vital life-line which such a fleet provides to many other countries.²⁹⁷ In building and maintaining a large and far reaching merchant fleet other benefits accrue to the Soviets, financial as well as strategic. Financially speaking, Soviet shipping has come a long way in carrying goods along the major trade routes. For instance, on U.S. routes alone the annual dollar value of Soviet-carried trade was zero in 1971; by the end of 1977 this figure leaped to \$2.7 billion or 1.8% of the total U.S. trade.²⁹⁸ This is a small amount but a significant increase when viewed against the background of a worldwide shipping slump that has seen some shipping lines go bankrupt while others are operating in the red.²⁹⁹ As of January, 1974 the Soviet merchant fleet consisted of 7,473 ships having a gross tonnage of 17,463,882.³⁰⁰ These figures increased to 7,991 ships with a gross tonnage of

²⁹⁷ Moore, Jane's Fighting Ships: 1974-75, p. 73.

²⁹⁸ "Piracy of Profit on the High Seas," Time, December 5, 1977, p. 59.

²⁹⁹ Mainichi Daily News, June 29, 1978, p. 6.

³⁰⁰ Couhat, Combat Fleets 1976-77, p. 376.

22,261,927 by 1978, at a time when there was more tonnage available than was being used.³⁰¹ Currently, Soviet shipping rates, according to Dutch shipping circles in Rotterdam and Antwerp, are up to 50% lower than the most competitive western rates.³⁰² In all likelihood, the Soviet share of world-shipping will increase due to two factors: low shipping rates and lower operating costs (for example, \$97 per month compensation for the ship's captain, \$31 per month for an ordinary seaman, and fuel costs that are 75% lower than that of other nations).³⁰³

As the Soviet share of carrying international cargo increases so does Western dependence increase on Soviet shipping. Concern is being expressed in NATO that if Western Europe becomes dependent upon COMECON shipping (this could well happen within ten years according to Antwerp shipping circles), then the Soviet Union will have the power to restrict, if not cut, Western life-lines of trade without firing a shot.³⁰⁴ In the event of war, the situation for the West could be critical if, indeed, the Western powers were to become dependent upon Soviet shipping for the transshipment of their exports and imports.

³⁰¹Couhat, Combat Fleets 1980-81, p. 524.

³⁰²"The Red Sea Fleet Sails In," To the Point International, October 3, 1977, p. 30.

³⁰³"Piracy or Profit," p. 59.

³⁰⁴"The Red Sea Fleet," p. 30.

Strategically, the merchant fleet provides for a peaceful, non-threatening form of Soviet penetration into areas where the Soviets have never before ventured in force; i.e., the Caribbean Sea and the Indian Ocean area, later to be followed by Soviet warships on a "good-will tour." Trade relations and Soviet prestige are enhanced when sea-borne trade is carried by Soviet freighters, especially when trading with fleetless underdeveloped countries.³⁰⁵

It is for the above mentioned purposes that the Soviet Merchant Fleet has been constantly expanding and also to ensure the independence of Soviet trade on the international scene, an independence that is highly visible especially to the fleetless developing countries whose reliance on capitalist tonnage to export their goods is no longer mandatory.³⁰⁶ According to Blackman, Jane's Fighting Ships 1970-71, "It has long been said that trade follows the flag," but in the case of the Soviet Union "it appears that the flag is following the trade routes all over the world."

As the flag follows the trade routes established by its sister fleet, the Soviet Merchant Fleet, it, the Soviet Navy, benefits from the diplomatic moves made on behalf of the foreign policy objectives of the Kremlin. Basically,

³⁰⁵Phil Hanson, "The Soviet Union and World Shipping," Soviet Studies, Vol. XXII (July, 1970), p. 48.

³⁰⁶Ibid.

these foreign policy objectives are to secure favorable terms of trade and foreign port rights, enlarge her sphere of influence, especially in the underdeveloped areas of the world and gain other concessions that might accrue to the advantage of the Soviet Union. Herein lies the problem of "image." During the Khrushchev years a "dual image" was projected. One pictured the Soviet Union as the friend and benefactor of the underdeveloped nations and former colonies of the capitalistic world. While the other, in the eyes of the West, painted the Soviets as the "Scourge of Capitalism," a sabre-rattling symbol to be viewed as an alarming and threatening apparition.

Experience has shown the Soviet policy makers that more can be gained by projecting a singular "peace-loving" image rather than a "dual image" of friend and adversary. Thus, the objective of Soviet foreign policy, in terms of image, is the desire to develop and maintain a spirit of "détente" which allows the Soviets to pursue a "peaceful," hence more favorable, strategy enabling them to project less of a "dangerous" image abroad.³⁰⁷ Such an image allows for broader technological and commercial exchanges with the West. At the same time Western governments cut back

³⁰⁷James D. Theberge, ed., Soviet Seapower In the Caribbean: Political and Strategic Implications (New York: Praeger Publishers, 1972), p. 15.

their defense budgets as the Soviets maintain and/or increase theirs. Diplomatic discussions are forwarded on a wide front keeping the Soviets in the spotlight as labourers of peace and dividing the West on minor points. However, a dual role is still maintained for the Soviet leadership cannot afford to "lose face" by failing to come to the aid of its socialist allies and client states. This aid may come before, during or after an armed conflict. In either case the objectives are the same: extract concessions.

During the 1967 Six-Day War in the Middle East, it became evident to the Soviet leadership that nuclear power in itself was not sufficient. If the Soviet Union is to assume the leadership role of a world power it has to have a naval force capable of operating and intervening in areas far from its home waters. In order for this to be achieved permanent port facilities are needed in countries not controlled by the Soviet Union. In the aftermath of the Middle East Six-Day War the Soviets were able to acquire permanent port facilities at Port Said and Alexandria, Egypt. These port facilities were extracted from the Egyptians as a condition to be met if the Soviets were to furnish further military aid sorely needed by Egypt to rebuild her military forces.

Egypt was reimbursed for her military losses, and the Soviet Union gained a permanent presence in the

Mediterranean Sea. This presence has effectively reduced the influence of the United States' actions. Krasnoya zvezda (Red Star - daily newspaper of the Ministry of Defense has said, "The U.S.A. can no longer consider the Middle East its private backyard," (May, 1970). "Nor is the Mediterranean any longer a private pool attached to the villas of NATO's admirals," (June, 1970).³⁰⁸ The same could be said of the Caribbean Sea, though in a more restrictive sense.

Soviet naval visits to any area receive wide-spread coverage, and close scrutiny is given to their movements. On the other hand the Soviet merchant ships, fishing fleet, and oceanographic vessels receive little, if any, attention. A presence is established in areas foreign to them, and a gradual increase of activity is maintained. Soviet presence in the area becomes an accepted fact of life, and eventually even an upgrading of power politics, via naval forces, is accepted.

The Soviet Union is employing her seapower - not just warships but oceanographic vessels, merchants ships, fishing trawlers and electronic intelligence vessels - as an increasingly flexible, sophisticated instrument of her foreign policy and as a means of establishing her presence in areas considered to be of strategic importance.³⁰⁹

³⁰⁸Ilana Dimant-Kass, "The Soviet Military and Soviet Policy in the Middle East, 1970-73," Soviet Studies, Vol. XXVI, (October, 1974), p. 507.

³⁰⁹Theberg, Soviet Seapower In the Caribbean, p. 10.

In addition to the semi-permanent naval presence the Soviets maintain 20-30 deep-sea stern factory fishing trawlers permanently based in Havana at a \$40 million fishing port facility built by the Soviets.³¹⁰

Oceanographic research is undertaken by Soviet oceanographic vessels in the Caribbean Sea and in the Gulf of Mexico. Soviet field work is closely coordinated with that of Cuban oceanographic vessels. There are eight to ten Soviet oceanographic and paraoceanographic vessels in the area at all times. In addition there are 500 Soviet specialists in the area. Neither Soviet fishing nor shipping justify the substantial effort being made to obtain knowledge of the waters of the area. However, such knowledge has military value and the Soviet research vessels and fishing trawlers sometimes double as "spy ships." Their location enables them to track United States naval vessels going to and coming from the Panama Canal.³¹¹

Now little doubt exists that the Soviets had intended to establish a limited rest, recreation and repair facility at Cienfuegos, on the southern side of Cuba, towards the end of 1970 for the purpose of servicing her Yankee Class nuclear powered ballistic missile submarines

³¹⁰Ibid., p. 8.

³¹¹Ibid., pp. 8, 49-50.

that are now operating in the western Atlantic. The United States' reaction and secret negotiations in the fall of 1970 discouraged the Soviets, for the time being, from servicing nuclear missile submarines in or from Cuba including servicing from a submarine tender based in Cuba.³¹²

During 1971 and 1972 Pravda was questioning the Soviet role in Egypt. Marshall Grechko, Soviet Minister of Defense, visited Cairo in February and May of 1972 in an effort to heal the rift that was developing between Moscow and Cairo. At the same time Moscow shifted its emphasis from Egypt to Syria and Iraq. On July 19, 1972, a swift pullout of Soviet "advisors" from Egypt took place. However, the port facilities at Alexandria remained open to the Soviets.³¹³ In March, 1976, Egypt abrogated a Treaty of Friendship and Co-operation with the Soviet Union. It was also announced that the Soviets were instructed to close the refueling and refitting depots that they maintained at Alexandria. Soviet warships departed Alexandria for the last time on April 15, 1976.³¹⁴ Thus, the Soviet Mediterranean Fleet was left with berthing privileges at the Syrian

³¹²Ibid., p. 10.

³¹³Dimant-Kass, "The Soviet Military and Soviet Policy," pp. 516-517.

³¹⁴New York Times, April 17, 1976, p. 3.

port of Tartus. However, this privilege's lease ran out in January, 1977, when Syria asked the Soviet Navy to remove its submarine and support fleet from Tartus.³¹⁵

Foreign policy efforts do suffer setbacks from time to time, and the Soviet Union has had its share; but even when suffering a setback the Soviets are persistently increasing efforts in other areas. An amended Yugoslavian law in April, 1974 (following persistent Soviet pressure for port facilities), permitted any nation to use Yugoslav repair dock facilities. However, there are restrictions concerning the use of these facilities. These restrictions are:

1. Each nation can have no more than two ships at a time at those facilities.

2. No ship is allowed to stay longer than six months.

In December, 1974, the first Soviet warship entered the Tivat naval dockyard in Kotor Bay for repairs. Since that time the Soviet Navy has made extensive use of the Yugoslavian facilities, no ship staying the full six months.³¹⁶

Recently, reports have surfaced that Col. Moammar Khadafy has placed the Libyan Mediterranean port of Al-Bardiya

³¹⁵Newsweek, January 17, 1977, p. 12.

³¹⁶Avigdor Haselkorn, The Evolution of Soviet Security Strategy 1965-1975 (New York: Crane, Russak and Co., Inc., 1978), p. 52.

at the disposal of the Soviets. Port facilities are being expanded, defenses are being beefed-up and a road is being constructed to connect the port to other parts of Libya.³¹⁷ When completed, this port will be a boon to the Soviet Mediterranean Eskadra.

The Soviets have also been busy in establishing a presence in the Indian Ocean as the British and French were decreasing their presence. In February 1968, Admiral Gorshkov visited India. One of the purposes of his visit was to secure refueling and repairing facilities in Indian ports for Soviet warships. Shortly afterwards, a Soviet naval squadron consisting of a cruiser, a missile-carrying destroyer, a nuclear powered submarine, and a navy oil tanker visited ports in India, Sri Lanka, Iran, Iraq, Somalia, and South Yeman. This Soviet squadron originated in Vladivostock and made repeat visits to the Indian Ocean and Persian Gulf in 1969 and 1970.³¹⁸

There are two views concerning intentions in the Indian Ocean. The first is the use of Soviet warships to interrupt the maritime trade routes of the West, principally of Europe. There is also speculation that the Soviets are filling a vacuum created by British and French withdrawal

³¹⁷The Japan Times, February 16, 1980, p. 4.

³¹⁸D. C. Watt, "Britain and the Indian Ocean," Political Quarterly, Vol. XLII (July-September, 1971), pp. 307-308.

from the area. Soviet presence in the area would be basically political in intent and be directed towards influencing political attitudes of the littoral states. This could be accomplished by goodwill visits to "showing the flag" visits. These are morale boosts for pro-Soviet states and can be intimidating towards unfriendly governments. "Late in 1970, Soviets secured a fishing agreement with Mauritius which could easily be used to cover the supply of fuel at sea from stores in Mauritius to ships of a Soviet naval squadron."³¹⁹

Of course, there is a third alternative in justifying the Soviet presence in the Indian Ocean. As the Soviet Merchant Fleet, which is fifth in world ranking, plies the trade routes around the globe, it can be ascertained that components of the Merchant Fleet are plying the routes of the Indian Ocean. Therefore the Soviet naval forces that are in the area are there to protect and be of assistance to the mercantile fleet as it ferries goods between Soviet Pacific ports and Soviet European ports. While it is a feasible venture to ship domestic goods from Soviet European ports to the Soviet Pacific ports, it is not a practical means of transport in terms of time, distance to be traversed and economy. For instance, a freighter leaving Odessa, in the Black Sea, with its final destination Vladivostok, in

³¹⁹Ibid., p. 312.

the Soviet Far East, has to traverse through the Dardenelles and on to the Mediterranean Sea; from there this vessel passes through the Suez Canal, traverses the Red Sea and journeys into the Indian Ocean skirting the subcontinent of India; then this freighter has to navigate its way through the Straits of Malacca, which can be hazardous to a ship's health, and wend its way into the South China Sea. At this point approximately 7,000 miles have been traversed with only about 4,000 miles to go before reaching Vladivostok.

At any rate, while the Soviet Merchant Marine is a major carrier of cargo on the international scene it is not a major force in the transshipment of goods on an inter-regional basis in the Soviet Union due to the geographic configurations of the Soviet Union, as well as the climatic conditions that prevail in the northern latitudes.

Railroads are utilized to carry the bulk of Soviet inter-regional trade as the broad plains of the Soviet Union are favorable to the construction and low-cost operation of railroads.³²⁰ While railroads carried approximately 240 million tons of petroleum and petroleum products, pipelines carried 240 million tons.³²¹ This overland shipment of goods to regions within Soviet borders will

³²⁰Lydolph, Geography of the U.S.S.R., p. 556.

³²¹Ibid., p. 560.

probably continue as long as such transport is faster in arrival time and cheaper to operate and transship goods from Soviet Europe via railroad to Vladivostok and/or Nakhodka for eventual shipment to Japan or other Far Eastern ports, or visa versa.

In February, 1972, Marshall Grechko signed an agreement with Somalia on the building of the Fanole-Juba project (dams, irrigation canals and hydroelectric stations on the Juba River near Fanole). In return, the Soviets would also improve the airstrip and create a deep-water port at Berbera in exchange for port facilities. This is the first time the Soviets, or Russians for that matter, have had a port in the Indian Ocean.³²² It is thought, at this time, that any Soviet attempt to disrupt the oil flow to the West is merely a scenario maker's pipe-dream. Soviet naval units here are viewed as pawns on a world-wide chessboard, and their presence is an effective one, militarily and diplomatically.

In testimony before the Senate Armed Services Committee, Secretary of Defense James R. Schlesinger stated that the Soviets had begun storing anti-ship missiles at Berbera to support air and naval operations in the Indian Ocean. He also stated that the Soviet base at Berbera was

³²²J. Bower Bell, "Strategic Implications of the Soviet Presence in Somalia," Orbis, Vol. XIX (Summer, 1975), p. 407.

comparable to the United States base at Subic Bay in the Philippines.³²³ This testimony was given in defense of United States plans to construct a \$108 million naval base at Diego Garcia.

Tass, the Soviet's official press agency, reacted sarcastically to Schlesinger's remarks, "The American Defense Secretary James Schlesinger must have fallen victim to a mirage when he saw a Soviet military base near Berbera on the sun-drenched coastline of Berbera."³²⁴

Secretary of Defense Schlesinger's statement concerning the Soviet naval base at Berbera upset the Soviet leadership. While the Soviets' activity in the Indian Ocean area had increased they were attempting to maintain a low profile in order to discredit American plans to build a naval base at Diego Garcia. Here is how the Soviets described their activity at Berbera:

As a result of joint efforts, a number of industrial enterprises have been built in Somalia: a milk factory in Mogandish, a deep-sea port at Berbera and a fish-canning plant at Las Khereh.³²⁵

This reaction on the part of the Soviet leadership underscores the polarization that exists in Soviet foreign policy. On the one hand the Soviets are playing the role of "Peace Advocate" by initiating resolutions in the United

³²³New York Times, June 11, 1975, p. 4.

³²⁴New York Times, June 13, 1975, p. 5.

³²⁵Sofinsky, "Somalia on the Path of Progress," International Affairs, Vol. XI (1974), p. 64.

Nations and/or advocating "zones of peace," i.e., the Indian Ocean. The rhetoric of the Soviets is such that to hear them tell the story, the socialist countries, and only the socialist countries are the active advocates of brotherhood, equality and peace. At the 67th Plenary Meeting of the fourth session of the Third United Nations Law of the Sea Conference, the Soviet Delegation head, S. P. Kozyrev, quoted part of a speech given by L. I. Brezhnev at the 25th Congress of the CPSU:

. . . of late, pronouncements have been proliferating in many countries against any of the powers setting up military bases in the region of the Indian Ocean. We are in sympathy with these pronouncements. The Soviet Union has never had, and has no intention now, of building military bases in the Indian Ocean.

Soviets have steadfastly denied having shore facilities in the area and frequently quote the press releases of the country concerned in order to deny the "alleged" reports of the West.

A statement issued by the Somalia Ministry of Information declared: 'The military assistance being received by Somalia from the USSR is designed only for the defence of her territorial integrity and Africa's just cause.' This official document also stated that Somalia would continue to strengthen her friendship and cooperation with the socialist states and would be guided, in settling any outstanding issue with neighbouring countries, by the principles of peace and fraternity, despite any attempts on the part of bourgeois propaganda to prevent this.³²⁶

³²⁶Ibid., p. 65.

In 1974 Emperor Haile Selassie of Ethiopia was deposed, to be replaced by a military council, the Dergue, headed by Lt. Col. Mengistu Haile Mariam. Gradually, Ethiopia drifted out of her Western alignment and into the Soviet camp where Somalia was firmly nestled. The Soviets attempted to accommodate both the Ethiopians and the Somalians under the banner of socialist brotherhood. As a balancing act it was doomed to failure as the Somalis claimed Ethiopia's Ogaden province was an integral part of Somalia.

In 1963 an uprising of the ethnic Somalis in the Ogaden resulted in the first armed clashes between the two nations. An end to the fighting was brought about by the Organization of African Unity (OAU), but border clashes were frequent. Soviet influence in Somalia began in 1968 and rapidly increased after General Mohamed Siad Barre assumed control of the country via a military coup in 1969. Relations between the Soviet Union and Somalia were good until December, 1976. At that time the Soviets concluded an arms agreement with Ethiopia's Dergue, and relations with Somalia began to sour. Following is a chain of events facilitating the break of Somalia-Soviet friendship:

- April, 1977 - Ethiopia expels U.S. military advisors.
- June, 1977 - U.S. agrees, "in principle," to supply arms to Somalia.
- July, 1977 - Somalia invades the Ogaden.
- July-November, 1977 - Soviet and Cuban aid, advisors, and arms go to Ethiopia for use against Somalia.

November, 1977 - Somalia unilaterally abrogates its Treaty of Friendship and Co-operation with the Soviet Union and expels all Soviets and missions from Somalia.³²⁷

This break cost the Soviets:

1. its nuclear submarine base at Berbera, complete with missile-loading facilities and an advanced communications network used to monitor Western shipping.
2. access to several air force bases.
3. its refueling base at Kismaya, used by the Soviets' Indian Ocean Fleet.

While the cost has been high, the situation has not been irreparable. Currently, the Soviet Navy has bases at Aden in South Yeman, at Socotra Island and on Dahlak Island at the southern approach to the Red Sea.³²⁸ These bases are not as sophisticated as the former base of Berbera, but they are strategically located to inflict maximum damage to Western shipping and naval forces, if and when the need arises.

In September, 1978, it was reported that Ishikawajima Harima Industries (IHI) was building an 80,000 ton floating dock for the Soviet Union, and it was to be delivered to

³²⁷"A Nation Scattered Over Four Countries," To the Point International, November 24, 1978, pp. 49-50.

³²⁸"Why the Kremlin Threw Its Support to Ethiopia," U.S. News and World Report, November 28, 1977, p. 85. See also "Widening the Suez for Flattops," Newsweek, July 7, 1980, p. 5, "A Big U.S. Buildup in the Gulf," Newsweek, July 14, 1980, p. 10.

Vladivostok by November. There was immediate speculation that the Soviets might use this giant Japanese-made floating dock to service a Kiev Class ASW cruiser.³²⁹ After this floating dock had been delivered to the U.S.S.R. in October, 1978, Soviet naval sources denied that it had anything to do with the navy. It was further stated that the giant floating dry-dock was being operated by the Soviet merchant marine. On the other hand, Western sources noted that the merchant marine in other parts of the U.S.S.R. already operate repair facilities for the Soviet Navy and saw no reason why this same situation should not apply to the Pacific Fleet.³³⁰

While speculation was mounting about the possible deployment of a Kiev Class ASW cruiser to the Soviet Pacific Fleet, other events were taking place. In November, 1978, Viet-Nam and the U.S.S.R. signed a Treaty of Alliance and Co-operation. This treaty also stipulated, under the terms of the treaty and attached documents, that either of the two nations could ask for military support and cooperation if either felt that its security was threatened in any way. Consequently, Vietnamese air bases and ports would be available for use by Soviet planes and warships for refueling purposes.³³¹

³²⁹The Japan Times, September 29, 1978, p. 1.

³³⁰The Japan Times, October 19, 1978, p. 1.

³³¹Mainichi Daily News, May 17, 1979, p. 1.

Later, in January, 1979, when relations between Viet-Nam and the PRC were becoming quite tense, Soviet warships steamed south to take up positions in the East China Sea. These positions were maintained during the hostilities that broke out between Viet-Nam and the PRC. This action was a show of support for their Southeast Asian ally, Viet-Nam, and also served to remind the PRC of the possible consequences of further escalation of hostilities.³³² When the Sino-Vietnamese conflict cooled off, and the antagonists pulled back their troops, the Soviet naval presence decreased but remained.

While the Sino-Vietnamese conflict was raging, a media event unfolded in Europe. On February 25, 1979, the ASW cruiser Minsk left the Black Sea and began a four month journey to Vladivostok via the Mediterranean Sea, the South Atlantic Ocean, around the Cape of Good Hope, into the Indian Ocean, through the Straits of Malacca, into the South China Sea, bypassing Cam Ranh Bay, steaming northward through the East China Sea transiting the Tsushima Strait, into the Sea of Japan and arriving at Vladivostok on July 3, 1979.³³³ During this four month sojourn extensive media coverage was given to the

³³²Mainichi Daily News, February 28, 1979, p. 1.

³³³The Japan Times, July 5, 1979, p. 2. See also September 5, 1980, p. 4.

whereabouts and activities of the Minsk. This coverage enhanced the prestige of the Soviet Navy and conferred acknowledgement that the Soviet Union was truly a global super-power with deep-water capabilities.

Nothing more was heard of the Minsk until September, 1980, when it was reported she had come out of her seclusion in Vladivostok and was then in the South China Sea, destination unknown. There is the speculation that the cause of her long seclusion at Vladivostok was due to a malfunction that required a major overhauling.³³⁴

Then in November, 1980, the Minsk reappeared in the news. This time it was reported that she and three support ships steamed to within 90 miles of Rayong Province, Thailand, in the Gulf of Thailand on Halloween night before turning back. This is the closest that a Soviet warship has ventured to Thai territory.

Given the staunch anti-Soviet position of the Association of Southeast Asian Nations (ASEAN) regarding Viet-Nam and Cambodia, this incursion is considered to be a test of the defensive reflexes of the member nations. While in the South China Sea area the Minsk has been operating out of the U.S. built base at Cam Ranh Bay.

³³⁴The Japan Times, September 5, 1980, p. 4.

There have been no indications that she would traverse the Straits of Malacca joining the twenty-five Soviet ships stationed there.³³⁵ The number of Soviet ships stationed in the Indian Ocean area varies according to the political situation, the Western response (in terms of warships deployed) and the relative importance to the Soviets.

Currently, the Persian Gulf is engulfed in flames as a result of the September 22, 1980 Iraqi attack against Iran in a bid for total control of the strategic Shatt al Arab waterway. A direct result of the war between the two oil-producing countries is that 3.2 million barrels (bbl.) of oil per day, representing 11% of the Organization of Petroleum Exporting Countries' (OPEC) total exports, have ceased to flow. This cut-back has hurt Brazil, Japan and France--countries that received 45%, 30% and 23% of their oil supplies from Iraq. Fortunately there is a glut of crude oil on the world market, thereby making it fairly easy for these countries to make-up the short-fall. The nightmare begins when one contemplates the effects of a closure of the Strait of Hormuz. Closure of the strait would immediately stop the flow of 17 million bbl. of oil per day or approximately 40% of the non-communist world's daily oil supplies.³³⁶ Consequently, there is an increased

³³⁵The Japan Times, November 4, 1980, p. 3. See also November 1, 1980, p. 1.

³³⁶"The Threat to the Oil Flow," Time, October 6, 1980, p. 18.

naval interest in the area by Western naval commands resulting in increased deployment of Western warships to the Persian Gulf area. This, in turn, prompts a corresponding increase in the size of the Soviet Indian Ocean Fleet, whereby tension in an already tense area continues to spiral. Consequently, the mission of the Soviet Navy is being fulfilled in the Indian Ocean and Persian Gulf areas so long as Soviet naval units are astride and/or close-by major shipping lanes and within the protective umbrella of Soviet-based missile bombers.

CHAPTER IX

CONCLUSION

Today, our country has a powerful oceangoing fleet capable beyond any question of doubt of serving its interests at sea.

Admiral Gergei G. Gorshkov
Commander-in-Chief, Soviet Navy³³⁷

In an amazingly short period of time the Soviet Navy, under the tutelage of Admiral Gorshkov, has been established as a first-rate blue-water navy with a global presence that serves to remind the world of the presence of this Eurasian power called the Union of Soviet Socialist Republics. Without a doubt it can be said that the peacetime mission of the Soviet Navy is being effectively carried out on a global basis.

Soviet warships have established a visibility factor upon the seven seas that becomes even greater in times of crises as additional units are deployed to the area of contention, thereby effectively counter-balancing the U.S. naval presence and limiting the range of action available to those forces. Lastly, the Soviet naval presence serves

³³⁷Couhat, Combat Fleets 1980-81, p. 523.

to remind the littoral countries of the interests of the Soviet Union in the region.

Strategic deterrence capabilities have been improved to the point where it can be said that the Soviet Navy exerts complete control over its peripheral seas and, utilizing her concentric rings of defense, over vast areas of contiguous seas.

The Soviet Navy retains the capacity to deny the free use of the seas to its potential adversaries, the United States and her allies. This capability is high, extremely high, and it also underlines the major weakness of the Soviet Navy. That weakness being that in the event of war all Soviet merchant vessels, fishing fleets and auxiliary vessels will disappear from the surface of the seas. The Soviet Navy is not capable of fully protecting its interests upon the high seas. It is fully capable of denying the use of the seas to its adversaries, but it is unable, at this time, to transform its sea denial capabilities into mastery of the sea beyond the peripheral seas of the U.S.S.R. This situation is a handicap that will be alleviated, if not eliminated, by the introduction of conventional nuclear-powered, Western-style aircraft carriers. These carriers will enable the Soviet Navy to project protective air-cover over wider ranges and wrest mastery of the sea from her competitors. Fortunately for the West the first is not expected to be delivered until the mid-1980's.

Currently, a more dangerous situation exists, the instability of the Middle East and the flames of war that are being fanned by religious extremism, intra-regional rivalries and plain old power politics resulting in internecine warfare that further destabilizes the area. This destabilization is dangerous because the region in question is on the Soviet Union's doorstep, her fleet is in the contiguous waters within range of Soviet-based air support and her client states in the region are continuing to exacerbate the prevailing situation.

In evaluating the political-military balance the client states of the U.S.S.R. have been noted, but their value as true allies is discounted for the following reasons:

1. In an all-out war they have a high vulnerability factor. Client states such as Cuba, Angola and Viet-Nam are far removed from the borders of the U.S.S.R., hence, the Soviet Navy must maintain adequate sea lines of communications with their distant client states if they are to be supplied during a war. This is something that at the present time is beyond the capabilities of the Soviet Navy. Only those states that border the Soviet Union can be considered as being under the protective wing of the U.S.S.R.

2. Soviet client states have a habit of quarreling among themselves, and these quarrels sometimes escalate into wars as was the case between Somalia and Ethiopia.

3. As allies these states are highly unreliable in that they are nationalists first, socialists second. Only those states that require massive amounts of Soviet aid and/or military protection against their neighbors can be considered as true allies. These client states are Cuba in the Caribbean, Ethiopia on the Horn of Africa and Viet-Nam in southeast Asia. Unfortunately for them they are out of the protective range of the Soviet Union.

4. These client states are uncontrollable in that they do not bury their differences and follow the socialist line as exemplified by the Soviets. Only Afghanistan can be said to be a true ally; it is occupied by Soviet troops.

Therefore, the Soviet Navy has no secure bases overseas that can be kept open during an all-out war. Thus, what bases the Soviets do have will continue to exist only so long as the supplies at these bases last. These bases are capable of surviving and of rendering assistance during a quick, short war. However, their usefulness begins to fade away the longer the war lasts.

In reviewing the current Soviet naval situation it can be stated that the Soviet Navy is up to the task of protecting the coasts of the Soviet Union as well as maintaining mastery of the peripheral seas. On the open seas the Soviet Navy has the capability to deny its use to her enemies, thereby being able to sever the sea lines of communication. Nevertheless, this navy is unable to project

power beyond the range of land-based naval aviation. Consequently, the Soviet Navy is incapable of resupplying her outlying bases. Furthermore, this navy is incapable of guaranteeing the safety of the Soviet merchant fleet during wartime, thereby forcing all merchant ships to seek shelter in a friendly or neutral port once hostilities begin.

This, then, is the threat facing the Western maritime powers. Either the emerging red tide will engulf the seven seas or will merely blend in as other navies have before it. Whether the former or the latter occurs depends upon the West's response to this potential threat to its security.

APPENDIX

APPENDIX

Terms and Abbreviations

Displacement: Standard displacement, as defined by the Treaty of Washington (1922), is given. When possible, full load is given; otherwise normal displacement or trial displacement is given. In the case of submarines, two displacements are given: the first indicates surface displacement while the second indicates submerged displacement.

Dimensions: Hull dimensions are given as follows: length overall X beam X draft (full load, unless stated otherwise). In some instances two figures are given for one of the dimensions, e.g., the beam of the flight deck is given, and, in parentheses, the hull measurement of an aircraft carrier.

Speed: This is given in knots and generally refers to maximum speed. Where two speeds are given for a surface ship, the top speed is given first, following by the cruising speed. In the case of submarines, surface speed is given first, followed by submerged speed.

Complement: Ship's company.

Range: Cited in nautical miles at a given speed.

Machinery: Type of powerplant used to power the ship in question. "Props" indicates propellers.

Boilers: Type is indicated under machinery, while number is indicated in this section.

Armament: Number of guns/caliber; or number of torpedo tubes or launchers with caliber. Figures in parentheses indicate the number of mounts and whether they are single, double, triple, etc., e.g. (11 X 3) indicates three double mounts.

Endurance: Length of time submarines stay on patrol.

Hull dimensions are in meters, calibers in millimeters, speeds in knots and ranges in nautical miles, unless otherwise indicated.

AA - Antiaircraft
 AS - Antisubmarine
 ASEAN - Association of Southeast Asian Nations
 ASW - Antisubmarine Warfare
 arg.- average
 bbl - barrels

CC - Central Committee
 CEP - Circular error probable
 CIA - Central Intelligence Agency
 CPSU - Communist Party of the Soviet Union
 COMECON - Council for Mutual Economic Assistance
 DP - Dual Purpose
 ECM - Electronic Countermeasures
 EEZ - Exclusive Economic Zone
 EPLF - Eritrean People's Liberation Front
 GE - General Electric Co.
 GT - Geared turbines
 hp - horsepower
 ICMB - Intercontinental Ballistic Missile
 IFF - Identification Friend or Foe
 IHI - Ishikawajima Harima Industries
 kg - kilogram
 KGB - Komitet Gosudarstvennoy Bezopasnosti
 (Committee for State Security)
 m - meter(s)
 MBU - ASW rocket designator
 MHD - Magnitohydrodynamic
 mm - millimeter(s)
 MRV - Multiple re-entry vehicle
 NATO - North Atlantic Treaty Organization
 NBC - Nuclear, Biological, Chemical
 NM - nautical mile(s)
 OAU - Organization of African Unity
 OPEC - Organization of Petroleum Exporting Countries
 PRC - People's Republic of China
 RBU - ASW rocket designator
 R&D - Research and Development
 RL - Rocket launcher
 SAC - Strategic Air Command
 SA-N-
 (Number) - U.S. designation for Soviet naval surface-to-air
 missile
 SALT - Strategic Arms Limitation Talks
 SLBM - Submarine Launched Ballistic Missile
 SLOC - Sea Lines of Communication
 SS - Attack Submarine
 SSB - Ballistic Missile Submarine
 SSBM - Strategic Ballistic Missile Submarine
 SSBN - Ballistic Missile Submarine, Nuclear-Powered
 SSG - Guided-Missile Submarine
 SSGN - Guided-Missile Submarine, Nuclear-Powered
 SSN - Attack Submarine, Nuclear-Powered
 SS-N-
 (Number) - U.S. designation for Soviet naval surface-to-surface
 or submarine-to-surface missile
 SSR - Radar Picket Submarine
 SUW - Anti-Surface Warfare rocket designator

TT - Torpedo tubes/launchers
 UN - United Nations
 UNLOS - United Nations Law of the Sea Conference
 US - United States
 USA - United States of America
 USSR - Union of Soviet Socialist Republics
 VDS - Variable Depth Sonar
 V/STOL - Vertical/Short Take-Off/Landing
 VTOL - Vertical Take-Off/Landing
 WWII - World War II
 YCL - Young Communist League

Missiles

- A. ballistic missiles: carried by submarines. All are liquid-fuel propelled, except for the SS-N-17, which has solid-fuel propulsion.
- SS-N-4: Range-300 NM. Nuclear warhead. Can only be launched from the surface.
 SS-N-5: Range-900 NM. Nuclear warhead of about 800 kilotons. Can be launched while submerged.
 SS-N-6: Range-1,300 NM. Nuclear warhead of about 1 megaton. Can be launched while submerged. A more recent version has a 1,600 NM range and an MRV-type warhead.
 SS-N-8 (NATO code name: Sawfly): Range-4,200 NM. Nuclear warhead of about 1 megaton.
 SS-N-13: Range-370 NM. Nuclear warhead.
 SS-N-17: Range-1,800 NM. Nuclear warhead. First ballistic missile with solid fuel propulsion.
 SS-N-18: Two stage missile with range of 4,000 NM. Triple nuclear MRV-type warhead. It is believed to be aboard Delta III submarines. Circular error probable (CEP): 700-1,000 m.
- B. surface-to-surface cruise missiles: Liquid-fuel propulsion, except for the SS-N-7, which has a solid-fuel propellant engine.
- SS-N-2-A and B: Maximum range-25 NM. Practical range 16 NM. 400-450 kg conventional warhead. The SS-N-2B has folding wings.
 SS-N-2C (formerly SS-N-11): Maximum range-45 NM. Combined radar and infrared homing. Altitude can be set at 100, 150, 200, 250, or 300 m. During its final approach to the target, the missile descends to an altitude of 2 to 5 m. It is necessary to have a forward observer to fully employ the maximum over-the-horizon range of the SS-N-2C.

- SS-N-3 (NATO code name: Shaddock): Maximum range-2.50 NM. Inertial guidance with mid-course correction by radio, active radar homing to target. Launched from the surface by submarines.
- SS-N-7: Maximum range-30 NM. Conventional warhead, can be launched while submerged.
- SS-N-9: Maximum range-30 NM, but can reach 150 NM with an aerial relay (aircraft fitted with a Video Data Link system), inertial guidance, and active radar homing to the target.
- SS-N-12: Maximum range-300 NM. Conventional or nuclear warhead. Replacing the SS-N-3 on submarines.

C. surface-to-air missiles

- SA-N-1 (NATO code name: Goa) - Twin launcher. Range: 30,000 m, interception altitude: 1,000 - 50,000 feet. Guidance: radar/command. Conventional warhead, 60 kg.
- SA-N-2 (NATO code name: Guideline) - Twin launcher. Range: 40,000 m, interception altitude: 1,000 - 80,000 feet. Guidance: radar/command. Conventional warhead, 150 kg.
- SA-N-3 (NATO code name: Goblet) - Twin launcher. Range: 30,000 m, interception altitude: 500 - 80,000 feet. Guidance: radar/command. Conventional warhead, 60 kg.
- SA-N-4 (short-range system) - Twin launcher, retracting into a vertical drum. Range: 9,000 m, interception altitude: 30 - 10,000 feet. Guidance: radar/command. Conventional warhead.
- SA-N-5 (very short-range system) - Naval version of SA-7 Strela.

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