STALIN'S BIG-FLEET PROGRAM

Milan L. Hauner

The Party is in favor of small submarines with a short range. You can build three times as many submarines for your money as big ones.... but the actual problem lay in a quite different sphere. Big submarines mean a policy of aggression, to further world revolution. Small submarines mean coastal defense—that is, self-defense, and postponement of world revolution.

ARTHUR KOESTLER

This is the answer that in Koestler's famous 1941 novel *Darkness at Noon* the police investigator Ivanov gives the accused Rubashov, who asked him why a certain admiral had to be executed. "The times are against us," Ivanov continues; "we are in the hollow of a wave and must wait until we are lifted by the next." His

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© 2004 by Milan L. Hauner Naval War College Review, Spring 2004, Vol. LVII, No. 2 explanation suggests what actual Soviet naval strategy advocated prior to 1936, when Joseph V. Stalin, believing that the uplifting wave had finally reached the vessel of socialism, decided to change abruptly to a new tack and ordered the construction of "big submarines."

Toward the end of 1935 Stalin's mind became increasingly preoccupied, in an almost obsessive fashion, with plans to acquire rapidly a large oceangoing navy, larger in its total displacement than any other at that time and capable of achieving supremacy on all four seas and oceans that circumscribed the Soviet Union. Super-dreadnoughts were laid down in Soviet yards beginning in 1938. Immediately after the nonaggression pact of 1939, what the Soviets mainly wanted from the Germans in exchange for wheat, manganese, and petroleum was naval equipment.¹ The new capital ships were, however, destined never to be completed. Construction of other warships—cruisers, destroyers, and submarines—continued, in most cases to completion; the half-built carcasses of the battleships (clearly visible on German air reconnaissance photographs at the time) disappeared. Why had they been begun? What had been in the minds of Stalin and his collaborators? Stalin must have resolved that without a powerful navy the Soviet Union's status as a great power could never be complete. Though the ruthless industrialization policies of the five-year plans of the mid-1930s produced rapid buildups of air and ground forces, especially tanks, the Soviet navy was a Cinderella, the least potent and most obsolescent of the three services. During the interwar years a large number of submarines were added, but the surface fleet had to rely on the few vessels of the old imperial navy that had survived the Civil War.

In the second half of the 1930s, however, Sleeping Beauty seemed to wake up. The utopian vision of an industrial giant that would provide the army of the World Proletariat with an iron fist had instilled pride and megalomania among Soviet leaders. Under Stalin's direct inspiration and involvement, plans for creating a huge ocean-going navy—*bolshoi okeanskii flot*—took shape.² Why was it not enough to arm Soviet proletariat with guns, tanks, and warplanes? Why would the Soviet Union, so disadvantaged at sea by geography, need to join in a naval race with traditional sea powers, to build capital ships with the declared aim of overtaking within ten years the British and U.S. fleets? Was Stalin's design to produce a Soviet *Flottenpolitik*, with a daring *Risikogedanke* (policy of risk) to take on Japan in the Pacific?³ How did he plan to deal with other naval powers? Questions of this kind persist. Much new information has become available in the last fifteen years, but because of the nature of Soviet dictatorship under Stalin, the puzzle may never be resolved completely.

Since Mikhail Gorbachev's policy of *glasnost*, openness, in the last years of the USSR, many specialized studies and personal memoirs of direct participants in these events have been published. Former naval officers have gained access to the main archives in question: the Russian Naval State Archive (Rossiiskii gosudarstvennyi arkhiv Voenno-Morskogo Flota, now declassified through 1942) in St. Petersburg; and to some extent the Central Naval Archive (Tsentralnyi Voenno-Morskoi arkhiv) in Gatchina, for all post-1941 naval records. However, in contrast to the enormous volume of information available on the growth of the Soviet ground and air forces, which during the 1930s had overtaken in numbers of tanks and warplanes those of all other powers put together, there remains a dearth of information about the expansion of the Soviet navy.⁴ John Erickson's magisterial *Soviet High Command* (1962) has a mere handful of scattered references to the Navy. Another highly acclaimed work, said to unravel Stalin's enigmatic behavior on the eve of Hitler's invasion of Russia on the basis

of the author's unique access to Russian archives, ignores the naval dimension completely.⁵

From the vantage point of Russian history, Stalin's decision to build a mighty oceangoing fleet was not a unique one. Other leaders had constructed fleets to solidify their rule. The founder of the Russian navy, Peter the Great, had started with a clean slate. He brought in shipbuilding specialists and in less than twenty years produced a Baltic fleet, about thirty men-of-war, ranging from hundred-gun to fifty-four-gun ships of the line, designed to be capable of defeating Sweden, the dominant Baltic naval power.⁶ Stalin's big-fleet program was to be even more ambitious.

In prerevolutionary Russia, however, periods of naval expansion were followed by long stretches of stagnation. It usually took Russia much longer to rebound at sea than it did on land after losing wars. Such low points for the Russian navy were the aftermaths of the Crimean War, the Russo-Japanese War, and of course World War I, as well as the subsequent civil war, at the end of which what little remained of the tsarist navy was hardly combat worthy.

After each disaster, Russian ambition to sail again seemed to become stronger. It would take fifty years after the defeat at the Crimea to rebound, but by the eve of the 1905 war with Japan Russia had risen to third among sea powers. After the crushing defeat at Tsushima, Russia almost immediately produced an ambitious naval rearmament program, launching dreadnoughts for the first time on the Baltic and Black Seas. These capital ships were built mainly for reasons of great-power pride and prestige; their limited tactical purposes could have been better performed by other, less expensive means.

One of Russia's chief problems remained geography. Neither the tsarist nor the Stalinist regime was able to solve the dilemma posed by the utter isolation of the Baltic and Black Sea Fleets, the remoteness of the Pacific Fleet, or the harshness of the Arctic Sea, which kept the Northern Fleet icebound for most of the year. The canals built under the tsarist regime to connect the Baltic and the White Sea were not for large warships. The Bolsheviks, using slave labor, widened the canals and eventually linked them to the mighty Volga. Nonetheless the fundamental isolation of the Black Sea was solved (partially) only after World War II, with the construction of the Volga-Don Canal, again with slave labor.

Deeply committed to the Mahanian doctrine that only dreadnoughts could fight dreadnoughts, Russian navalists insisted these costly capital ships were the only effective naval weapon against the nation's immediate maritime adversaries, Germany and Turkey. Except in the Black Sea against Turkey, Russia could not maintain this ship-against-ship race without assistance. Tsarist Russia could count on naval allies to offset the negative impact of maritime geography, but communist Russia was to be a permanent target of capitalist encirclement. The closest historical parallel to Stalin's big-fleet program was Russia's shipbuilding program of 1912 (for which naval records, including private papers of the principal actors, are now accessible for the first time). The two shipbuilding programs faced the same geographical constraints and industrial shortcomings. Moreover, both programs seemed to be governed by the same naval philosophy, assigning to capital ships tasks for which they proved quite unsuitable in the shallow and narrow waters of the Baltic and Black Seas. As a result, in World Wars I and II the main role of the Russian navy (tsarist and Soviet) was much the



Battleship, Project 25, 1936

same: defending the coast and assisting ground forces. In both cases Russian ships rarely ventured on the open sea; surface ships, rather, were extensively used as gunnery platforms against shore targets. Russian warships in World War II usually did not even protect Anglo-American convoys carrying Lend-Lease supplies to the Soviet Union; the Allies provided their own convoy protection, which proved more efficient.

The Soviet government was ready, for strategic reasons, to expand its shipbuilding industry even into some of the most inaccessible regions of the vast Eurasian continent, but the severe limitations imposed by climate, distance, and bad communications prevailed. Even intensification of the Gulag system of slave labor—a very sinister but important factor in the rapid Soviet industrialization and remilitarization—could not overcome these problems. Because of these natural limitations, in conjunction with competing priorities in the military and civilian sectors and the need for reconstruction after wartime destruction, the big-fleet program could never have been completed during the dictator's lifetime.

Nonetheless, this program is well worth examining, for several reasons. First, it fills an important gap in Russian as well as comparative naval history, for

Stalin's big-fleet program has scarcely been mentioned, let alone studied, in Western naval colleges and research institutions.⁷ Second, on the Russian side, because of Stalin's mania about foreign spies and military secrets, prior to *glasnost* adequate information was simply not available. The big-fleet program coincided with the great purges in the Soviet Union, during which the Soviet navy suffered extensive losses, especially among its senior officers, and very few survivors understood the details of the plan. Third, the lessons of Stalin's big-fleet program can be usefully compared with other, similar naval building projects. In addition to the 1912 Russian naval program, Admiral Tirpitz's Navy Laws of 1898 and 1900, designed to provide Germany with a High Seas Fleet to challenge the Royal Navy, and the great "White Fleet" of Theodore Roosevelt should be mentioned in this connection. Finally, Hitler's short-lived "Z-Plan" of January 1939 was an obvious parallel to Stalin's big-fleet program.

All these programs, however, including the Russian one of 1912, had a strategy behind them, something that we do not find behind Stalin's big-fleet design. Did the Soviet dictator imbue his dream with a particular strategic idea, a Stalinist *Risikogedanke?* Or, as it seemed to most witnesses, was it simply a product of blind determination to achieve numerical superiority in the USSR's home waters, combined with an appreciation of the deterrence that every fleet-in-being radiates and of the incalculable propaganda effect of sending the red flag around the world on handsome (Italian-designed) capital ships?

Finally, a study of Stalin's big-fleet program will give us a yardstick to examine present-day regional navies that are largely based on Soviet platforms and equipment and that now are undergoing considerable growth. Among this number, the Indian navy and, especially, the Chinese navy would appear to have important elements in common with Stalin's big-fleet program. The present expansion of the Chinese navy from a coastal to an oceangoing fleet during the next ten years or so suggests a parallel that is hard to ignore.

RASPLATA: RECKONING AFTER TSUSHIMA

In 1905 Russia suffered the most crushing naval defeat in its entire history. The defeat was even more humiliating because in Russian eyes the winners were Asian upstarts. Russians faced the shocking realization that they had been smashed to pieces by Japanese sailors who had learned their new trade overnight, who sailed in warships recently purchased abroad. Moreover, it was not only Russia's navy and army that collapsed in the Far East but eventually the country itself, as a colonial power; a revolution generated by social and ethnic forces struck the interior of the vast Eurasian empire. The shock waves of this devastating naval disaster would affect the Russian navy deep into the Soviet period.

But the year 1905 should be also remembered for an amazingly quick attempt to restore Russia's maritime power. Two of its best fleets having been destroyed in quick succession in the Far East—the Pacific Fleet in and around Port Arthur, and the Baltic Fleet, after its epic journey around the world, at Tsushima—the Russian navy found itself without a battle fleet to protect the imperial capital, St. Petersburg, and the Baltic coastline.

However, the Mahanian quest for an oceangoing battle fleet to win the command of the sea was not the only policy being proposed. The "Young School" (named after the French Jeune Ecole, developed in the 1880s by Admiral Aube) seemed to reflect better Russia's strategic requirements. The state's enormously long coastline, shallow coastal waters, and virtual lack of access to the open sea made mine warfare and coastal defense in the Baltic and the Black Sea the logical priorities. Moreover, the Young School seemed to find support in the most recent experience of sea warfare, that against Japan. Most seapower analysts interpreted the lessons of the 1904-1905 war in terms of the Japanese experience, which overwhelmingly favored the Mahanians. The Young School contradicted the argument that Japan's success lay in the efficient application of aggressive seapower, in a decisive encounter of battleships and cruisers. Of Admiral Heihachiro Togo's original six modern battleships, two had been lost to Russianlaid minefields, not gunfire. The other Russian naval success story had been aggressive cruiser raids against Japanese shipping at the beginning of the war. Captain Nikolai O. von Essen, in command of the fast cruiser Novik, attached to the Port Arthur squadron, and the Vladivostok-based cruiser squadron had disrupted communication between the home islands and the Japanese troops on the mainland.⁸

Von Essen was promoted and in November 1908 appointed commander of the Baltic Fleet. He came up with a radical war plan that was in essence anti-Mahanian. He proposed that, instead of waiting passively for the superior German High Seas Fleet to come out and offer a gunnery duel, the Baltic Fleet concentrate close to the German border at the ice-free base of Libava (now Liepaja). From there the Russians would initiate offensive minelaying operations at night, deep in enemy waters, close to the likely routes from Kiel, Stettin, and Danzig. The proposal was unmistakably similar to Japanese and Russian minelaying tactics in the Pacific in the 1905 war.

But the Naval General Staff did not like this plan, considering it too risky, and suggested that the fleet be transferred to Kronstadt and assume as its main task the defense of the capital against sea attack. Von Essen submitted a compromise plan, according to which the approach to St. Petersburg, at the narrowest section of the Gulf of Finland, between Nargen (off Reval) and Porkkala, would be protected by advanced minefields, by coastal artillery on either shore, and by the main Baltic battle fleet, in a central position east of the island of Hogland.⁹ This was the war plan with which the tsarist navy entered war in 1914.

The only Russian battle fleet available after Tsushima to demonstrate the validity of the Mahanian doctrine of seapower survived on the Black Sea. It had survived the strange masochistic frenzy of Russian patriots who had been ready to send every floating device against the Japanese at the height of the war. Leading that choir had been Russia's most outspoken Mahanian, Captain Nikolai L. Klado (1862–1919), responsible for the main strategy courses at the Nikolaevsky Naval Academy in St. Petersburg.¹⁰ The Black Sea Fleet consisted primarily of five predreadnought battleships (with two more being commissioned). Their crews, in a state of semipermanent mutiny, were considered a greater threat to their officers than to the enemy.¹¹ Moreover, they had no strategic value outside the Black Sea, into which the fleet was locked by Turkish hostility. (An Allied attempt to open the Dardanelles in 1915 was to fail completely.) Under such circumstances the costly proposal to introduce four dreadnoughts to the Black Sea seemed to make little sense. The weak and obsolete Turkish navy posed no threat (and would not until the German battle cruiser Goeben joined the Turks at the outbreak of World War I, enabling the Turks to conduct forays against the Russian coast).

With regard to the Far East, after Tsushima Russia's dominant feeling was one of reckoning and revenge, epitomized in the *Rasplata*—"the payback"—which became the title of the best-selling Russian book of the era.¹² This feeling generated desire for reconquest as an act of self-defense against the "Yellow Peril," and irrational fear that quite a few Russians visualized in the form of a combined Sino-Japanese invasion of Siberia, advancing as far as Irkutsk.¹³ To offset this threat, huge sums had to be found for doubling the tracks of the Trans-Siberian Railway and completing its new branch along the Amur (which was to provide an alternative route to Vladivostok after the Russian withdrawal from Manchuria).

The crushing military defeat in the Far East, of which the word "Tsushima" was emblematic, remained deeply engraved on the hearts of Russian patriots. They were echoed forty years later when Stalin welcomed, in an address free of any notion of proletarian internationalism, the reoccupation of Port Arthur by Soviet warships after Japan's surrender.

THE NAVAL PROGRAM OF 1912

On 29 June 1905, only four weeks after Tsushima, Tsar Nicholas II announced the intention to "reestablish our battle squadrons."¹⁴ Even more amazing was the continuing vitality of Russia's professional classes, in spite of the military disasters and revolutionary upheavals at home. This innovative spirit was especially noticeable among the naval intelligentsia. With the advent of dreadnoughts they

believed that the Russian navy would ride on the crest of societal modernization in the Empire. The young officers felt they were being propelled overnight into a new age. The demise of Russia's once numerous but obsolete Navy had been devastating, but the young officers now felt they could start with a new slate.

In early 1908, six Russian and twenty-one foreign companies entered the design competition for the first Russian dreadnought. The priorities of the Naval General Staff were known to include four in-line turrets, on the same deck, to avoid superfiring, and an original arrangement of boilers and turbines that would produce a top speed of no less than twenty-three knots. The first Russian dreadnought was meant to be more powerful and faster than any known British or German dreadnought finished or under construction at the time. (In fact, however, because of the notorious slowness of Russian shipyards, which needed three years on average for a capital ship, as against eighteen to twenty months elsewhere, it would be obsolete at launching.)¹⁵

After the first round of solicitations, three foreign designs remained on the shortlist: those of Blohm & Voss of Hamburg, British Vickers, and the Italian naval designer Vittorio Cuniberti (with an innovative layout of four in-line turrets on the centerline).¹⁶ However, the Baltic Works of St. Petersburg ended as the favorite, due to the complexity of credit financing and strong government pressure. Blohm & Voss seemed to be winning the contract, but Paris protested strongly. A well-timed French loan proved decisive.

The final Russian design was largely based on that of Cuniberti but with a number of improvements and special features, such as an eccentric icebreaking bow.¹⁷ Eventually, three series of Russian dreadnoughts were designed: the twelve-inch-gun *Gangut* class of four battleships for the Baltic, followed by the twelve-inch-gun *Imperatritsa Maria* class of four for the Black Sea, and finally the faster and bigger fourteen-inch-gun *Kinburn* class of four battle cruisers for the Baltic. The battleship classes were completed between 1914 and 1916; the battle cruisers were launched but never completed.

However, it was not only in the category of dreadnoughts that the Russian navy scored a success. An even more spectacular innovation was achieved with the launching in 1911 of the *Novik*, the fastest and most heavily armed destroyer in the world.¹⁸ It had many features unmatched in any other navy, such as four quick-firing four-inch guns of exceptional muzzle velocity. Its torpedo armament was a unique arrangement of three triple launching tubes. It also carried minelaying equipment, another characteristic feature of Russian destroyers in the Baltic waters. *Novik* was built in the Putilov yard in St. Petersburg; its large oil-fired boilers, supplied by the German Vulcan works in Stettin, gave its turbines an output of almost forty-two thousand horsepower (about the same as the dreadnought *Gangut*), which produced a top speed of 37.3 knots during sea

trials—a speed unmatched by any other destroyer anywhere at the time. *Novik* was the name-ship of a whole class of large destroyers subsequently built for the Baltic and Black Sea Fleets; they were to be workhorses through the early Soviet period until the Second World War.

Novik would probably have been a match for a light cruiser, in addition to being fast enough to escape from any ship. No battle fleet commander would relish a night encounter with a flotilla of *Noviks*, collectively capable of launching in one salvo almost a hundred torpedoes, in the narrow waters of the Baltic. Such a group could also lay a field of about six hundred mines in enemy waters. With the *Noviks* Russia had acquired virtually a new class of all-round ships ideally suited for the major naval task in the Baltic: the protection of the defensive mine barriers. The creators of the *Novik* thus provided a weighty argument for the anti-dreadnought lobby, whose message was that at least for the defense of the Baltic coast, the four cherished dreadnoughts were unnecessary.¹⁹

As a direct consequence of the domestic shakeup following the disaster in the Far East, the Russian autocracy had to make way for constitutional reforms. In spite of war and revolution the Russian Empire completed its first comprehensive modern census in 1897-1907; its statistics placed Russia in second place among the great powers, after the United States.²⁰ The discussion concerning new ship constructions and the reorganization of the Russian navy after Tsushima was wide-ranging. The debate did not merely involve Russian Mahanians and their opponents; many formal and informal groups (kruzhki) and individuals joined in, as did the leading naval journal, Morskoi sbornik. Other participants in the debate-such as the Naval General Staff, the Navy Ministry, the War Ministry, the Army General Staff, the State Defense Council, the Finance Ministry, the Ministry of Foreign Affairs, and legislative groups and committees in the State Duma (the imperial parliament)—completed the picture of late-imperial Russian as a bustling and intellectually vibrant community, of which no equivalent was to be found in Stalin's dictatorship twenty years later.²¹ Pressure groups like the Navy Renewal League (Liga Obnovleniya Flota) followed the pattern established in the British navy by the Navy League and the German by the Flottenverein.²² The Special Committee for Strengthening the Fleet by Voluntary Donation carried out a fund-raising and national subscription effort that paid for the Novik.²³ Of great importance was the Naval Technical Commission, with its Chief Shipbuilding Inspector, A. N. Krylov, known as "the master of Russian hydrodynamics," whose long career extended from Tsushima to the eve of World War II. Other ship constructors of this period-like I. G. Bubnov, A. I. Maslov, G. F. Schlesinger-were still to be around when Stalin's big-fleet program was launched.²⁴ By that time, however, there was to be no open discussion; critical questions could cost one's life.

In 1912, the argument could be reduced to three basic questions. What sort of navy does Russia need? Where and how should it be deployed? Were the resources needed for it at hand? As we shall see, the same questions were to haunt Stalin twenty years later.

Tsarist Russia aspired to three more or less balanced fleets in three parts of the world: the Baltic Fleet in northeastern Europe (the newly founded Arctic Flotilla was an extension of the Baltic Fleet), the Black Sea Fleet in southern Europe, and the Pacific Fleet in the Far East. The latter had been the strongest in 1904; in the war, however, it lost most of its ships and its chief base, the ice-free Port Arthur. Only a small cruiser squadron based in Vladivostok was left. Underlying the intensive discussions on the post-Tsushima naval programs was always the question of whether Russia could afford to remain a great power in three seas simultaneously.

In 1914, after the launching of the first Russian dreadnought, an enterprising naval enthusiast who wished to remain anonymous suggested building a canal system between the Baltic and the Black Sea, should all of the anticipated twelve Russian dreadnoughts be needed in one sea for a decisive action. He recommended connecting Russia's navigable rivers with a canal big enough for huge pontoons about 120 feet wide with twelve-foot drafts, in which dreadnoughts could be towed by tugboats downstream to the Black Sea in from twenty-five to thirty days. The recent successful widening of the Kiel Canal and the construction of the Panama Canal may have inspired the author.²⁵ Not even the Soviets, with their almost unlimited supply of slave labor, were able to take up such a challenge. They did, however, use both river canals and railways to move small naval craft and segments of ships. Even during World War I small submarines were transported by rail to the Pacific, and destroyers assembled in Kherson on the Black Sea had subsections shipped from elsewhere.

In spite of recommendations by the State Defense Council and the emperor's endorsement, new construction could not begin immediately, because the Duma could not bring together the necessary votes. It took more than a year of bitter and exhausting debate before the necessary measure passed. Class instincts, reflecting the recent revolution and breakdown of law and order, were at issue rather than concern for regaining great-power status. The right wing intuitively supported strengthening the army rather than the navy, because the former could be also used to quell insurrections, for which sailors were notoriously unreliable. However, once the finance ministry obtained credits in France (mentioned below) for the construction of the four dreadnoughts in the Baltic, the moderate right, the Octobrists, supported the tsar's wishes for shipbuilding. In the center, the Constitutional Democrats (Kadets) opposed any increase of the Baltic Fleet but voted for the expansion of the Black Sea Fleet. Their leader, the well known liberal historian Paul N. Milyukov, argued that the Kadets opposed not the construction of a battle fleet but the idea of having one in the Baltic, as a waste of resources since a European war was, in their view, highly unlikely. The Near East was another matter. War there could break out any moment, the Kadets were sure, and Russia should be prepared for action in the south. As for the political left in the Duma, the Social Democrats and the *Trudoviki* (properly, the Social Revolutionaries, known in Russian as the "*Esery*"), true to their antimilitarist ideology, consistently voted against any allocations for either the army or navy.²⁶

Thus it was after considerable delay that the Duma finally voted the sums needed for the "small" naval program of 1912. Even with the French loan, the Russian naval budget in 1913–14 came close to 250 million rubles, thereby outstripping all other nations—with the exception of Great Britain and the United States, but including Germany, the navy of which was by then number two in the world. Had the Russian Empire survived to 1930 without wars or revolution, its navy, according to the original, larger construction program of 1912, would have consisted of twenty-four battleships, twelve battle cruisers, twenty-four small cruisers, 108 large destroyers, and thirty-six submarines.²⁷

These, then, were paper figures, but they were by no means unrealistic, given Russia's enormous potential and rapid industrial growth, sustained over two decades and second only to that of the United States. The financial means having been voted by the Duma, a carefully calibrated expansion of Russia's shipbuilding capacity was the next prerequisite. As it happened, however, the peaceful interval of less than nine years Russia enjoyed after Tsushima proved too short. The outbreak of the First World War resulted in the call-up by the army of shipyard workers, chaotic conditions on the railroads, and mass industrial unrest. The half-finished *Borodino*-class super-dreadnoughts in the Baltic had to be canceled, and out of fifty-three destroyers planned for the Baltic and Black Sea only thirty were ultimately commissioned.²⁸ So it was that when after the warfare and revolution that engulfed the nation between 1914 and 1922, Russia reemerged in a new imperial reincarnation under a ruthless dictator, Joseph V. Stalin, the naval strategic questions remained the same. Would Russia ever regain its lost position as a great sea power? What strategy would it choose?

THE DAWN OF THE SOVIET ERA

When the Civil War ended Soviet Russia possessed several old battleships, two modern and three old cruisers, and about two dozen destroyers, submarines, and other smaller craft in various stages of immobility and decay.²⁹ One battleship was in the Arctic, four in the Baltic, and six in the Black Sea. When the Soviets decided to scrap all predreadnought battleships, they were left with four

damaged dreadnoughts in the Baltic, three unfinished *Borodino*-class hulls, and one dreadnought under construction in the Black Sea.

Sorting Out the Debris

Three of four completed dreadnoughts of the *Gangut* class were in disrepair in the Baltic; the fourth, *Poltava* (in 1918 renamed *Frunze*), having been damaged during the Civil War, was to be cannibalized for spares and turned into a blockship. One dreadnought of the 1912 program remained unfinished in the Black Sea's main shipyard in Nikolaev (*Nikolai I*, renamed in 1917 *Demokratiya*); the Soviets were unable to complete the ship, and it was scrapped after 1922. Its sister ship *Imperator Alexander III* (renamed *Volya* in 1917 and *General Alekseev* in 1919) was taken in 1920, during the Civil War, by the Whites to the French base at Bizerte in the Mediterranean. Its fate was inglorious; taken over by France in 1924, it was briefly considered for recommissioning by visiting Soviet naval experts but in 1936 was found unseaworthy and scrapped.³⁰

As for the three launched *Borodino* hulls, the Soviet government toyed for a while with completing at least one of them (*Izmail*) but decided to sell them all to Germany for scrap. The three remaining Baltic dreadnoughts were slowly modernized during the mid-1920s and recommissioned. One of them, the *Sevastopol*, renamed *Parizhskaya Kommuna*, was transferred to the Black Sea during 1929–30. A few gunboats were retained in the Caspian Sea for use against the British in Persia. The Soviets were too weak to maintain any significant defenses in the Arctic or in the Pacific; not until the early 1930s could the Arctic and Pacific Fleets be reestablished, initially in a largely symbolic way.

The destruction and disintegration of the former tsarist navy during the Civil War was a double blow. The fleet had been to a large extent physically destroyed, but the navy's human component had suffered perhaps even more. The navy, in contrast to the semiliterate peasant army, had in the Revolution played a decisive role. It was primarily sailors from the main base of the Baltic Fleet at Kronstadt who carried out the Bolshevik coup of 7 November 1917 (25 October, according to the prerevolutionary Julian calendar). Their feats had earned them the proud epithet "Vanguard of the Working Class"—which was to be taken away after the 1921 Kronstadt mutiny, during which the "Praetorian Guard" of the Bolshevik Revolution was crushed. The notion that "a sailor equals a Bolshevik" would, however, endure (and even lead to successful feature films, like *My z Kronshtadu* [We from Kronstadt, 1936] and especially Sergei Eisenshtein's masterpiece *Bronenosets Potëmkin* [1925]).

Early in the Soviet period, then, due to materiel and personnel losses, the former tsarist navy reached the lowest standard in Russian naval history. Furthermore, Russian bases and the former maritime frontier in the Baltic had substantially shrunk when the Bolsheviks lost all the advanced bases in Finland and along the Baltic coast. Only ice-bound Kronstadt, guarding the approach to Leningrad (ex–St. Petersburg, ex-Petrograd), remained.

The Old School versus the Young School

One of the little-known paradoxes of the period immediately after the Civil War was that the young Bolshevik cadets at the former Imperial Naval Academy (now the Voroshilov Naval War College) and the Frunze Army Staff College continued to be exposed in matters of strategy to the same curriculum as their predecessors. Ex-tsarist officers, pupils of Professor Klado, Boris B. Gervais, and Mikhail A. Petrov, taught the Bolshevik midshipmen that in order to achieve effective command of the maritime approaches, the socialist Motherland must aspire to a traditional high-seas fleet of battleships and cruisers.³¹ In other words, there was no shortcut, even for a new proletarian power like Soviet Russia.

Gervais and Petrov became known as exponents of the Old School. They were soon to be challenged by the Young School. Like their predecessors in the 1880s, the proponents of the Soviet Young School would insist that the command of the sea was to be obtained not through idle battleships but by cruisers, submarines, and other smaller craft aggressively attacking enemy shipping. Led by the Navy Commissar V. I. Zof and one of the younger Bolshevik commanders, L. M. Ludri, they silenced their opponents.³²

Unable to preach the tenets of the Old School, Gervais and Petrov underwent a remarkable metamorphosis between 1923 and 1924, proposing a new "active defense" theory that suggested the use of submarines and other small units under cover of land-based naval aircraft.³³ This approach proved acceptable to the Soviet high command. (Unsurprisingly, this theory has today proven attractive to another large regional power with a lengthy coast to defend, China.) The defenders of the Old School were to meet a characteristically ironic fate: Gervais and Petrov were eventually executed in the purges, even though their original belief in big ships was embraced by Stalin himself.

FIVE-YEAR PLANS AND SOVIET SHIPBUILDING

Stalin's ultimate determination to go ahead at full speed with his big-navy program must be understood against the background of available shipyards, material, naval architects, and skilled labor. This background, in turn, requires an evaluation of the Soviet Union's First Five-Year Plan (1928–32), as well as a brief overview of the Soviet shipbuilding industry in the Second Five-Year Plan (1933–37), when modernization of the principal old shipyards in Leningrad and Nikolaev resumed. The most interesting initiative in the shipbuilding industry, however, was the construction of entirely new yards in remote areas of the Arctic and the Far East. Shipyards were built also in the interior at important industrial centers that could be reached by canal from the open sea.

The new Shipyard 402 at Molotovsk (renamed Severodvinsk after 1957) can serve as a chilling example of these efforts. An estimated 120,000 slave laborers were brought here in the 1930s to construct the shipyard. Stalin envisaged it as becoming the largest shipyard with covered building ways in the world. The con-



Battleship Sovetskii Soyuz, 1938

struction shed measured some 1,100 feet in length and 450 in width; it could accommodate two super-battleships of the *Sovetskii Soyuz* class side by side. It remains today the only major shipyard in the world above the Arctic Circle capable of building the largest warships, now mostly nuclear submarines. During World War II the unfinished yard completed submarines laid down in Leningrad and at the new Krasnoe Sormovo Shipyard 112, near Gorkii on the Volga River, and brought to Severodvinsk through the canal-river system. After the war several *Sverdlov*-class cruisers were built there.

Another Stalinist creation of this period was Shipyard 199 at Komsomolsk, about 280 miles up the Amur River, started in 1932. Since the Amur is not deep enough, larger ships must be towed downstream after launching to be fitted out at coastal shipyards. Nonetheless, its location had the advantage of being out of range of Japanese aviation and out of reach by warships. This shipyard would later become a major shipbuilding facility for the restored Pacific Fleet. Like the yard in Molotovsk (Severodvinsk), the Komsomolsk yard was to be capable of constructing two battleships side by side in a covered building. In 1935 a large iron and steel mill, known as Amurstal, was begun about five miles from Komsomolsk. Complete self-sufficiency was not regarded as possible, however; components were sent in from the European factories and shipyards. No battleships were built at Komsomolsk, but in 1938 the keels of two heavy cruisers, *Kalinin* and *Kaganovich*, were laid down. These cruisers, commissioned only after the end of the war, were the first and last cruisers built and finished here; surface ships built at Komsomolsk were mainly destroyers and frigates. During the war the shipyard had a workforce of five thousand, half of them women, and six building ways in two large covered halls. In the 1960s Komsomolsk became, after Molotovsk, the second Soviet shipyard to construct nuclear submarines.³⁴

Although the Soviet Union had a longer coastline than any other nation, over sixteen thousand nautical miles (by comparison, the U.S. coastlines without Alaska total just under eleven thousand nautical miles), naval facilities and shipbuilding industries were historically confined to certain areas. The St. Petersburg/Leningrad area and Nikolaev in the south were particularly important, though the Black Sea shorelines (867 nautical miles) and the Baltic coast (988 nautical miles in pre-1991 borders) accounted for only a fraction of the total maritime frontier.

Thus the history of Russian shipyards on the Baltic Sea is inextricably linked with the history of St. Petersburg. The oldest shipyard, the Main Admiralty Yards, was founded in 1705 but closed in 1844; shipbuilding soon shifted to the New Admiralty Shipyards about a mile downstream on the left bank of the Neva (during the Soviet period renamed for A. Marti and referred to as No. 194). In 1908, the New Admiralty Yard merged with the second-largest shipyard in Russia, on Galernyi Island. The enlarged New Admiralty Yard built two *Gangut*-class dreadnoughts and two of the *Borodino* class. In 1939 the keel was laid down here for the first of the *Kronshtadt*-class battle cruisers (never finished) of Stalin's big-fleet program.

Next in size was the Baltic (Baltiiskii) shipyard, founded in 1856 (in the Soviet era the Ordzhonikidze Shipyard, No. 189), also capable of building the largest warships. It was located across the Neva from the Galernyi Island yard. The Baltiiskii yard launched two cruisers of the *Kirov* class (1935–39) and two of the *Chapaev* class (completed only after the war); in 1938 it saw the laying down of the first Soviet super-dreadnought, the *Sovetskii Soyuz*, meant to be the mainstay of Stalin's big-fleet program. After World War II Baltiiskii built six of the *Sverdlov* cruisers.

The Putilov Works (renamed in 1935 for A. A. Zhdanov and designated No. 190), divided into two separate plants, was the largest among the prerevolutionary private firms. Its original engine plant opened a second location as a shipyard in 1911, operated by the leading German shipbuilder, Blohm & Voss of Hamburg. Putilov was in charge of the construction of the innovative *Novik*-class destroyer.

Through 1917 the number of shipyards in the St. Petersburg area grew to thirteen. Nine of them also built steam engines, and two of them, Izhora and Putilov, also produced armor plate. Moreover, the Putilov and Obukhov works produced heavy artillery pieces as well.³⁵

The second major center of Russian shipbuilding was the old port of Nikolaev on the Bug River and the Black Sea. The Andre Marti Shipyard (No. 198) was once the largest private Russian shipyard on the Black Sea. Before the Bolshevik Revolution it built many warships, including two of four Russian Black Sea dreadnoughts. In the 1930s the Soviets initiated the construction here of such warships as cruisers of the Voroshilov and Frunze classes, work that culminated in the laying down in 1938 of the battleship Sovetskaya Ukraina of the Sovetskii Soyuz class and in 1939 of the battle cruiser Sevastopol. (Work on the two capital ships stopped in October 1940 and never resumed.) The Nikolaev yard was to witness in 1949 Stalin's capital-ship "swan song," when it started under direct orders of Stalin in 1949 the only Soviet postwar battle cruiser, the Stalingrad. The ship is said to have been about 60 percent complete and ready for launching when Stalin suddenly died in March 1953 and all work on the last Soviet dreadnought ceased. The other large shipyard in the area, "The Sixty-one Communards" (No. 200) yard, began in the eighteenth century as the major Admiralty facility on the Black Sea. Most of the battleships for the Black Sea were built here. In 1910 the government decided to close it, but it was reopened in the following year as the French-owned Russian Shipbuilding Corporation (RUSSUD). Since 1930 the yard had built light cruisers, destroyers, and submarines.

Owing to the severity of the Russian winter, all Russian building berths (with the exception of those on the Black Sea) were covered. If construction was to continue year round, it had to be done in a roofed shed with solid walls, with an end that could be opened when the vessel was launched. Because domestic shipbuilding potential was so limited and Stalin's expansionist dreams were so big, Soviet diplomats were ordered, paradoxically, to purchase from "capitalist enemies" what was needed for the "Big Navy Program": latest blueprints, parts, weapons, engines, even entire battleships. This approach would give Stalin's big-fleet program a bizarre twist, normally encountered in the world of fiction like George Orwell's Animal Farm-as teams of Soviet diplomats went abroad in search of naval technology. Because Japan was excluded and Britain uninterested, the choice was limited to the four remaining major naval powers. As early as 1934–35 negotiations were initiated with France to deliver plans for cruisers and flotilla leaders, but the French were reluctant to close the deal. Help, however, was found in fascist Italy. The firm Ansaldo of Genoa was approached during 1935 and agreed to deliver blueprints for a battleship of forty-two thousand tons of displacement (design UP-41). This design was used to make further improvements on the Soviet battleship "project 25," which would eventually lead to a heavier version, the super-dreadnought Sovetskii Soyuz class (project 23) of over sixty thousand tons' displacement and equipped with nine sixteen-inch guns. Ansaldo was also responsible for the first designs leading to the Kirov-class cruisers, to be built in Leningrad and in Nikolaev. Another Italian firm, Oderi-Terni-Orlando of Livorno, built and delivered to the Soviet navy (in the midst of the Spanish Civil War) the *Tashkent*—the fastest destroyer in the world.³⁶

Meanwhile, the United States was approached in 1937 about battleships, armor, and artillery. Various blueprints were purchased from Gibbs & Cox of Philadelphia, including three variants of a hybrid battleship–aircraft carrier of monstrous proportions and incongruous appearance. This amphibious hybrid was to carry forty planes on a short flight deck between the two gun decks. One variant was to have had four gun decks carrying eighteen-inch guns, which only the forthcoming Japanese battleships of the *Yamato* class possessed; other variants featured battleship-carriers with the same number of planes and ten to twelve sixteen-inch guns.³⁷

Stalin himself considered the task of purchasing foreign technology so important that in June 1938 he unexpectedly walked in on a session with the U.S. ambassador, Joseph Davies, to negotiate personally. Stalin's main preoccupation was not only to purchase blueprints of capital ships but to let the Americans build a whole battleship for the communist navy. He was prepared to expedite these purchases by all means, including the payment of prerevolutionary debts. He sent a high-level mission under Admiral Ivan S. Isakov during March 1939 to America, but its negotiations were made difficult by the resolute opposition of the U.S. Navy and were finally broken off when the Soviet Union invaded Finland.³⁸

Smaller countries were also drawn into Stalin's fantastic plan. The Soviets engaged the Czechoslovak Škoda works—prior to 1918 the major supplier of the Austro-Hungarian navy—to deliver naval guns;³⁹ an order was placed with the Swiss firm Brown-Boveri for a seventy-thousand-horsepower turbine set. But paradoxically, some of the most useful help, in terms of both quantity and quality, came from Nazi Germany—which was until August 1939 the chief ideological foe of the Soviet Union.

"WHY DID STALIN BUILD AN OCEANGOING FLEET?"

One of the key questions is: what circumstances drove the Soviet government, or at least its ruthless dictator, to the watershed decision to build an oceangoing navy, literally from scratch?⁴⁰

There were, of course, historical precedents, like the 1912 program, and the achievements in forced industrialization and militarization during the First Five-Year Plan were impressive, but it does seem that Stalin acted in part out of megalomania. This led Stalin to insist on planting a new shipbuilding industry, including gigantic shipyards, in distant areas to support the Northern (reconstituted in 1932) and Pacific Fleets (1933).⁴¹ The first warships to join the Northern Fleet had been sent from Leningrad by the Baltic–White Sea Canal, completed in the summer of 1933 by slave workers. The second impulse must have been the

worldwide naval arms race, which would have increased his fear of surprise attack, especially from Germany and Japan. A third cause can be traced to Stalin's desire to increase the international prestige of the Soviet Union as a great power and at the same time as the motherland of the world's proletariat, a motherland that understands how to arm itself.

Regarding the first motivation, between 1931 and the end of 1935 the Soviet Union produced for its armed forces, the "armed vanguard of the World Proletariat," almost fourteen thousand tanks and between 10,267 and 13,728 military aircraft—a staggering volume exceeding many times the entire arsenal of the world.⁴² Elements of these forces were to be tested soon in Spain and in China, and their quality gained international recognition. It is not hard to imagine Stalin who, according to people around him, loved big warships in any case—asking why the USSR could not build mighty warships as well to overawe its enemies.

Stalin's second motivation was his gloomy assessment of the international situation, in which three particular "non–status quo" powers—Japan, Germany, and Italy—were trying to bring about radical changes that might start another major war. Stalin knew that the USSR was isolated. He chose two strategies to answer this challenge. The first was the "If you cannot beat them, join them" strategy, by which he allowed Commissar for Foreign Affairs Maxim Litvinov to pursue collective security, culminating in the USSR's joining the League of Nations in 1934 and in signing mutual-assistance pacts with France and Czechoslovakia during 1935. The second strategy was that of massive militarization, even while disseminating intensive antiwar propaganda for domestic and foreign consumption. It was against this background that in 1936 the big-fleet program was launched.

In attempting to explain why, naval historian Captain Mikhail S. Monakov starts with Stalin's decision making.⁴³ Monakov remains convinced not only that Stalin himself made all the key decisions but that he made them in late 1935—six or ten months prior to the outbreak of the Spanish Civil War. Moreover, Monakov argues Stalin's decision was preceded by a well-orchestrated and thoroughly prepared propaganda campaign, in which fleet reconstruction was tied to a recent political education campaign on improving efficiency within the navy. The Soviet Union was then in the grips of the Stakhanovite movement, with its unrealistically high "norms," and the quest for higher efficiency and productivity was pursued within the armed forces with even greater vigor than in the civilian sector. The emerging Soviet patriotism, which had replaced the earlier "internationalism," functioned as a powerful stimulus to link up naval rearmament with the new nationalism.⁴⁴

As has been mentioned, Soviet production of tanks and warplanes had been remarkable and became one of the key factors in the new propaganda message that modern warships could be built from scratch just as quickly. Stalin refrained from mentioning fleet expansion publicly; he let others do it for him. At the XVII Party Congress in 1934, Marshal of the Soviet Union and Commissar for Defense Kliment E. Voroshilov linked the achievements in rapid industrialization with the expectation that "we shall be able to create our shipbuilding industry and soon produce our fleets, which will become the most powerful among workers-and-farmers navies."⁴⁵ In the following year pro-navy public pronouncements were rather muted until *Pravda* reported on an important 24 December meeting in the Kremlin in which Stalin and the entire Soviet leadership received a large delegation of younger commanders of the reestablished Pacific Fleet. At the end of the reception, the Soviet leaders invited the commanders of the Red Army and Navy to prepare and submit as soon as possible a draft proposal concerning the buildup of a "mighty sea and oceangoing fleet."⁴⁶ It was clear that this was more than a casual public-relations exercise; Stalin would not have allowed without premeditation or calculated purpose such a conspicuous public pronouncement.

Another factor on Stalin's mind was the international naval arms race, which in the mid-1930s seemed unstoppable. One of the first trespasses against the arms limitation treaties had already occurred, the completion by the Germans in 1932 of the "pocket battleship" Deutschland. This vessel did not fit any category laid down by the naval treaties of Washington (1922) or London (1930). Two more of the class were added before Germany launched two "fully grown" battleships of the Scharnhorst class in 1936, to be followed two years later by two even mightier ships of the Bismarck class. France first responded, building two fast battleships of the *Dunkerque* class. Italy reacted by pushing the construction of its first thirty-five-thousand-ton battleship, the Vittorio Veneto. In 1935 France announced contracts for a Richelieu class, two battleships of 38,500 tons each. Italy responded with two more heavy battleships, while England started five King George V-class battleships, thirty-eight thousand tons each. The United States produced two North Carolinas and four South Dakotas, armed with nine sixteeninch guns and exceeding thirty-five thousand tons. Last, but outsizing all their competitors, the Japanese started to build in 1937 the four Yamatos, the heaviest ships under steam, exceeding sixty thousand tons and armed with the biggest armament yet produced, nine eighteen-inch guns.⁴⁷

As early as 1935 the Soviet navy minister, Admiral V. M. Orlov, instructed the Voroshilov Naval War College to prepare preliminary drawings of battleships that would respond to the new challenge. Several projects were drawn up for the Baltic Sea, having in mind the new German battleship *Scharnhorst* as an opponent; for the Pacific Fleet a heavier type of thirty-five thousand tons and nine sixteen-inch guns, modeled on the British *Lord Nelson* class, was proposed. At the same time, as mentioned above, the Italian Ansaldo navy yard in Genoa was

commissioned by the Soviets to prepare plans for a forty-two-thousand-ton battleship, similar to the *Vittorio Veneto* class.⁴⁸

The first draft of a comprehensive big-fleet program was submitted by Admiral Orlov in early February 1936. It called for construction of sixteen battleships and twelve heavy cruisers during the next two five-year plans. The first substantive steps, however, were not undertaken until June 1936 in a government ukase detailing the composition of the future navy and its distribution among four fleets after the completion of the program in 1947.⁴⁹

On 28 November the Soviet public was told the details of this grandiose enterprise, in a speech of V. M. Orlov at an Extraordinary All-Soviet Congress. He stressed that the building of a "genuine [*nastoiashchii*] Big Fleet" comprising all classes of warships "was [due to] the worsening of the international situation and imperialist encirclement."⁵⁰ Orlov dwelled in particular on the vulnerability of the Soviet Union's maritime borders, especially vis-à-vis Germany, Italy, and Japan, which had recently attacked Spain, Abyssinia, and Manchuria and were members of the Anti-Comintern Pact. It was imperative, Orlov urged, to defend the Soviet Motherland from such aggressor states.

Were the Program's Targets Realistic?

Russian naval historians are in little doubt that even had Soviet involvement in the Second World War been somehow avoided—not that it could have been, they are convinced, Hitler being determined to attack the USSR-the targets set out in Stalin's big-fleet program were unrealistic and could never have been fulfilled. None of the capital ships laid down in 1938 and 1939 could have been completed even under peaceful conditions. Even "collecting every penny," as Stalin put it, would have been of no help. The Soviets lacked much basic industrial infrastructure: their gun factories could not yet produce or test guns of sixteeninch caliber; boilers for the powerful steam turbines could not have been manufactured until after the war; there was no sophisticated optical equipment for fire control.⁵¹ An increase in the size of the Red Navy by a factor of eleven within seven to ten years, given the USSR's limited resources and capabilities, seemed unattainable. In 1939 the navy's budget had reached 7.5 billion rubles-18.5 percent of all defense expenditure and almost 5 percent of the entire state budget of 153.1 billion rubles.⁵² The next year the four giant battleships of the Sovetskii Soyuz class, already laid down, alone accounted for almost one-third of the defense budget.53

None of the Russian naval historians can satisfactorily explain, however, why Stalin chose to become in the mid-1930s one of the last "navalists" or "Mahanians." Kasatonov considers several arguments why, including the international situation, the naval armaments race, and Stalin's megalomania, demonstrated in his fondness for "big things"—in this case an obsession with big battleships.⁵⁴ At least one Western historian sees it differently. Commander R. V. Herrick, arguably the most perceptive American expert on Soviet naval power, considers crucial Stalin's rational assessment of the Spanish Civil War and of the limitations imposed by the 1936 London Naval Conference. Apparently Stalin concluded that Soviet diplomats had no chance to be listened to, because they had no big naval guns behind them. Other countries looked down on the Soviet Union, assuming that the Soviet navy's potential lay in small submarines exclusively. Herrick also correctly recognized Stalin's long-term interest in transferring present and future Russian oceangoing warships to open waters rather than keep them bottled up in the Baltic and Black Seas.⁵⁵

It has been argued that in the beginning of the 1930s, Stalin would not oppose the prevailing theory of the limited and defensive function of the Soviet naval forces, as represented by the *Jeune Ecole*. Although inwardly he was already shifting toward defense by big ships, he would not oppose the removal of the old officers from the tsarist navy who like himself supported big ships—for many of whom "removal" was a one-way trip.⁵⁶ Furthermore, the initiative to build the big fleet could not have come from the military, for the Ministry of Defense was under the control of the army and traditionally viewing the navy as supporting the ground forces. Clearly there are inconsistencies either in our understanding of the events or in Stalin's behavior, or both.

In the end of 1935, under Stalin's direct orders, a special commission was appointed, representing the highest national-security decision-making bodies of the Soviet government—the Council of Labor and Defense of the Council of People's Commissars, as well as the chairman of the state planning agency—to review existing and future naval plans.⁵⁷ In early 1936 the commission severely criticized the implementation of the shipbuilding program of the current Second Five-Year Plan. Only two of eight light cruisers had been laid down. Such delays also plagued three destroyer leaders of the "Project 7" *Leningrad* class, under construction since 1932 (during the First Five-Year Plan). The first ship had been launched in November 1933 but three years later was still not in commission. Heads began to roll.

Consequently, between 1936 and 1937, amid intensified political purges, several plans for the "big navy" program were drafted. According to the April 1936 version there were to be completed by 1947 fifteen battleships, twenty-two large cruisers, thirty-two light cruisers, 162 leaders and destroyers, 412 submarines, and many ancillary vessels—exceeding 1,300,000 tons altogether. In June the number of battleships was increased to twenty-four and that of the light cruisers reduced to twenty; there were now to be 182 destroyers and 344 submarines.⁵⁸ Four or five subsequent modifications kept the cumulative tonnage of Stalin's big fleet growing. By the draft plan of August 1939 the number of combat vessels had grown to 699, over 2.5 million tons, in addition to several hundreds of auxiliary vessels totaling almost half a million additional tons.

The reborn Pacific Fleet was to account for almost 40 percent of this inventory, in order to be capable of defeating the Japanese on the open sea, to destroy their home bases and fisheries, occupy the Kurils, and disrupt Japan's sea communications. The Baltic Fleet was expected to sink not only all German warships but also the Polish, Swedish, and Finnish fleets, as well as the three small Baltic republics. Soviet submarines were expected to sink 120,000 tons of German shipping monthly. The Black Sea Fleet was to sink the naval forces of Italy, Romania, Bulgaria, and Turkey. As for the Northern Fleet, its task was to prevent Germany from landing troops in the Arctic and to disrupt communications in the North Atlantic.⁵⁹

There were, of course, substantial differences between views of the Army and Navy in this connection—over the use of aircraft carriers, for instance. Marshal Yegorov, the chief of the general staff, wanted six of them—two for the Northern Fleet and four for the Far East. Orlov at first wanted only two small carriers, and he later gave them up entirely to please Stalin.⁶⁰

Drafts were usually prepared in great haste and in great secrecy, not by naval experts but by top officials, who did not call upon the available pool of specialists and theoreticians. In any case, such experts, like M. A. Petrov, had already been dismissed from the navy. According to testimony of Admiral L. M. Galler, commander of the Baltic Fleet in 1936, one of the very few officers from the tsarist navy who survived the purges, Stalin would summon his fleet commanders in 1936 and ask them briskly, "What kind of ships with what kind of ordnance do we need?" Galler recalled that the fleet commanders would unanimously recommend that priority be given to submarines but disagreed on the bigger surface ships. The commander of the Pacific Fleet, Admiral M. V. Viktorov, favored big ships for his vast spaces, whereas the commander of the Black Sea Fleet, Admiral I. K. Kozhanov, naturally advocated a fleet consisting mostly of destroyers, with some cruisers. Stalin would impatiently and contemptuously release the admirals with the remark, "Even you yourselves have little idea what you need!"⁶¹

Fearing his wrath, the navy leadership timidly avoided internal debate on this issue. Admiral Orlov issued on 15 July 1936 the order, "Stop discussion between the industry and professors from the naval academy."⁶² The contrast with the intellectual climate of the tsarist navy twenty-four years earlier could not have been greater with the veil of absolute secrecy that surrounded Stalin's big-fleet program. Stalin himself insisted on it. *Gensek*—"General Secretary," as he was known—would regularly inspect the ship designs but would not allow fleet commanders to learn what was going on in their own shipyards.⁶³

The Spanish Civil War

Earlier accounts often stated that it was because of Spain that Stalin felt the sudden urge to provide the Soviet Union with an oceangoing fleet. However, sufficient evidence has now been assembled to prove that Stalin's decision preceded the outbreak of the Spanish mutiny in mid-July 1936 and that he already had the big-fleet idea firmly fixed in his mind in 1935, the year in which the Soviet Union was forced by Japan to, among other things, retreat completely from Manchuria. Soviet involvement in the Spanish Civil War was, nevertheless, an important reinforcement of the dictator's decision.

The seventy-six Soviet naval advisers and commanders of Republican submarines and torpedo boats were unable to transcend the self-limiting assumptions of Soviet strategy.⁶⁴ Unlike most of the traditional naval powers, the Soviet Union in those years had virtually no experience of service in foreign waters or of protecting convoys. They simply could not come to terms with the proper employment of a relatively powerful Republican fleet of cruisers, destroyers, and submarines, which they allowed—when it was not escorting convoys—to sit in port rather than take action against the weaker enemy.⁶⁵

Also, the merging of the Soviet and Republican navies did not work. The maritime war, which taught the Soviets a few serious lessons about contemporary naval warfare as inseparable from the exercise of airpower, revolved around the flow of foreign arms, vital to both sides. Between 80 and 90 percent of them came by sea. Soviet naval aviators scored a few hits on enemy targets, including a spectacular one on the German pocket battleship *Deutschland*, but because of their extremely poor ability to identify between enemy and friendly ships they usually posed a greater danger to the Republican ships they were supposed to protect.⁶⁶ Soviet manning of the Spanish submarines achieved little or nothing. Clearly, a more assertive strategy was needed.

During 1937 the Germans and Italians took the calculated risk of using their own submarines, and occasionally even surface warships, against merchant ships—this time not only Soviet ones—running supplies for Republican Spain. To counter this campaign, the French and British governments convened a conference, at which the Soviet Union also participated, at Nyon in Switzerland. The conference adopted a British plan to establish special routes and accompany convoys with French and British warships. This plan turned out to be the most efficient response to the Axis (Italo-German) piracy, but the notoriously weak Soviet navy remained unable to protect its own supplies shipped to its client government in Spain.⁶⁷

Pressed from London by Ambassador Ivan Maisky and his naval attaché, the Soviet leadership finally discussed the pros and cons of sending a small squadron, to consist of one or two cruisers, up to four destroyers, a few submarines, and a depot ship, to participate in the international naval force. A recent international agreement regulating the passage through the Dardanelles—a convention reached at Montreux, Switzerland, in July 1936, just as the Spanish Civil War broke out—authorized the USSR, as a Black Sea power, to send its warships through the Straits freely in peacetime.

Admiral Orlov, however, was against naval intervention in Spain. In his opinion the inadequate Soviet navy could not spare a single combat ship for overseas duties. In any case, he argued, a squadron would be so weak and obsolete that the impact on the country's prestige would be utterly negative. Stalin seemed to accept Orlov's view at the time but would later use it against him.⁶⁸ In July 1937 Orlov was relieved of his command, arrested, and sentenced to be shot as a British spy.

The Anglo-Soviet Naval Agreement of 1937

One of the important factors contributing to the big-fleet program—less to its adoption than to the speed and direction with which it was carried out—was the Anglo-Soviet Naval Agreement of 17 July 1937. This agreement with Great Britain—traditionally the leading sea power—provided Moscow a cloak of respectability in the international maritime sphere, as did its membership in the League of Nations in the political arena. Once again, the deteriorating situation in the Far East played a role in Stalin's decision to come to terms with England, since the Soviet navy could then direct the bulk of its big new warships against Japan.

It is not always easy to assess correctly the dual role that the Soviet Union played on the international stage, first as the headquarters of a communist world revolution, and only secondarily as an ordinary nation-state. Though it signed international treaties with the newly created Japanese puppet state of Manchuria and the new regime in Germany, Moscow had never abandoned the dream of world revolution.⁶⁹

Under the cover of its pacifist propaganda, the Soviet Union began to rearm soon after the victory of Nazism in Germany. In the naval field this began during 1935, when Great Britain, to accommodate German aspirations, signed in June 1935—in a clear breach of the Versailles Peace Treaty—an agreement with Nazi Germany lifting restrictions on all ship categories, including submarines. The Soviets saw no option but to catch up with naval rearmament, which they had neglected for so long.⁷⁰

One of the practical signs of the seriousness of Soviet aspirations was the Anglo-Soviet Naval Agreement of 17 July 1937, modified on 6 July 1938. The new agreement extended the tonnage limit of capital ships to forty-five thousand tons.⁷¹ The agreement also banned new Soviet cruisers until 1943, a proviso that Moscow countersigned knowing that it was already in breach of it. The Soviet Union had been invited to participate in none of the three international naval

conferences during the interwar period limiting naval armaments—in Washington 1921–22 and two in London, in 1930 and 1936. The Anglo-Soviet Naval Agreement was the first recognition of Moscow as a maritime power. The Soviet Union also became a late signatory of the London Naval Treaty of 1936, signed by France, the United States, and later Italy.

The absence of Japan from international naval agreements after 1936 enabled the Soviet Union to push for removal of restrictions regarding the Pacific Ocean. Article 9 duly removed limitations of size and armament from the Soviet Pacific Fleet and relieved Moscow of any obligation to inform London of its new construction in the Far East.⁷² Although the Soviet Pacific Fleet consisted at the time of three obsolete destroyers, Stalin was looking ten years ahead to a strong fleet capable of challenging even Japan. Entering the naval race so late, Stalin could not be squeamish about ignoring provisions of its new agreement. The Admiralty in London complained to the Foreign Office that whereas twenty-six ships had been laid down in Russian shipyards in 1938, including capital ships, the Soviets had declined so to inform London until 1 November.⁷³ Their lordships, unamused, considered the delay deliberate and wholesale evasion of the terms of the naval agreement.⁷⁴

The Soviet premier, Vyacheslav Molotov, announced on 15 January 1938 the creation of a separate naval ministry (Commissariat) and declared that a mighty oceangoing fleet was necessary not only for defense but, especially, for an offensive warfare.⁷⁵ The British naval attaché in Moscow, however, was deeply skeptical.⁷⁶ In July President Mikhail Kalinin told the workers of the Baltic Shipyard in Leningrad that they were entering into a fierce competition with leading capitalist countries and that they must overtake them all.⁷⁷ The attaché concluded that a decision had been taken at very high places to build battleships at the Baltic Shipyard.⁷⁸ He was right.

At the same time the purge of the senior naval personnel had reached its climax. Thus a certain Commander Yevseev, using the Spanish War as a pretext, was settling scores first with the Ludri School, which underestimated the offensive potential of air force and submarines in modern warfare.⁷⁹ Then Yevseev turned against both the Old and Young Naval Schools, accusing them of anti-Soviet activities. Because they "taught false doctrines thereby undermining the mighty Soviet Union," Yevseev stressed, the NKVD (the People's Committee of Internal Affairs) justly "decapitated the reptiles." Yevseev went on, "The Voroshilov Naval Staff College must become the forger of a sound naval doctrine. In the past this establishment has been the home of our enemies.⁸⁰ Its leaders must now expose all the harmful theories, which have been spread about and ensure that in the future strong and healthy strategical, operational and tactical opinions will take their place."

German-Soviet Naval Contacts

Few bilateral agreements had so revolutionary an impact on international relations as the Nazi-Soviet Nonaggression Pact of August 1939. Historians ever since have examined the origins of the pact and what motivated the two partners behind the scene.⁸¹ A related question is seldom asked: Did Stalin's *Flottenpolitik* play any role in his decision to approach Germany?

Nazi Germany turned overnight into the main arms provider of the Red Navy, to the surprise of many.⁸² Recent research in Soviet archives has confirmed that Stalin was deeply committed to building his big fleet and obtaining naval equipment from Germany even in previous Soviet-German trade negotia-tions—seven sessions since 1933. One Russian scholar familiar with Stalin's private papers and having unique access to Stalin's personal folder [*osobaia papka genseka*] argues that naval equipment and other armaments were specifically



Battle cruiser Kronshtadt, 1940

mentioned as early as December 1935.⁸³ The archival record shows an extraordinary, almost obsessive, involvement on the part of the *gensek* in naval matters; Stalin would follow the smallest details. This close involvement with Germany may constitute an important missing link in explaining Stalin's irrational behavior during the spring of 1941, in rejecting nearly a hundred warnings of the imminent German attack.

On 26 October 1939, a Soviet delegation of over sixty experts, headed by People's Commissar for Shipbuilding Ivan Tevosyan, descended on Berlin like a swarm of locusts. More than half of the delegates were interested in buying naval equipment. The initial wish list, which Tevosyan produced on the 27th at the Foreign Ministry, confirmed that the Soviets wanted to purchase mainly German technology, especially related to naval armaments.

The Soviet shortlist seems endless, even in retrospect: complete materials for the construction of four light cruisers; two hulls of heavy cruisers of the Admiral Hipper class; coastal and ship guns of all calibers; torpedoes and mines; optical range finders, fire control directors, and hydro-acoustical devices; and the entire set of blueprints for the battleship *Bismarck*, the *Hipper* class of heavy cruisers, the Scharnhorst-class battle cruiser, and the (never finished) aircraft carrier Graf Zeppelin. In the early summer of 1940, the Germans reluctantly allowed the Soviets to tow to Leningrad the half-finished heavy cruiser Lützow (renamed Petropavlovsk), to be completed there. Stalin was hoping that by hard bargaining, Hitler could be induced to sell further equipment needed for the big fleet-"leftovers" from the unfinished third Bismarck. When the Soviets found out that the Germans had six fifteen-inch guns and turrets in excess, two battle cruisers of the Kronstadt class, their hulls already laid down, had quickly to be redesigned to receive these much heavier main batteries. The new cruisers of the Chkalov class (project 68-I), under construction in Leningrad, had similarly to be redesigned to receive German 150 mm guns and triple turrets.

By early 1940, the war in Europe was raging, and the race for time was becoming desperate; the U.S. shipyards were not delivering any battleships to the Soviets, and the Germans were reluctant. It became obvious that the ambitious targets of the Third Five-Year Plan could not be met. On 27 July the "big fleet" program was reduced from fifteen battleships to ten, from sixteen battle cruisers to eight, and to fourteen cruisers, although the plan now envisioned, for the first time, two small aircraft carriers for the Pacific Fleet.⁸⁴ The Soviet military leadership began to prepare for strategic deployment in the West against possible German attack. Stalin, however, wished to delay involvement in a general war "among imperialists" as long as possible and to take advantage of the German technical assistance, especially naval. When between the summer of 1940 and June 1941 the Soviet naval high command wisely proposed to halt construction of capital ships to free capacity for lighter surface craft and submarines and to save high-quality steel for other armament, Stalin stalled. When Kuznetsov asked to scrap the two battle cruisers on the ways, still at least two years from completion, Stalin refused. He also refused to cancel work on the Sovetskii Soiuz class and ordered the construction of the cruisers to be continued regardless.⁸⁵

More comparative research must be done in order to prove that Stalin had pursued a Soviet *Flottenpolitik* since the end of 1935 and that it played a central role in the Nazi-Soviet negotiations in the late 1930s. Moreover, if that policy weighed so heavily on Stalin's mind and his decision making, since Nazi Germany had become in 1939 the sole foreign supplier of vital naval equipment, Stalin must have strongly desired to avoid war with Germany in order to win even one extra year for the completion of the big warships. Thus, the "big fleet" hypothesis would directly oppose what is known as the "Icebreaker" theory, that Stalin wanted to attack Hitler first.⁸⁶ The big-fleet hypothesis is still plausible even if Stalin's navy, which relied so much on German assistance, might have been eventually used against Germany (rather than against Japan after 1946); this factor makes Stalin's decision-making process even more intriguing. In 1941, however, the years required for the fleet's construction lay ahead, and Stalin had weighty reason for keeping the Nazis busy elsewhere.

"GOOD ONLY AS A MISSILE TARGET"

Russia's history of wars and revolutions, the complex geographical impediments to access to open seas and to ice-free harbors, have returned the country, especially after major wars, to the persistent question of what kind of naval strategy would be optimal. There are three principal issues. First, should the strategy be offensive or defensive, directed against sea or land? Second, what kind of a navy should Russia have, and how large? Third, where should ships be built, maintained, and stationed?

Stalin's big-fleet program was driven by the slogan "catch up and overtake" [*dognat i peregnat*] (i.e., the West), a common phrase during the forced industrialization of the early Soviet era. The decision to build big warships, battleships, and cruisers was, finally, Stalin's own. Dissatisfied with his fleet commanders, whose wishes were bound to be divergent, he provided his own answer, in favor of big ships. Russian naval experts had time after time demonstrated that these big ships were ill suited to the shallow waters and short distances of the Baltic and Black Seas. Furthermore, big fleets could not resolve Russia's fundamental geographic and strategic problems. How could a great power with the largest landmass in the world and four separated sea frontiers hope to protect enormously long maritime frontiers without allies and to exercise *Weltpolitik* at the same time?

Stalin seems to have fallen into much the same trap that his tsarist predecessors tried to avoid after Tsushima. The big-fleet program was marred by its lack of a clear strategic purpose, except to serve Stalin's megalomania to use it (prior to the arrival of the nuclear deterrent) as the ultimate military arbiter. Admiral Kuznetsov later recalled that toward the end of 1939 he once asked Stalin, in a moment when the dictator seemed to be in a good mood, how he planned to use the big ships under construction, particularly in the shallow Baltic Sea, which could be easily mined, and when Germany had ceased to be the main adversary. Stalin angrily replied: "We shall build them even if we had to scramble the last penny!" "Thus ended the conversation about battleships," Kuznetsov has commented drily, "whose construction was already going full speed ahead, while I as a Navy Minister was still not quite clear in my head why they were being built at all!"⁸⁷

After the Soviet victory in 1945, incredibly, Stalin resumed his dream of acquiring an oceangoing fleet but found that the acquisition of battleships from abroad was even more troublesome than before the war. Stalin, who still refused to have aircraft carriers, decided to settle for heavy (battle) cruisers, which became the focus of his fantasy in the last three years of his life. The resulting *Stalingrad* battle cruiser, however, was never to be completed. When Stalin died, Stalingrad died with him. The construction of cruisers, however-the launching of the Kirov class in 1936, to which the Chapaev class was added after the war-went ahead under full steam. It continued even after Stalin's death in 1953 through the Sverdlov class, the most accomplished Soviet cruiser, of which half out of the originally planned twenty-four hulls were completed by 1960. Thereafter the Soviet Union took a different course as a naval power, relying more on nuclear submarines with fast missile boats. Strategically too the world geopolitical map changed radically after World War II. The superpower rivalry between the United States and the USSR meant that the small and technologically inadequate Soviet navy had to face global tasks on the world oceans while still confronted with the old limitations in its regional waters. However, all of the Soviet navy's former rivals, including the Germans, the Italians, and above all the Japanese, were no longer threats after 1945. The lack of hostile neighboring naval powers made the gradual resurgence of Soviet seapower possible.

While the Soviet Union's strategic dilemma regarding the closed Black Sea remained the same, the USSR acquired two large ice-free naval bases, Kaliningrad (ex-Koenigsberg) in the Baltic and Port Arthur in the Far East. However, when measured against the superior NATO and U.S. naval power in the Mediterranean, the Atlantic, and the Pacific, these Soviet gains were only marginal, not revolutionary improvements in the global strategic constellation. The idea of a big fleet had to be abandoned and replaced by a strategy based on smaller warships, harassing enemy shipping, and securing command of the sea by other means.

Thus in 1946, instead of a battle fleet of twenty-four new battleships and battle cruisers able to challenge capitalist navies throughout the world, the postwar Soviet navy had only its two old and several-times-refloated ex-tsarist dreadnoughts in the Baltic, one leased Royal Navy battleship of the same age in the Northern Fleet, and two more dreadnoughts in the Black Sea, consisting of one ex-tsarist and one ex-Italian war-reparation battleship. It had no battleships in the Pacific Fleet at all.

However, Stalin's successors wisely abandoned the urge to possess huge and expensive capital ships for showing the red flag abroad. Nikita S. Khrushchev even denigrated his own flagship during a 1959 trip to the United States "as good only for state visits and ... as a missile target!" and announced that the remaining cruisers under construction were to be scrapped.⁸⁸ This casual dismissal of the

Soviet flagship was indeed the death knell of Stalin's big-fleet program—but not yet the end of the Red Navy itself. One could consider the launching of *Sputnik* in 1957 to be the new watershed in the development of the Soviet navy. The new leaders of the Soviet Union, while challenging the American superpower, looked to space, not the sea.

Under the leadership of Admiral Sergei Gorshkov, Kuznetsov's successor, the Soviet navy would undergo a remarkable metamorphosis, combined with a radical modernization and expansion program. During the 1970s, the Soviets achieved a close parity with the U.S. Navy and in some categories—like submarines and small missile-carrying boats—even gained the upper hand. In 1972, Norman Polmar, the foremost U.S. authority on the Soviet navy, stated that "today the Soviet Union can boast the world's largest and most modern surface navy; the largest and most modern ocean research and fishing fleets."⁸⁹

By the early 1980s, while still finding it impossible to challenge the U.S. supremacy in large fleet carriers, Russia was still a power to be reckoned with. Less than ten years later, however, the once-threatening Soviet navy, together with the rest of the Soviet armed forces, began an irreversible decline. In a matter of years the collapse of the world's most powerful war machine was clear for all to see in the rusting ship-graveyards of Petropavlovsk, Vladivostok, Polyarnoe, Kronstadt, Kaliningrad, and Sevastopol. But even after more than a decade of steady decline—as well as tragedy, such as the loss of the nuclear submarine *Kursk* with its entire crew—the Russian navy still remains nuclear and the second most powerful in the world. It overreached itself under Stalin, but under Gorshkov it took a more innovative approach against which the United States for a while could not find an adequate response. It is now in the hollow of a wave, but who can tell when the next uplift will arrive?

NOTES

- Schwendemann, Heinrich, Die wirtschaftliche Zusammenarbeit zwischen dem Deutschen Reich und der Sowjetunion von 1939 bis 1941: Alternative zu Hitlers Ostprogramm (Berlin: Akademie Verlag, 1993). English summary in Cahiers du monde russe 36, nos. 1–2 (1995), pp. 161–78.
- See Admiral Kuznetsov's memoirs, *Krutye* povoroty (Moscow: Molodaya Gvardiya, 1995).
- Risk was an indispensable element of Admiral Tirpitz's naval strategy to challenge England, as

it had to be assumed that England could smash the budding German naval program during its first years after inception (hence the nickname of Tirpitz's navy during the first years, *Risikoflotte*).

- 4. D. C. Watt's pioneering article "Stalin's First Bid for Sea Power, 1933–1941," U.S. Naval Institute *Proceedings* (June 1964), is a rare exception.
- Gabriel Gorodetsky, Grand Delusion: Stalin and the German Invasion of Russia (New Haven, Conn.: Yale Univ. Press, 1999).

- I. P. Spasskii et al., *Istoriya otechestvennogo* sudostroieniya (St. Petersburg: Sudostroienie, 1996), vol. 1, pp. 170–71.
- 7. A good example that illustrates this ignorance in the West is the commentary to Sergei Gorshkov's relevant chapter covering the reconstruction of the Soviet navy, 1928–41. Although Gorshkov refers explicitly to the big-navy construction program of the late 1930s, his American commentator, Vice Admiral J. F. Calvert, decided to bypass the reference completely. See Sergei G. Gorshkov, *Red Star Rising at Sea* (Annapolis, Md.: Naval Institute Press, 1974), pp. 65–75.
- In the early days of the war *Novik*, accompanied by destroyers, led sorties to harass the Japanese blockade around Port Arthur. After the loss of cruiser *Novik* in 1904 the name was transferred to the fast destroyer built in 1912 in the Baltic. See also Charles E. Adams, "Der Wiederaufstieg der russischen Kriegsmarine in den Jahren 1905–1914," *Marine-Rundschau* 1 (1964), pp. 12–22.
- Evgenii F. Podsoblyaev, "The Russian Naval General Staff and the Evolution of Naval Policy, 1905–1914," *Journal of Military History*, no. 66 (January 2002), pp. 57–69; and J. N. Westwood, *Russian Naval Construction*, 1905–1941 (London: Macmillan, 1994), p. 34.
- Among his more than one hundred works on naval strategy and history, the most frequently quoted are: *Voenno-morskaya istoriya* [Military history; 1901]; *Sovremennaya morskaya voina: Morskie zametki o russkoyaponskoi voinei* [Modern naval warfare: Maritime notes on the Russo-Japanese War; 1905]; and *Etyudy po strategii* [Studies on strategy; 1914].
- 11. The legendary mutiny took place on board the battleship *Knyaz Potëmkin Tavritchesky*, glorified during the Soviet period by Sergei Eisenshtein's film masterpiece, made in 1925. After the mutineers surrendered, the disgraced ship was renamed *Panteleimon*.
- 12. A. P. Semenov, *Rasplata* (1906, repr. St. Petersburg: Gangut, 1994).
- M. Rimskii-Korsakov, "Threat from the East," *Morskoi sbornik* 1 (1907), pp. 61–73. For the analysis of the propaganda slogan "Yellow Peril" see my *What Is Asia to Us*?

Russia's Asian Heartland Yesterday and Today (Boston: Hyman Unwin, 1990).

- M. A. Petrov, *Podgotovka Rossii k mirovoi* voine na more [The preparedness of Russia for world war at sea] (Leningrad: Gosvoenizdat, 1926), p. 96.
- 15. Vickers had offered to build the first Russian dreadnought in twenty months, which must have offended Russian national pride. See Spasskii, vol. 3, p. 131ff.
- Cuniberti designed the first Italian dreadnought, *Dante Alighieri*, in 1907, which had its four triple-gun turrets on the centerline. Westwood, p. 66.
- 17. Admiral Gorshkov's negative verdict on the supposed low quality and "slavish imitation of foreigners in the types of ships, often imperfect and obsolete" does not seem fair, especially as he praises on the same page A. N. Krylov, I. G. Bubnov, and others, as "greatest Russian shipbuilders." Cf. Sergei G. Gorshkov, *The Sea Power of the State* (Annapolis, Md.: Naval Institute Press, 1979), p. 91.
- Westwood (p. 78) calls it " the Dreadnought among destroyers."
- 19. Ibid., pp. 78-89.
- 20. The results of the census are neatly summed up and discussed in terms of global impact by one of Russia's leading scientists, D. Mendeleev, in his masterpiece *K poznaniyu Rossii* [Toward understanding Russia] (St. Petersburg, 1907).
- 21. As shown by Podsoblyaev (pp. 37–70), using extensively both the contemporary press and now accessible naval records for the period of 1905–18. See also Westwood. See also contemporary reprints of the selected pre-1914 discussion in *Voenno-morskaia ideia Rossii: Dukhovnoe nasledie imperatorskogo flota* [The Russian naval idea: The intellectual heritage of the imperial fleet], ed. A. E. Savinkin et al. (Moscow: Russkii put, 1999). The Navy General Staff (known as "Genmor") was founded in 1906 as part of the postwar reforms.
- 22. Westwood, p. 8.
- Its influential journal carried the title *More i* ego zhizn [The sea and its life]. Ibid., pp. 8, 10, 46.
- 24. Ibid., pp. 14–20; and Spasskii, vol. 3, pp. 144– 72, passim.

- "Sobolev 2" [pseud.], "Soedinie flota" [Bringing the fleet together], *Morskoi sbornik* 7 (1914), pp. 207–12.
- 26. Podsoblyaev, p. 52.
- Weyers Taschenbuch der Kriegsflotten 1914 (Munich: J. F. Lehmann Verlag, 1914), pp. 515–17; Nauticus 1914: Jahrbuch für Deutschlands Seeinteressen (Berlin: E. S. Mittler Verlag, 1914), p. 534; René Greger, The Russian Fleet 1914–1917 (London: Allen, 1973), p. 9.
- 28. Spasskii, vol. 3, p. 527.
- 29. The "dawn" metaphor is especially apt in that by coincidence, the Bolshevik coup known as the October Revolution began with a salvo from the cruiser *Aurora*—named for the Greek goddess of dawn.
- 30. J. Meister Greger, Soviet Warships of the Second World War (London: Macdonald and Jane's: 1977), pp. 15–19; Siegfreid Breyer, Grosskampfschiffe 1905–1970 (Munich: Bernard and Graefe, 1979), vol. 3, pp. 119.
- Mikhail S. Monakov, "Sudby doktrin i teorii" series in *Morskoi sbornik*, nos. 11–12 (1990), nos. 3–4 (1991), no. 3 (1992), nos. 3–5 (1994). "Gervais" is the familiar Western rendering, properly Zhervé (Жерве).
- 32. For Zof, see *Morskoi sbornik* 5 (1925), p. 16; for Ludri, *Morskoi sbornik* 10 (1927), p. 26.
- 33. M. A. Petrov, writing in *Morskoi sbornik* 9 (1923), p. 48.
- 34. Norman Polmar, *The Naval Institute Guide to the Soviet Navy* (Annapolis, Md.: Naval Institute Press, 1991), p. 429.
- 35. Compiled from Boris V. Drashpil and Christian de Saint Hubert, "Main Shipyards, Engine Builders and Manufacturers of Guns and Armour Plate in the Saint Petersburg Area up to 1917," *Warship International* 4 (1985), pp. 333–61; Polmar, *Guide*, pp. 413–28; Spasskii, vol. 4.
- Compiled from René Greger, "Sowjetischer Schlachtschiffbau" [Soviet Battleship Construction], Marine-Rundschau 71 (1974), pp. 461–79; S. Breyer, "Sowjetischer Schlachtschiffbau," Marine-Rundschau 72 (1975), pp. 141–63; Jürgen Rohwer and Mikhail S. Monakov, Stalin's Ocean-Going Fleet: Soviet Naval Strategy and Shipbuilding Programmes 1935–1953 (London: Frank Cass, 2001), p. 74f.

- Breyer (1975), pp. 161–64; Rohwer and Monakov, *Stalin's Ocean-Going Fleet*, pp. 88–89.
- Foreign Relations of the United States: The Soviet Union 1933–1939 (Washington, D.C.: U.S. Government Printing Office, 1952), pp. 457–91, 670–707, 869–903; J. E. Davies, Mission to Moscow (New York: Simon and Schuster, 1941), p. 208; and Thomas Maddux, American Relations with the Soviet Union 1933–1941 (Tallahassee: Univ. Presses of Florida, 1980), pp. 86–88, 96–98.
- A. Pokorná, "Czechoslovak-Soviet Armaments Cooperation in the Second Half of the 1930s," *Historie a vojenství* (Prague), no. 5 (1982), pp. 56–77 (in Czech).
- 40. The subhead on page 103 is the English for the title of M. Monakov, "Zachem Stalin stroil okeanskii flot?" *Morskoi sbornik* 12 (1998), pp. 74–79.
- 41. Rohwer and Monakov, *Stalin's Ocean-Going Fleet*, p. 42.
- David R. Stone, Hammer and Rifle: The Militarization of the Soviet Union 1926–1933 (Lawrence: Univ. Press of Kansas, 2000), p. 214.
- 43. Monakov, "Zachem Stalin stroil okeanskii flot?"
- 44. For patriotism, see Erwin Oberländer, Sowjetpatriotismus und Geschichte: Eine Dokumentation (Cologne: Verlag Wissenschaft und Politik, 1967).
- 45. I. V. Kasatanov, ed., *Tri veka Rossiiskogo Flota 1696–1996* [Three centuries of the Russian fleet] (St. Petersburg: Logos, 1996), vol. 2, pp. 339–40.
- 46. The Russian phrase is *bolshoi Morskoi i* okeanskii flot (Pravda, 24 December 1935).
- 47. Jürgen Rohwer, War at Sea 1939–1945 (Annapolis, Md.: Naval Institute Press, 1996), p. 9
- 48. Rohwer and Monakov, *Stalin's Ocean-Going Fleet*, p. 62.
- 49. Kasatonov, p. 337.
- 50. *Pravda*, 29 November 1936, p. 3. It was also Orlov's swan song—he would vanish the next year in the purges.
- Monakov, "Zachem Stalin stroil okeanskii flot?" p. 76; Breyer, "Sowjetischer

Schlachtschiffbau"; and A. M. Petrov et al., *Oruzhie Rossiiskogo Flota* [Weapons of the Russian fleet] (St. Petersburg: Sudostroienie, 1996).

- 52. Kasatonov, p. 349.
- V. N. Krasnov, "Linkory tipa 'Sovetskii Soyuz'" [Soviet Union–class battleships], Morskoi sbornik 6 (1990), p. 63.
- 54. Kasatonov, pp. 337–39; see also Kuznetsov's testimony in A. S. Kiselev, ed., Admiral Kuznetsov (Moscow: Mosgorarkhiv, 2000), pp. 105, 255–56; V. N. Krasnov, "Stalinshchina v VMF i korablestroenii [The Stalin era in the navy and shipbuilding], Sudostroenie 7 (1990), pp. 64–69.
- 55. Kasatonov, p. 339; R. V. Herrick, Soviet Naval Strategy: 50 Years of Theory and Practice (Annapolis, Md.: Naval Institute Press, 1968), pp. 38–45.
- 56. Kasatonov, p. 343.
- 57. Ibid., p. 340. Summed up in Admiral Kuznetsov's personal notes and published in the posthumous *Admiral Kuznetsov*, pp. 100– 106. The STO (Sovet Truda i Oborony, the Council of Labor and Defense), within the Sovet Narodnykh Kommissarov (Council of People's Commissars), was established between 1922 and 1937 as nominally the highest decision-making body responsible for defense.
- Rohwer and Monakov, "The Soviet Ocean-Going Fleet, 1935–1956," *International History Review* 18, no. 4 (November 1996), p. 830; Kasatonov (p. 345) has different figures for destroyers and submarines.
- 59. Kasatonov, p. 350; Rohwer and Monakov, "The Soviet Ocean-Going Fleet, 1935–1956," p. 856.
- 60. Kasatonov, p. 341; Rohwer and Monakov, *Stalin's Ocean-Going Fleet*, p. 97.
- 61. N. G. Kuznetsov, *Nakanune* [On the Eve] (Moscow: Voienizdat, 1969), p. 282.
- 62. Kasatonov, p. 342.
- 63. Ibid., p. 349.
- 64. N. G. Kuznetsov, *Na dalekom meridiane* [At the distant meridian] (Moscow: Nauka, 1988), and *Nakanune*, pp. 115–84.

- 65. Willard C. Frank, "Naval Operations in the Spanish Civil War 1936–1939," *Naval War College Review* 37 (1984), pp. 24–55, esp. p. 39.
- 66. Ibid., pp. 39-40.
- See ibid., p. 44, and Franco Bargoni, L'impegno navale italiano durante la Guerra civile spagnola 1936–1939 [The involvement of the Italian navy in the Spanish Civil War] (Rome: Ufficio Storico della Marina Militare, 1992).
- 68. Rohwer and Monakov, *Stalin's Ocean-Going Fleet*, pp. 65–66.
- 69. British Embassy Moscow to Foreign Office, Annual Report for 1937, The National Archives (TNA): Public Records Office (PRO)/Foreign Office files: FO 371/23699/N 2166.
- L. Ivanov, Morskoe sopernichestvo imperialisticheskikh derzhav (Moscow: Sotsekiiz, 1936), and an article by the same author on the Anglo-Soviet Naval Agreement of 1937, in Morskoi sbornik 9 (1937), pp. 114–25.
- 71. See British Embassy Moscow to FO: dispatches of 17 January, 4 February, 8 July, 12 September, and 12 November 1938, TNA: PRO/FO 371/22820 and 22296, and FO 371/23699 (Alliances and Treaties).
- 72. This would directly apply to the *Chapaev*class cruisers built in the new shipyard at Komsomolsk.
- 73. According to article 7 of the agreement, each government was expected to furnish particulars of warships under construction within one month of the treaty's coming into force, which the Soviets obviously ignored.
- 74. Admiralty to FO, 10 January 1939, TNA: PRO/FO 371/22820/A235/235/45.
- 75. See in the lead article in *Pravda* and *Izvestiya* of 17 January 1938: "The mighty socialist industrial potential is capable of fulfilling any and every order of the People's Navy Commissariat.... The mighty specialized shipyards (Komsomolsk, Murmansk, Arkhangel, Vladivostok ...) that are being rapidly completed at the present time will launch ships of all categories.... The vital interests of our mighty Soviet land demand that we should possess a powerful fleet capable not only of defending itself but, in case of need, of taking the offensive and destroying the enemy in his own territorial waters."

- 76. In Lord Chilton's dispatch to FO, 17 January 1938 (TNA: PRO/FO 371/22296/N 360 and N465).
- 77. Pravda, 3 July 1938.
- Naval Attaché to Admiralty, Dispatch no. 7 of 8 July 1938 (TNA: PRO/FO 371/22296/N).
- 79. For Commander Yevseev, *Krasnoj flot* of 16 August 1938. The Ludri School was named after M. I. Ludri, who died in the Gulag; see *The Times* (London) of 31 August 1938, which lists some of the most prominent victims of the Navy. He perished together with Professors Gervais and Petrov, among others.
- 80. The Voroshilov Naval Staff College was the former Imperial Nikolaev Naval Academy in St. Petersburg-the highest educational institution for naval officers. The purge of the professors of the naval academy was one of the widest in the ranks of the Soviet armed forces; it led to the destruction of practically the entire faculty, under the pretext that they had taught the wrong doctrines. The Naval Academy did not recover until the 1960s. See memoirs by Kuznetsov and others. According to The Times of 31 August 1938, the following naval officers perished in the purges: Admiral Orlov, commander in chief (C-in-C) of the navy; Admiral Zhivkov, C-in-C Baltic Fleet; Admiral Ludry, head of the Naval Academy; Admiral Ivanov; Admiral Viktorov, Orlov's successor; Admiral Muklevich, head of naval construction; Admiral Kozhanov, C-in-C Black Sea Fleet; Admiral Kireev, C-in-C Pacific Fleet; Admiral Dishenov, C-in-C Northern Fleet; and Admiral Kadatsky, C-in-C of the Far Eastern Amur Flotilla. Among the few survivors from the former tsarist navy were Admiral Galler, the chief of naval staff, and his first deputy, Admiral Isakov (who traveled

in 1938–39 to the United States on a shopping trip—without success).

- See in particular D. C. Watt, "The Initiation of the Negotiations Leading to the Nazi-Soviet Pact: A Historical Problem," in *Essays in Honour of E. H. Carr*, ed. Chimen Abramsky and Beryl J. Williams (London: Macmillan, 1974), pp. 152–70.
- 82. One of the first works dealing with the naval aspects of Russo-German relations was Gerhard Weinberg, *Germany and the Soviet Union 1939–1941* (Leiden, Neth.: E. J. Brill, 1954).
- 83. L A. Bezymensky, "Sovetsko-Germanskie Dogovory 1939g.: Novye dokumenty i starye problemy" [The Soviet-German pact of 1939: New documents and old problems], *Novaia i noveishaia istoriia* [New and newer history] 3 (1998), pp. 3–26.
- Schwendemann, p. 102; Rohwer and Monakov, Stalin's Ocean-Going Fleet, p. 113.
- 85. Rohwer and Monakov, "The Soviet Ocean-Going Fleet, 1935–1956," p. 861, and *Stalin's Ocean-Going Fleet*, pp. 110–43.
- 86. For the best update see Teddy Uldricks's review article "The Icebreaker Controversy: Did Stalin Plan to Attack Hitler?" *Slavic Review* 58, no. 3 (1999), pp. 626–43.
- From the Kuznetsov Family Archives, original; published posthumously in *Admiral Kuznetsov*, ed. A. S. Kiselev (Moscow: Mosgorarkhiv, 2000), p. 105.
- Leningradskaya Pravda, 23 March 1960. The scrapping applied to a dozen Sverdlov-class cruisers under construction.
- Norman Polmar, Soviet Naval Power: Challenge for the 1970s (New York: Crane, Russak, 1974).