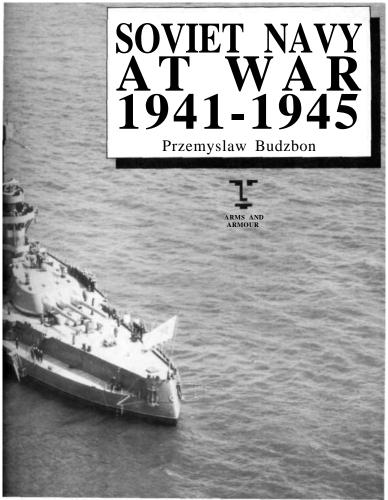


# Warships fotofax soviet NAVY AT WAR 1941-1945

Dedication: To Eva

Front cover illustration: The destroyer *Razyaryonnyi*; see plate 23

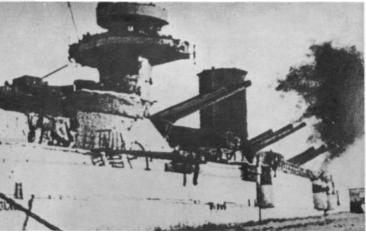
Back cover illustrations: Top: G5-class motor torpedoboats: see plate 61. Bottom: The battleship Marat: see plate 1. I. In the 1920s the Russian Navy had three battleships, survivors of the Gangut Class. During the 1930s they underwent 'face-lifting' modernization which although attending the battlefleet's life did little to enhance their inadequate protection. Marat (namesake of the modernized class, she being the first to be taken in hand) is seen here during the 1937 Coronation Review at Spithead, showing her outdated layout which originated from Admiral Cunnibetti's design of 1908. (Imperial War Museum, Neg No. MH7)





 In June 1941 the Russian Navy had approximately 290000) personnel on active service; this number had increased to 415,000 by June 1943 and to 600,000 by May 1945. The photograph shows Russian sailors lighting ashore; besides the Naval Infantry, which totalled some 100,000 men, almost 390,000 sailors (not included in the above list) were deployed ashore; they suffered heavy losses because of a lack of field training.

3. On 23 September 1941 German dive-bombers damaged Marat at Kronshtadt. A bomb ignited the torpedo magazine and in the resulting explosion the forward part of the hull as far as the forefunnel was destroyed and sank. The remainder of the ship was intact and, following provisional repairs during the winter of 1941-2, she was employed as a floating battery (shown here); from May 1943 she sailed under her original name Petropaviovsk.



# **INTRODUCTION**

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The Navy comprised 470 warships and 670 minor vessels divided between the Baltic, Black Sea, Barents Sea and Pacific Fleets, with flotillas in the Caspian Sea and on the Rivers Amur. Danube and Prypyat. A further 2019 major warships in various stages of construction were evidence of an ambitious desire to create an ocean-going navy under the third Five-Year Plan of 1938-43.

Since the struggle against the Cermans was decided by land campaigns, the Navy's influence was only marginal - activity being concentrated on support of the armies and attempts to cut the sea lanes in the vicinity of land fronts. Following heavy losses during the withdrawals from the Baltic and the Black Seas, the Russians were unwilling to risk larger surviving units whose maintenance in besieged Leningrad or small Caucasian ports was therefore often neglected.

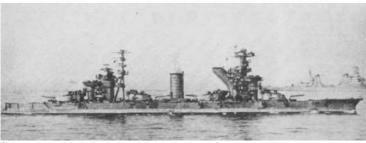
The entire burden of the surface naval war was now borne by the 'mosquito' fleet: minesweepers, motor boats, patrol craft and 1,300 mercantile conversions - adapted trawlers, tugs and riverine vessels. These were used in all environments - open sea, lakes and rivers - and for all sorts of duties throughout the war, and they suffered heavy losses.

Operating with varying intensity and success, these light forces made little impact on the German convoy system. The Russian submarine arm, dogged by technical shortcomings and often inadequately trained crews, was unable to impede even training manoeuvres conducted by U-boats in the central Baltic. In fact, it was only the strength of the land offensive in 1944-45 that enabled the Baltic Fleet to deploy in this area at all.

During the two weeks of war against Japan, in September 1945, the Pacific Fleet (strengthened by US-supplied ships) successfully executed assaults against ports in Korea and southern Sakhalin, and in the Kurile Islands. No opposition was encountered, the Japanese Navy having been annihilated by the Allies.

On VJ-Day the Russian Navy comprised 530 warships and 1.700 minor vessels of which some 88 and 1,000 respectively had been built in home yards during the war, while 166 and 340 respectively had been supplied under Lend-Lease. Although most of the Russian ships were obsolescent or worn out, equipment obtained from the Allies during the war. and the ships captured from the Germans in 1945 together provided a solid base from which was developed a modern, sophisticated navy within the next four decades.

The photographs in this book have been assembled from collections owned by the Imperial War Museum, London (negative numbers of IWM pictures are given and prints can be ordered from the museum); National Archives and Records, Washington, DC; Aldo Fraccaroli in Switzerland; Boris V. Lemachko in the Soviet Union; Jerzy Micinski and Marek Twardowski in Poland; Adrian Vicary in Norfolk, England; and the Author.

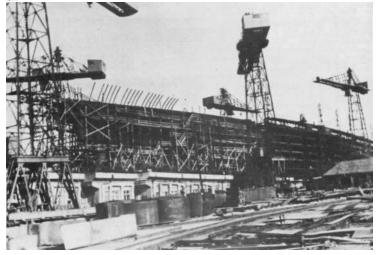


#### 44

4. Sevastopol seen just after the war, carrying British radars and increased AA armament. As a sop to Stalin's ocean going naval ambitions, the Russian battleships remained in front-line service well into the 1950s. Their evident obsolescence was turned to good account in official publications which praised the genius of Russian ¥5

shipwrights who could turn out shipwright a lifespan of more than forty years, while ships built in capitalist countries had long since gone to the breakers. Not until after Stalin's death were they relegated to training duties and in February 1956 they were ordered to the breakers by Admiral Gorshkow during only his sixth week as Commander-in-Chief of the Navy.

 The decision to build an ocean-going navy was urged by Stalin personally, who overcame the opposition of high-ranking officers during the purges of 1937-8. The 59,150-ton. 28-knot battleship Soverskaya Ukraina (seen on the slipway at the Marti Yard in Nikolayev in August 1941) was to be armed with three triple 406mm, six twin 152mm, eight 100mm AA, thirty-two 37mm AA and be protected by a 420mm belt. Of the planned four, three ships were laid down before the project was abandoned on 10 July 1941. / Lerzy Micinski)

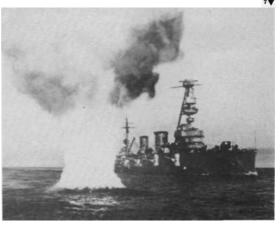


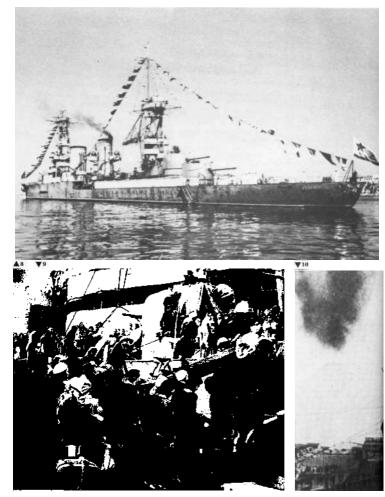


6. The First World War vintage 29,150-ton British battleship Royal Sovereign was temporarily transferred to the Northern Fleet to satisfy the Russians' claim to a share of the surrendered Italian Navy. She is seen here flying Russian colours after the handing over ceremony on 30 May 1944 at Rosyth. Officially commissioned on 29 August 1944 at Polarnoe as Arkhangelsk, she was to be the largest ship in the battle fleet. She was returned on 4 February 1949 following the transfer of the ex-Italian battleship Guilio Cesare to the Black Sea Fleet. (Imperial War Museum. Neg No. A23814)

7. The 6,800-ton cruiser Svetlana, ordered in 1912 for the Baltic Fleet, was completed and commissioned in 1928 as *Profintern*. Transferred to the Black Sea in 1930, she was renamed once again in 1939 to become Krasnyi Krym. She is seen here exchanging fire with German shore artillery off Odessa in 1941. She was the most successful of the Russian cruisers, taking part in numerous actions but never suffering serious battle damage. In 1944 she was armed with fifteen 130mm, three twin 100mm AA, four 45mm AA, ten 37mm AA, seven 12.7mm machine-guns and two triple

456mm torpedo tubes. She could also carry 90 mines. Wom turbines limited her speed to 22 knots.





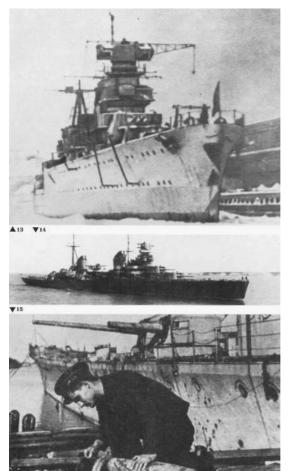
8. The cruiser Admiral Lazarev was laid down in 1913 for the Black Sea Fleet and was completed (to a modified design) and commissioned in 1932 as Krasnyi Kavkaz: 7.650 tons, 29 knots, the hull lengthened by six metres, two funnels instead of three, and experimental 180mm guns mounted in enclosed centreline turrets. She is seen here in 1945, armed with four 180mm. six twin 100mm AA, four 45mm AA, ten 37mm AA, two quadruple 12.7mm machineguns, two triple 456mm torpedo tubes and rails for 100 mines. She was expended as a target during guided missile trials in the 1950s. (Boris Lemachko)

 Krasnyi Kavkaz in 1942 at Sevastopol, taking civilian refugees aboard after having disembarked troops and munitions for the besieged city. Acting as a fast transport, she carried more than 25.000 men during the war.  Kirov, the prototype of the generation of classic Russian cruisers, seen in July 1944 engaging German positions from the commercial port at Leningrad.

 Voroshilov was commissioned into the Black Sea Fleet in 1940. having incorporated minor improvements to the armour protection as compared with Kirov. This 1946 photograph shows the significant mixture of armament and controls: main guns and torpedoes of Italian design. Swedish automatic guns. British quadruple machine-guns as well as Type 279 and Type 285 radars, and German Wackeltopf director. (Boris Lemachkol

12. Action stations aboard Voroshilov. The triple 180mm guns were crowded into a common cradle, which indicates Italian influence on design. Such closely spaced barrels led to serious inaccuracies from shell interference when firing salvoes.





13. The improved Kirov-class Maxim Gorkiv was commissioned into the Baltic Elect in 1940. She is seen here ice-bound at Leningrad during the siege in the winter of 1943-4. She survived with her machinery intact, electricity being provided from ashore. Chimneys protrude upwards from scuttles forward, stoves having been fitted in the few habitable compartments. To deceive enemy observers, topmasts were removed. rangefinders hidden in a boxlike awning and a low section of the hull was painted dark-grey as high as a pier.

14. Molotov was commissioned into the Black Sea Fleet one week before the German invasion; she is seen here when brand-new, with the KOR-1 type seaplane aboard. At the mainmast head she carried, though this is scarcely visible, the aerial of the Russian experimental shipborne warning radar Redut-K. (Boris Lemachko)

15. As a result of the Russo-Cerman pact of 1939, the incomplete 16,900-ton Hipperclass heavy cruiser Lutzow was sold to the Soviet Union. She was towed to Leningrad in May 1940 and when 70 per cent complete in June 1941 she was commissioned as the floating battery Petropavlovsk with two twin 203mm and twelve 37mm AA guns. Grounded on 17 September 1941 as result of German artillery fire (the wreck is seen here with a Russian explosives expert inspecting a German 210mm dud in the foreground), she was raised in 1942 and renamed Tallin the following year. In 1953 she became the stationary training ship Dnepr and was scrapped in 1959.



16. In 1944 the 7.000-ton US cruiser Milwaukee was temporarily transferred to the Russian Navy in lieu of part of the Russians' entitlement to surrendered Italian tonnage. She was commissioned into the Northern Fleet as Murmansk on 20 April 1944, Following the transfer of the ex-Italian cruiser Duca d'Aosta she was returned to the US Navy on 8 March 1949. She is seen here at Spithead still wearing Russian colours. (Maritime Photo Library)

17. Ten Chapayev-class cruisers of the 1938 Programme were initially planned as modified Kirovs, but with 152mm turrets. However, they were lengthened to accommodate the fourth turret and finally the 10,600-ton. 35-knots design was approved in 1939 with armament of four triple 152mm, eight 100mm M, twelve 37mm AA, eight 12.7mm machine-guns and two quintuple 533mm torpedo tubes. Seven ships were actually laid down; two were captured by the Germans at Nikolayev and the remainder were completed post-war to an improved design. Zheleznyakov is seen late in her career. (Marek Twardowski)





18. Seventeen of the sixty-six turbine destroyers ordered for the Imperial Russian Navy from 1911 to 1917 formed the backbone of the Russian Navy's light forces by the late 1930s. All carried the names of Communist leaders. Of the seven Baltic Fleet ships, all were lost within the first three months of the war. Lenin (ex-Kapitan Izyhneitev), seen here in June 1941, was scuttled in Libau to avoid capture. (Marek Twardowski)

19. The Novice-class Karl Libhaccht (xz-Kapitan Belli) of the Northern Fleet in 1945, At that time she displaced more than 2,000 tons full load, could achieve 25 knots and was armed with four 1020mm, two 37mm AA, two 37mm AA three 12.7mm machine-guns, three 12.7mm machine-guns, three triple 456mm torpedo tubes, two depth-charge throwers and 80 mines. (Marek Twardowski)

20. Leningrad (see in action at Leningrad in 1944) was the prototype of the class of six 2,150-ton flotilla leaders, the first destroyers to be laid down in Russia under the Soviet regime. Designated as substitute light cruisers, which the Russians lacked at that time, she was fast (42 knots) and strongly armed with five 130mm, two 76mm AA, six 37mm AA, six 12.7mm machine-guns, two quadruple 533mm torpedo tubes, two depth-charge throwers and 68 mines. Although impressive on paper they were not a success and the design was not developed.





21. A Type 7 destroyer of the Black Sea Fleet, her silhouette similar to that of the Italian Oriani-class ships. Of the total of fitty-four Type 7 and Type 7U destroyers laid down from 1934 to 1938, thirty were

commissioned before the outbreak of war, while fifteen others entered service during hositilities. Eighteen of them were lost. (Marek Twardowski)

22. Dug during the first decade

of the Soviet regime, at an enormous cost in stave labour. the 'Baltic-White Sea Canal' was used for the transfer of warships from the Baltic to the Arctic. *Gremyashchiy*, a Type 7, went this way to the Arctic following her completion at Leningrad. She is seen here in 1944, camouflaged and with the aerial of a British Type 286 surface radar visible a! her foremast head. (Jørzy Mtcinski)





▲23 ¥24



23. in 1942 Razyapyonnyi was transferred to the Arctic from the Far East wia the northern sea route. She entered service in European waters, because of the time needed to transport the material to Komsomolsk, but profited from the delay by receiving modified weapons (compare her guns with those of Gremyashchi). (Imperial War Museum, Neg No. A22471)

24. The Type 7 destroyer Gremyashchiy seen in late 1944 leading another of her class and two Novic-class destroyers escorted by MO4-class subchasers. (Jerzy Micinski) 25. The 1.990-ton. 35-knot Type 7U destroyer Simy of the Balic Fleet was armed with four 130mm, three 76mm AA, seven 37mm AA, eight 13.7mm machine-guns, three triple 533mm torpedo tubes, two depth-charge throwers and could carry 58 mines. The third depth-charge throwers and the 130mm 'D' mounting was not a typical feature of the class. (Boris Lemachko)

26. The stern of this Black Sea Fleet Type 7U destroyer is much less crowded with antisubmarine weapons than its British counterpart. Only two BMB 1 type depth-charge throwers and a pair of rails were fitted, with capacity for ten 135kg and twenty 25kg charges.

27. The wreck of Svobodnyi photographed by an Italian on 16 July 1942. Len days after the Germans captured Sevastopol. Note the extent of the damage caused by nine bombs which hit the ship. (Aldo Fraccaroli)









28. Slavnyi of the Baltic Fleet, after the war. (Boris Lemachko)

29. The experimental 1,570-ton destroyer Opyrn,i was built to test an al-welded hull and highpressure Ramsin boiler design. After failing speed trials in 1940, when 35 knots were achieved against the 43 knots anticipated. she was provisionally armed with three single 130mm, four 45mm AA, three 37mm AA, two quadruple 533mm torpedo tubes and served as a floating battery at Leningrad. Experiments were continued after the war. (Boris Lemachkol

30. The 3,200-ton, 44-knot flotilla leader Tashkent was ordered in 1935 from Italy to enhance Russian design practice. She is seen here in the summer of 1941 with three twin 130mm, six 37mm AA, six 12.7mm machine-guns, three triple 533mm torpedo tubes and rails fitted for 80 mines.

31. Of the twenty 2,240-ton, 37knot Ogeneo-class destroyers laid down prior to the war. only one had been commissioned by 1945. And just eleven others by 1945. They were to be armed with two twin 130mm, two 76mm AA. three 37mm AA, four 12.7mm machine-guns, two triple 533mm torpedo tubes, two depth-charge throwers and 96 mines. To avoid their capture



by the advancing Germans, some of the incomplete hulls were evacuated - Ozomoj is seen here at the small Caucasian port of Batum. (Boris Lemachko)

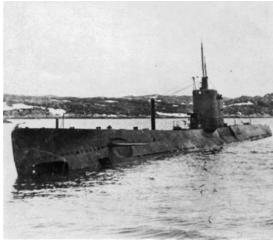
32. A squadron force consisting of the First World War vintage 29.150-ton British battleship Royal Sovereign (commissioned by the Russians as Arkhangelsk), eight Town-class destroyers and four modern submarines seen assembled at Rosyth on 30 May 1944 awaiting handing-over to the Northern Fleet to satisfy the Russians' claim to a share of the surrendered Italian Navy. All of these ships, with the exception of the ones lost in action, were returned from 1949 to 1952 following the transfer of the ex-Italian vessels. (Imperial War Museum, Neg. No. A23786)











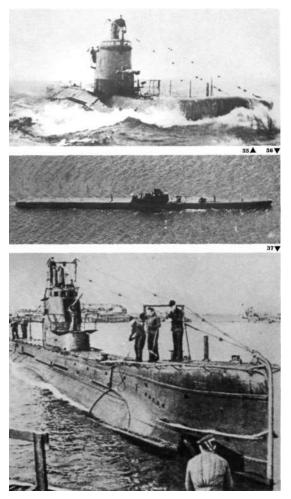
33. The Russians took every opportunity to enlarge their naval forces with booty regardless of quality or origin. Even Roumanis's defection to the Allied cause in September 1944 did not prevent the seizure of her tiny fleet of four destroyers (*Regele Fardinand* seen here as Russian *Likhol*), three submarines, five motor boats and five river monitors. (Boris Lemachko)

34. The six D Class 941/1.288ton, 14/8.7-knot 'Series I' boats of the 1926 Programme were the first submarines designed under the Soviet regime. Although heavily armed with eight 533mm torpedo tubes, single 100mm and 45mm AA guns, they were of inferior quality because of design faults. D3 [Krasnogvardeyec of the Northern Fleet is seen here after her 1938-40 reconstruction which included remodelling of the conning tower and addition of sheer. She was tost in July 1942 off the coast of Norway. (Imperial War Museum, Neg No. RUS4539)

35. The design of the L Class submarines was modelled on the British L55, sunk in 1919 and raised by the Russians in 1928. Following the laying down of six 'Series IT and Series XI' boats (1.025/1.321 tons, 14/8.5 knots, six bow 533mm torpedo tubes, single 100mm and 45mm AA guns, twenty mines in two horizontal stern tubes), the design was modified to the 'Series XIII' (seen here) in 1934. Enlarged by 75tons, she had two stern 533mm torpedo tubes added and high-power diesels were fitted in order to attain 17 knots on the surface. By 1959, seven boats had been built with five others of the 'Series XIIIbis' by 1943. (Imperial War Museum, Neg No. RUS4404)

36. L15 entering the US submarine base at Coco Solo in the Panama Canal Zone on 21 October 1942. With her sister LI6 they were earmarked for transfer from the Far East to the Arctic: but the operation. which began on 25 September 1942, was not a success; on 11 October 1942 L16 was torpedoed and sunk by the Japanese submarine 125, 600 miles off the Oregon coast. L15 arrived at Polarnoe on 23 May 1943 well illustrating the isolation of the Russian naval forces from various areas. (Official US Navy Photo)

37. The Baltic Fleet Shch303 (Ersh), seen in 1943. She was one of the original four 'Series III' boats that formed the Shchuka class. These 572/700ton, 11.8/8-knot submarines were built from 1930 to 1934 and were armed with six 533mm torpedo tubes and one 45mm AA gun. Two of her sister ships were lost when trying to penetrate the German-Finish blockade in the Gulf of Finland from June to December 1942. Three groups of submarines, totalling 37 boats, made repeated attempts to force their way out into the Baltic; the resultant campaign in the Baltic led to the sinking of 23 enemy ships and a further eight damaged (total 84,000 GRT) at a cost of fourteen Russian vessels.





38. In 1930 the Shoh class was modified by lengthening the hull by 15 metres, the compartmentation was changed and one 45mm AA gun was added aft of the conning tower. From 1931 to 1935 39 boats were built, consisting of the Series V, "vbis" (seen here) and 'Vbis-2" designs. (Imperial War Museum. Neg No. RUS379)



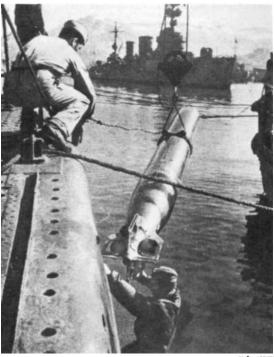
39. The 'Series X' Shch209 of the Black Sea Fleet with experimental net cutters at the bow. (Imperial War Museum, Neg No. RUS2245)



40. A Shch-class 'Series Vbis' submarine of the Black Sea Fleet landing frogmen behind enemy lines.

41. Hoisting a 53-38U-type 533mm torpedo aboard the Series X' Shch215 of the Black Sea Fleet in 1943. During the war Russian submarines undertook 679 attacks expending 1,550 torpedoes which resulted in 28 (33 according to Russian sources) warships and 108 (157) merchantmen of 254,525CRT)(462,313CRT) being sunk at the cost of at least 89 submarines lost, many with all hands. Total war losses amounted to at least 108 boats.

42. Twenty-eight of the thirty Series VI Arkas boats, built at the Ural Machine Works, were transported by rait to Vladvostok after running trials in the Black Sea. The design had been modified to improve hydrodynamic qualities, and twenty Series Vibis' (seen here) boats were ordered. These single-shaft boats of 160/196 tons and 13/7 knots were armed with two box 53mm torpedo tubes and one 45mm AA gun. (Abb Fraccaroli)



41 42 ¥



# SOVIET FLEETS AND FLOTILLAS 1941-1945

Unit Baltic Fleet	Formed 11 Feb 1918	Disbanded -	Main Base Tailin Kronshtadt. Sept 1941 Leningrad. Oct 1941 Kronshtadt. June 1942 Leningrad. Jan 1943 Kronshtadt. June 1944 Tallin, Oct 1944	C-in-C Adm V. F. Tributs
Northern Fleet	1 June 1933		Polarnoe	Rear-Adm A. G. Golovko
Black Sea Fleet	March 1920		Sevastopol Poti. July 1942 Sevastopol. Oct 1944	Vice-Adm F. S. Oktyabrskij Vice-Adm L. A. Valdimirskij, 24 Apr 1943 Vice-Adm N. E. Basistyj. 10 March 1944 Vice-Adm F. S. Oktyabrskij. 28 March 1944
Pacific Fleet	21 Apr 1932		Vladivostok	Vice-Adm I. S. Yumashev
Amur Flotilla	May 1920	c.1950	Khabarovsk	Rear-Adm P. S. Aban'kin Vice-Adm F. S. Oktyabrskij, 29 June 1943 Rear-Adm P. S. Aban'kin. 21 March 1944 Rear-Adm F. S. Sedel'nikov. 2 Sept 1944 Rear-Adm N. V. Antonov. 23 June 1945
Azov Flotilla	25 July 1942	14 Oct 1942	Mariupol Primorsko-Akhtarsk. Oct 1941	Commodore A. P. Aleksandrov Rear-Adm S. G. Gorshkov, 13 Oct 1941
	20 Feb 1943	20 Apr 1944	Ejsk Primorsko-Akhtarsk. Sept 1943 Temryuk. Apr 1944	Rear-Adm G. N. Kholostyakov, 5 Jan 1944 Rear-Adm S. G. Gorshkov, 6 Jan 1944
Caspian Flotilla	5 July 1920	-	Baku	Rear-Adm F. S. Sedel'nikov Rear-Adm F. V. Zozulya
Chudskaya Flotilla	June 1941	13 Aug 1941	Gdov	Commodore N. Yu. Avraamov
Dnieper Flotilla	22 Sept 1943	Dec 1945	Chernigov Kiev, Nov 1943 Pinsk, July 1944	Commodore V. V. Grigor'ev
Danube Flotilla	28 June 1940	21 Nov 1941	Izmail Nikolaev, Oct 1941	Rear-Adm N. 0. Abramov Rear-Adm A. S. Frolov. 16 Sept 1941
	20 Apr 1944	1945	Odessa Izmail. Aug 1944	Rear-Adm S. G. Gorshkov Rear-Adm G. N. Kholostyakov. 12 Dec 1944
Ilmen Flotilla	28 July 1941	20 Oct 1941	Novgorod	Commander V. M. Drevnitskij
Ladoga Flotilla	18 June 1941	4 Nov 1944	Schiusselbourg Novaya Ladoga, Sept 1941	Captain V. P. Baranovskij Captain S. V. Zemlyniachenko. 30 June 1941 Commodore V. P. Bogolepov. 24 July 1941 Commodore B. V. Khoroshkhin. 8 Aug 1941 Commodore V. C. Cherokov. 13 Oct 1944
Northern Pacific Flotilla	Aug 1939	1945	Sovetskaya Gavan'	Rear-Adm M. I. Arapov Rear-Adm V. A. Andreev
Onega Flotilla	7 Aug 1941	28 Nov 1941	Petrozavodsk Voznesen'e. Aug 1941 Vyterga. Oct 1941	Commodore A. P. D'yakonov
	13 Dec 1942	10 July 1944	Vyterga	Commadore A. P. D'yakonov Commodore N. V. Antonov. 7 July 1943 Rear-Adm P. S. Aban'kin. 11 Aug 1943 Commodore N. V. Antonov, 7 Jan 1944

Unit	Formed	Disbanded	Main Base	C-in-C
Pinsk Flotilla	23 June 1940	5 Oct 1941	Pinsk Kiev. July 1941	Rear-Adm D. D. Rogachev
White Sea Flotilla	15 Aug 1941	15 Apr 1945	Arkhangelsk	Rear-Adm M. M. Dolinin Rear-Adm G. A. Stepanov. 7 Oct 1941 Rear-Adm S. G. Kucherov. 11 March 1943 Vice-Adm Yu. A. Panteleev, 30 Aug 1944
Volga Flotilla	28 Oct 1941	30 June 1944	Ulyanovsk	Commodore S. G. Sapozhnikov Rear-Adm S. M. Vorob'eb, 6 Nov 1941 Rear-Adm D. D. Rogachev, 16 Feb 1942 Rear-Adm Yu. A. Panteleev. 14 May 1943 Commodore P. A. Smirinov, 16 Dec 1943

#### SEVASTOPOL

#### STRENGTH OF THE SOVIET NAVY 1941/1945

ez-Parizhskaya 1943	K <b>lommuna</b> i f <b>ro</b> ms 81 Malay		Baltic Fle 22 June 1941	eat 1⊍alam 1945	Black Se 22 June 1941	a Fleet May 1944	Northern 22 June⊧ 1941	Fleet Uan 1945	Pacific Fl 22 June 1941	eet 10 Aug 1945
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Launched Examplesioned	29 JUNE 19911 17 NAV 1814	Weesseds Gunboats Mine-	2	10	4	3	-	-	-	-
Pata vaild for Beployment Bisplacement	1944 Black Sea Fleet 30 395t normal 30 395t normal	swelepers Motor Tometto-	3 <b>3</b> 0	<sub>?</sub> ₹3	1212	2 <b>2</b> 7	, 2	38 <sup>36</sup>	<sub>18</sub> 18	<sub>5</sub> 522
Bimensions	31:2754 Hill Hoad 1844:57m°dax x33:27.5mX x 9:7m Max:	Boais Patrol: Beaiss	<sub>6</sub> 6,7 3,3	778 2220	7₹8 2₽4	4 <del>4</del> 7 1 <del>1</del> 3 3	14 <sup>1</sup> 4	40 <sup>4</sup> 0 59 <sup>5</sup> 9	<sub>14</sub> 1 <sub>5</sub> 45 <sub>19</sub> 19	2204 4949
Armament	four triple 305mm. sixteen 120mm: six 76mm AA: sixteen	Aireraft	656	781	625	467	118	721	588	1618
Armour (max )	37mm AA, sixteen 37mm AA, ourterourteen 12:7mm MG belt 239mm decks	<i>Kommuna.</i> Tha jii 1930. to ke					ROV			

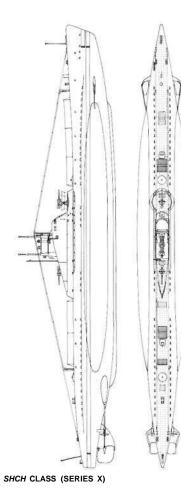
	12://mm1MG
Armour (max.)	belt 230mm. decks
	150717h, W// Pets 25507m
Electronics	none
Machinery	Twenty-two Yarrow
	Boilers, 4/shaft Parsons
	turbines; 61,000bhp
SBEER	21.5kts
Endurance	2,500mm at 1144kes
Complement	1,546 officers. & men
Fate	sold for scrap 17 Feb
	1958

The four Gangut-slass dreadnoughts were the first to be built in Russia after the Russia-Japanese War. Following their completion in December 1914 they water deployed with the Battle Thest and after a pende of inactivity during the war they were demobilized in January 1918. Severation/between to service in 1921 under the name of Pariatokaya

Kommuna. Transferment to the Black Stae jin 1950. Ito keep the balance spirit Turkety, she underwents/big/outg/C00684401907100 Term 19331031921944he/to/c00684401907100 additions to the forecease/self-and/self-node, introduction of time coakted systems and oli-timed uptors/sig/c006261 d/Add(Enc6e, deck atmourcand, blevition tot 2/2 jar/guns. Following the outbreak of the Second World War, sake was based at 3-6 washop) (the method and 01 mB/ Bhade Set #Leo.

eastwards to avoid enemy air attacks: Involved in coastal bombardment dvty during the defence of the Simmer in the winter of 19d/t72: site was withdrawn to Bott in March 1942 for repairs; but comamed there until hostilities-inded in the Black See: Reventing to her original name in 1943; site was again based at Sevastiopto on 5 November 1944 and the following year was decorated for Seventionshi war activity.

Tiype	Leegykij kreisser Light
	oruiser
Class	Kirov
Builder	Ordzhonikidze Yard,
	Leeningreet
Laudidown	2222004999535
Launched	30 Nov 1936
Cemminsioned	223 Selet 9388
Data Waller for	191944
DEABERNAME	Baltic Elect
Displacement	7.860t standard:
	9.436t full load
Dimensions	1991.Qm 9a & 17.66m
	x 6.15m max.
Armament	three triple 180mm.
	eight 100mm AA, ten
	37mm AA, four 12.7mm
	MG, two triple 533mm
	torpedo tubes, four
	depth-charge throwers,
	100 mines



Armour (max.)	belt 70mm, deck
	50mm, turrets 100mm
Electronics	warning radar
Machinery	Six Yarrow boilers
	2-shaft Parsons geared
	turbines. 113,000bhp
Speed	35.94kts
Endurance	3.750nm at 18kts
Complement	872 officers & men
Fate	deleted 1974
Eight Kirowclass	cruisers authorized

Eight Know-class cruisers, authorized under the 1933 Programme, were the first cruisers to be built in Russia after the Bolshevik Revolution. Design of these ships was based on Italian practice (drawings of the Rainnondo Montecuccoli class had been provided) and therefore emphasized speed over inadequate protection, although hull scantlings. regarded by the Russian as too light, were strengthened (200 tons of steel were added). Only two ships were laid down to the original design which was modified in 1936 to improve protection and bridge structure.

Kirov was employed for shore bombardment duty during the Winter War of 1939/40 against Finland. In 1941 she took part in the defence of Tallin and was then evacuated to Kronshtadt and employed in the defence of Leningrad where she was damaged twice by the Luftwaffe. Operational again in 1943 (she had surrendered her catapult and aircraft by that time to improve her AA battery), Kirov was employed later as a fire support ship in Leningrad. Having turbines of Italian manufacture she outlived her sisters and remained in service until 1974. seeing out her last years as a headquarters and training ship.

# GREMYASHCHU

Туре	Eskadrennyj minonosec
	Fleet torpedo boat
Class	Gnevnyj
Builder	Zhdanov Yard,
	Leningrad
Laid down	23 July 1936
Launched	18 March 1937
Commissioned	28 Aug 1939
Data valid for	1944
Deployment	Northern Fleet
Displacement	1.885t standard,
	2,402t full load
Dimensions	112.5m oa x 10.2m x
	4.1m max.

Armament	four 130mm. two 76mm AA. four 37mm AA. four 12.7mm MG. two triple 533mm torpedo tubes,	Data valid for Deployment Displacement	1941 Northern Fleet 206t surfaced. 258t submerged
	two depth-charge throwers 56 mines	Dimensions Armament	44.5m x 3.3m x 3.0m
Electronics	British Type-286 surface warning radar British Asdic	Amamon	torpedo tubes, one 45mm AA, two 7,6mm MG
Machinery	Three watertube boilers. 2-shaft geared turbines, 48,000shp	Electronics Machinery	Mars-type hydrophones 2-shaft diesel engine + electric motor, 800bhp
Speed	37kts		surfaced, 400shp
Endurance	2.720nm at 19kts		submerged
Complement	246 officers & men	Speed	13.2kts surfaced.
Fate	deleted 1956		8.2kts submerged
		Endurance	3,600nm at 8.5kts

The 1933 Programme provided for the construction of destroyers for the first time in the Soviet Union. The Russians. lacking the necessary experience, sought the design assistance of the Ansaldo shipyard. The new destroyers thus resembled the Italian single-funnelled boats, but as a result they incorporated faults inherent in this design - structural weakness and limited seaworthiness, The latter was caused by the armament and fittings which were heavier than those of Italian manufacture; so fully loaded were the Russian boats that they drew almost 700 tons in excess of the original design. In May 1937 the design was improved to strengthen the hull and to remodel the machinery layout by alternating the arrangement of the boiler and turbine rooms, which resulted in changes to the two-funnelled silhouette

In September 1939 Gremyashchij was transferred from the Baltic to the White Sea via the Stalin Canal. She was one of the most successful Russian warships of the war: operating in an extremely difficult environment she accomplished ninety war missions, sixty convoys and provided fire support for ten landing operations. According to Russian sources she sank the German submarine U585 and shot down fourteen aircraft.

## M172

ex-M88. from	16 June 1939
Туре	Malaya podvodnaya
	lodka Small submarine
	boat
Class	Μ
Builder	Sudomekh Works.
	Leningrad
Laid down	17 June 1936
Launched	12 June 1937
Commissioned	11 Dec 1937

Displacement	206t surfaced. 258t
	submerged
Dimensions	44.5m x 3.3m x 3.0m
Armament	two bow 533mm
	torpedo tubes, one
	45mm AA, two 7,6mm
	MG
Electronics	Mars-type hydrophones
Machinery	2-shaft diesel engine +
	electric motor, 800bhp
	surfaced, 400shp
	submerged
Speed	13.2kts surfaced.
	8.2kts submerged
Endurance	3,600nm at 8.5kts
	surfaced. 90nm at 3kts
	submerged
Complement	22 officers & men
Fate	lost Oct 1943. Barents
	Sea, probably mined

The M class coastal submarines were the result of a demand during the early 1930s for a boat that could be built by mass-production methods at an inland works and transported to the coast by rail. In the interests of simplicity, fighting and navigational qualities had to be sacrificed to a considerable degree, the extent of which became obvious following trials of the prototypes. In 1934, to remedy the more serious shortcomings, the design was modified and orders were shifted to the experienced naval vards at Leningrad and Nikolaev so as to achieve better standards of construction. However, satisfactory results were obtained only after the 'Series XII' design had been introduced in 1936. A total of twentyeight boats of the latter type were completed before the war, and a further seventeen had been built by 1944.

In May 1939, M88, following a training period in the Baltic, was renumbered M172 and transferred to the Arctic via the Stalin Canal. She carried out eighteen patrols before she was lost (probably mined), and was credited by the Russians with nine hits', of which number only the sinking of one transport and one patrol boat were confirmed after the war

#### SHCH402

ex-SHCH314, from 16 May 1937 Type Srednyaya podvodnaya lodka Medium submarine boat

Class	Shchuka
Builder	Ordzhonikidze Yard,
	Leningrad
Laid down	4 Dec 1934
Launched	28 June 1935
Commissioned	23 Sept 1936
Data valid for	1941
Deployment	Northern Fleet
Displacement	590t surfaced. 70St
	submerged
Dimensions	58.75m x 6.2m x
	4.3m
Armament	four bow and two aft
	533mm torpedo tubes
	two 45mm AA, two
	7.6mm MG
Electronics	Mars-type hydrophone:
Machinery	two 2-shaft diesel
	engines + electric
	motors. I.600bhp
	surfaced, 800shp
	submerged
Speed	13.6kts surfaced.
	8.7kts submerged
Endurance	4.500nm at 8.9kts
	surfaced. 100nm at
	2.5kts submerged
Complement	40 officers & men
Fate	sunk 21 Sept 1944.
	Barents Sea.
	accidentally by Soviet
	aircraft

The Sficftufca-class medium submarines were developed during the late 1920s from the Dutch AG class built for the Imperial Russian Navy. In 1934 the design was remodelled to the Series X' which accommodated technical innovations obtained from the Germans Thirty-two boats of this type were completed before the war with a further nine of the improved 'Series Xbis' being completed in 1941 and a final eight commissioned post-war.

SHCH314, following training with the Baltic Eleet was renumbered SHCH402 and transferred to the Arctic in June 1937. During the winter of 1937/8 she took part in the rescue of the drifting polar ship Severny Polyus. In contrast to her rather dull patrol service during the Winter War against Finland, her Great Patriotic War service was as adventurous as it was ineffectual. During sixteen war missions she actually sank three ships. although she claimed nine plus a U-boat. She twice missed destruction by a hairsbreadth, being severely disabled by German patrols in March 1942, and then damaged by a hydrogen explosion six months later

#### METEL'

Туре	Storozhevoj korabl' Guard ship
Class Builder	<i>Uragan</i> Zhdanov Yard,
Dunder	Leningrad
	(construction) Dalzavod
	Works, Vladivostok
	(assembly)
Laid down	18 Dec 1931
Launched	15 June 1934
	(at Vladivostok)
Commissioned	18 Nov 1934
Data valid for	1944
Deployment	Pacific Fleet
Displacement	450t standard, 619t full
	load
Dimensions	71.5m oa x 7.4m x
	2,6m max
Armament	two 102mm. three
	37mm AA, three
	12.7mm MG. one triple
	456mm torpedo tubes,
	two depth-charge
Electronics	throwers. 30 mines
Electronics	Posejdon-type
Machinerv	hydrophones two 3-rJrum watertube
Machinery	boilers, 2-shaft geared
	turbines, 6.290shp
Speed	23kts
Endurance	1.500nm at 14kts
Complement	108 officers & men
Fate	training ship since Oct
	1945

Eighteen of the Uragan-class guard ships were authorized under the 1926 Programme to replace the old torpedoboats hitherto used for coastal patrol duties. They were the first surface warships built in Russia under the Soviet regime, a process which involved numerous difficulties ranging from shortage of experienced naval architects, engineers and skilled workmen to deficiency in technology and the low quality of industrial products. It was small wonder that they inherited the worst traditions of Russian shipbuilding being topheavy, overweight and underpowered. They attained 23kts on trials, although 29kts had been anticipated.

Metel<sup>7</sup>, albeit destined for the Pacific Fleet, was built in Leningrad and after the completion of her hull in 1933 she was dismantled and transported in sections to Vladivostok by the Trans-Siberian Railway. There she was reassembled. launched and finally completed. In JulyAugust 1938, during the Russo-Japanese conflict. Medre screened troop convoys off Chasan Lake. After war was declared on Japan in August 1945. she took part in assaults on the east coast of Korea, landing troops and shelling enemy positions.

#### MOTOR TORPEDO BOAT 106

MOSKOVSKU REMESLENNIK TRUDOVYKH REZERVOV No 7K412 from 23 Feb 1944 Vooruzhennyj kater Type Armed boat Class G5 Builder Zelenodolsk Yard, River Volga Laid down 1941 Launched April 1942 Commissioned 5 May 1943 Data valid for 1943 Black Sea Elect Deployment Displacement 16,26t full load Dimensions 19.1m oa x 3.4m x 0.8m max. Armament launcher for twenty-four 82mm rockets, two 12.7mm MG Electronics none 2-shaft Packard Machinerv 4 M-2500 petrol engines, 2,400bhp Speed 50kts Endurance 220nm Complement 2 officers & 5 men Fate deleted 1950s

Design of the G5-class motor torpedoboats was developed from the British CMBs, a few of which remained in Soviet hands after the Civil War. The prototype, albeit with an aluminium alloy hull instead of double mahogany as in the British boats, ran trials in 1927 and series production began under the designation SH4. In 1933 the design was recast to the G5 class with 21in torpedoes replacing the 18in. and engines of local production were introduced. Some 329 boats were built to this design from 1934-1944, divided into five basic series. In 1942, following the successful use of home-made Katyusha 88mm rocket-launchers from boats of this type, the naval authorities ordered 82mm and 132mm army rocketlaunchers to be adapted for naval use (242 had been ordered by 1945). Some of the G5-class boats completed from 1943 to 1944 had torpedo wells plated

out. and missile-launchers mounted above the conning tower.

Funds to complete No. 106 were raised by public subscription so. in addition to her number, she bore the name commemorating the donors (Moscow artisans). She participated in landings on Kerch in November 1943 and in the Crimea in April 1944. From April 1945 she served with the Danube Flotilla.

#### MOTOR TORPEDO BOAT 14

Туре	Torpednyj kater
	Torpedo-boat
Class	D3
Builder	Shipyard No 25.
	Leningrad
Laid down	1939
Launched	1940
Commissioned	22 July 1941
Data valid for	1941
Deployment	Northern Fleet
Displacement	32.1t full load
Dimensions	21.6m oa x 3.9m x
	1.35m max,
Armament	two 533mm torpedo
	tubes/launching gears.
	two 12.7mm MG. eight
	depth-charges
Electronics	Tsefej-type
	hydrophones
Machinery	3-sbaft GAM-34F petrol
	engines, 3,150bhp
Speed	37kts
Endurance	550nm at 8kts
Complement	2 officers & 6-8 men
Fate	sunk 15 Sept 1944 off
	North Cape by German
	surface craft

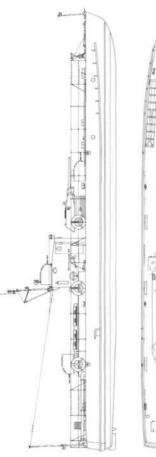
Since the mid-1930s the Soviet Navy had run an experimental programme with a view to producing large, seaworthy motor torpedo-boats. Following trials of the G5derived boats of various sizes, the sternlaunching system was abandoned in favour of deck torpedo-launching racks. Soon two types of wooden- and steelhulled boats of this kind were selected for further evaluation. The general performance of the larger, woodenhulled boat was found to be satisfactory and series production began in 1939 under the designation D3 class. Because of engine shortages fifty-six hulls were completed as subchasers and it was only when Packard engines became available that the construction programme reached its peak. A total of 119 boats, (torpedo-boats or subchasers) had been built by 1944.

Following trials in the Baltic during the summer of 1941, under the designation *Lengwatchit*, 5. she was transferred by railway to the Arctic to be commissioned on 16 August 1941 as No. 14. She took part in actions against German traffic off the north Norwegian coast and claimed two hits on coastal ships (neither confirmed). She was sunk by German patrol craft of 61 Vorposten during an attack on the Petsamo-Kirkenes convoy.

# PATROL LAUNCH SKA 065

M065 from 7 May 1944	
ex-SKA No. 124	, from 17 Dec 1942
ex-PK125. from	10 Dec 1941
Туре	Malyj okhotnik Small
	hunter
Class	M04
Builder	inland yard
Laid down	1938
Launched	1938
Commissioned	1938
Data valid for	1943
Deployment	Black Sea Fleet
Displacement	50.5t standard. 56.5t
	full load
Dimensions	26.9m oa x 4.0m x
	1.5m max.
Armament	two 45mm AA. two
	12.7mm, three 7.6mm
	MG, thirty-two depth-
	charges, four mines
Electronics	Posejdon-type
	hydrophones
Machinery	3-shaft GAM-34BS
	petrol engines.
	2.550bhp
Speed	26kts
Endurance	470nm at 7kts
Complement	24 officers & men
Fate	probably deleted mid-
	1950s

The consolidation of Stalin's totalitarian regime during the early 1930s required closely sealed sea borders to quard against either foreign infiltration or Russian citizens trying to leave. Such political imperatives necessitated the development of coastal forces which could also be used for patrol and antisubmarine duties in the event of war. This force was to be built around MO2--lass wooden-hulled motor launches developed as a joint venture of the NKVD and the Russian Navy. Following completion of the first batch of 27 boats in 1936, the design was abandoned and replaced in 1937 by the improved M04 class. Some 219 boats had been



3



completed by 1943 when production of this type was terminated.

SKA065 entered service as the patrol boat of the 1st Division of the Black Sea NKVD Frontier Guard, and was commissioned with the Black Sea Fleet on 19 July 1941- She took part in defence actions off Odessa. Sevastopol and along the Caucasian coast, then later participated in the recapture of the Crimea. According to official records she covered 30.000 miles, escorted 250 convoys and repulsed more than 300 air attacks during the course of the war.

## MOTOR LAUNCH SK503

-	
Туре	Bronirovannyj malyj
	okhotnki Armoured
	small hunter
Class	BMO
Builder	Zhdanov Yard,
	Leningrad
Laid down	Autumn 1942
Launched	Spring 1943
Commissioned	30 June 1943
Data valid for	1943
Deployment	Baltic Fleet
Displacement	62t full load
Dimensions	24.75m oa x 4.2m x
	1.6m max.
Armament	one 45mm AA. one
	37mm AA, two twin
	12.7mm MG. eight
	depth-charges, ten
	mines
Armour (max)	belt, fuel tanks and
	bridge 10-12mm
Electronics	Drakon-type sonar
Machinery	2-shaft Packard petrol
	engines. 2,400bhp, 1-
	shaft Continental petrol
	engine, 80bhp
Speed	23kts
Endurance	? (6t of petrol)
Complement	26 officers & men
Fate	mined 5 July 1944, Gulf
	of Finland

Experiences in combat with the M04class motor launches resulted in a request from the Chief of the Baltic Fleet in July 1942 for the design and construction of an armoured patrol/antisubmarine boat. Besides armour plates distributed along the waterline. around fuel tanks, magazines and the conning tower, tight compartmentation was also stressed. Although the programme. designated BMO class, got as high a priority as was possible in besieged

Leningrad, construction and trials of the prototype lasted until May 1943 (she remained idle during four months of the 1942/3 winter because of ice). Facilities for series manufacture were created: the boats were built in two sections on direct production lines - to cope with an order for 66 launches. In the event only 48 boats were commissioned, at a rate of three per month, before the end of hostilities. Ten of these were lost.

SK503 was mined of Teikarsaari Island in action against the futile attempts of German-Finnish forces to support an isolated garrison there.

#### ARMOURED GUNBOAT BK140

Туре	Bronekater Armoured
	boat
Class	BK-1125-III
Builder	Rechsudoverf Yard at
	Perm. River Kama
Laid down	1944
Launched	Summer 1944
Commissioned	13 March 1945
Data valid for	1945
Deployment	Dnieper Flotilla
Displacement	26t standard, 29.3t full
	load
Dimensions	22.65m oa x 3.55m x
	0.56m mean
Armament	one 76mm gun in T34-
	type tank turret, two
	twin 12.7mm, one
	6.7mm MG
Armour (max)	belt, bridge, turret
	4—7mm
Electronics	none
Machinery	1-shaft GAM-34B petrol
	engine. 850bhp
Speed	18kts
Endurance	180nrn
Complement	10 officers & men
Fate	preserved at Perm since 1974

In the vast land areas of Russia, the rivers and lakes were the best and most reliable means of communication and defence. Utilising positive experience of this type of warfare gained during the Civil War, the Russians worked on designs of river gunboats such as had been built for the Imperial Russian Navy. By 1935 they had developed two basic types of river armoured gunboats armed either with two (1124 Type) or one (1125 Type) 3in guns mounted in tank turrets. After the turret of the T-34-type medium

tank became available in 1939, most of the new gunboats received it.

By the time of the German invasion some 70 gunboats had been commissioned and 85 were under construction. They were followed by an order for 100 in August 1941 which was completed by the end of 1945. About 90 of these were lost.

BH140 only reached the main body of the Dneiper Flotilla on 12 April 1945. having been operating on the River Spree in support of the army during the final struggle for Berlin. After the war she was transferred to the Far East and was finally sold for scrap in the late 1960s. Recovered from the breakers at Khabarovsk, she is preserved as an onshore memorial at Perm.

#### MINESWEEPER T404

Туре	Bazovyj Tral'shchik Base minesweeper
Class	FUGAS
Builder	Sevastopol Naval Yard
Laid down	Autumn 1934
Launched	10 Dec 1936
Commissioned	30 Oct 1937
Data valid for	1944
Deployment	Black Sea Fleet
Displacement	433t standard, 494t full
	load
Dimensions	62.0m oa x 7.6m x
	2.4m max.
Armament	one 100mm AA, one
	45mm AA. three 37mm
	AA, three 12.7mm MG,
	twenty depth-charges,
	twenty-seven mines
Electronics	none
Machinery	2-shaft diesel engines,
	2.800bhp
Speed	18.5kts
Endurance	3.400nm at 14kts
Complement	66 officers & men
Fate	deleted 1950s

The diesel-powered Fugas class medium minesweepers were intended to be the standard type under the second and third Five-Year Plans. Of 48 hulls laid down prior to the German invasion, forty had been commissioned by the end of 1945 (half of this number were lost in action) with a further four probably finished afterwards. They were sturdy, strongly armed, fitted for minelaving and fast enough to serve as escorts. The power plant of the first series boats presented problems with speed control (maintaining low speeds especially)

which excluded the possibility of pair sweeping; besides this fundamental fault the main sweep winch was underpowered. They were also criticized for insufficient stability and inadequate storage of fresh water. Most of these difficulties were subsequently overcome on the boats laid down after 1936.

Shchit (she received her number designation in July 1939) took part in the defence of Odessa and Sevastopol and was damaged by coastal batteries on 29 December 1941 during an assault on the Crimea. Afterwards she acted along the Caucasian coast and later participated in landings off Novorossisk in February 1943 and Varna in September 1944.

#### MINESWEEPER T467

Туре	Malyj Tral'shchik Small
	minesweeper
Class	7351
Builder	Leningrad
Laid down	Spring 1945
Launched	Autumn 1945
Commissioned	Winter 1945
Data valid for	1945
Deployment	Baltic Fleet
Displacement	145.8t standard.
	160.4t full load
Dimensions	38,0m oa x 5.7m x
	1.5m
Armament	two 45mm AA. two twin
	12.7mm MG, twelve
	depth-charges, twelve
	mines
Electronics	Tamir-10-type Sonar

Machinery	3-shaft. Superior diesel
	engines I,440bhp
Speed	11.7kts
Endurance	2,400nm
Complement	25 officers & men
Fate	transferred to the Polish
	Navy. 5 Apr 1946

Work on a mass production programme of expendable, shallow draught, steel coastal minesweepers had started immediately following the outbreak of war. Orders were placed in Leningrad, but the design required modifications to ensure simplicity of construction and economic use of materials. Straight hull lines were adopted so that flat sections could be used throughout, thus saving manpower. The power plant was built around Lend-Lease supplied engines and after successful trials of the prototype boat series production began in spring of 1943. The design was modernized in 1944: the hull was lengthened, engines were placed in separate rooms, machineguns doubled and fuel capacity tripled. Thirty-nine boats had been commissioned with the Baltic Fleet when hostilities ended. These had been followed by another 53 by the end of 1945. Production was continued at Rybinsk and lasted until 1956. The Class finally totalled more than 260 vessels and 44 of them were sold to satellite navies

T476 was transferred to the Polish Navy on 5 April 1946 as its guota of the surrendered German Navy, and was commissioned as Orlik.



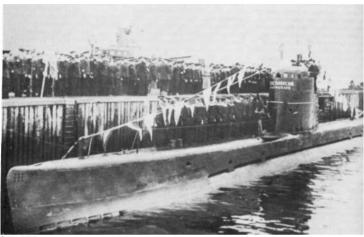
# TENDER No 24

Type Class Builder	Tender 15-ton Pertozavod Works, Leningrad
Laid down	Summer 1942
Launched	Summer 1942
Commissioned	18 June 1942
Data valid for	1942
Deployment	Ladoga Lake Flotilla
Displacement	25t full load
Dimensions	10.3m oa x 3.3m x
	1.1m max.
Armament	one 12.7mm MG (15t of
	load)
Electronics	none
Machinery	1-shaft ZIS-5 petrol
	engine. 75bhp
Speed	5kts
Endurance	40nm at 5kts
Complement	3 men
Fate	auxiliary since 22 Aug 1945

Following the growth of the concept of landing operations by the Russian Navy. production of 'small landing pontoons' was started in the Tallin ship repair works in 1941. However, in the face of the German advance no more than six incomplete hulls were evacuated to Leningrad. Only when frequent navigation of Lake Ladoga began in 1942 was there a marked increase in demand for small tonnage to make up supply caravans to relieve the besieged city. As a result the mass production of selfpropelled tenders was ordered based on the landing pontoon design. A total of 122 tenders of 15-ton and 25-ton deadweight was built from 20 May to 12 August 1942. They were of rudimentary construction with flat hull sections and were propelled by a truck engine.

No 24 served as a transport on Lake Ladoga until the German siege was smashed, but from November 1943 on she was listed with the Baltic Fleet. Together with other tenders, deployed since January 1944 with various forces as landing craft, she was shifted to the Gulf of Finland and took part in assaults off Vyborg in July 1944. Following this she was transferred to Lake Peipus and contributed to the regaining of this area which had been achieved by November 1944.

43. The -Series XII' M-class M172 of the Northern Fleet in 1942. (Imperial War Museum, Neg No. A2244)



A44 ¥45



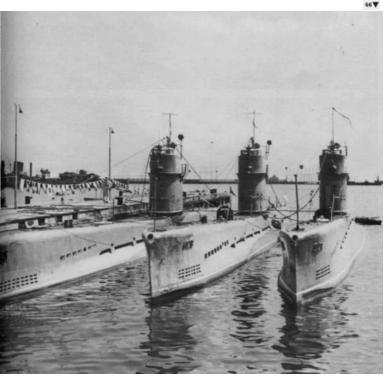


44. This-Series XIIbis'boat, MI07 INvoxsibirskiy Komsomolec), commissioned with the Northern Fleet on 24 July 1943 and was transferred by rail to the Black Sea in 1944, By using inland waterways and railways some 1,700 minor craft were shifted between various areas during the war.

The building of four of these boats was funded by public subscription. Thanks to such enforced action, a sum in excess of 159 million roubles was collected throughout the war for the construction of sixteen submarines and 151 motor boats.

45. In 1933 the Soviet Government purchased a design of submarine from the firm Ingenieurskaantor voor Scheepsbouw in The Hague (founded by the Germans there. since submarine building was forbidden in Germany). As a result construction of the S-class 'Series IX' boats began, which influenced the efficiency of submarine design in Russia. The prototype, SI (Nalim), has been blown up in Liepaja in June 1941 to prevent her capture. (Aldo Fraccaroli)

46. In 1938 the *M*-class design was radically revised to the twoshaft, Series XV of 283/350 tons, 15.5/7.9 knots, with four bow 533mm torpedo tubes and a single 45mm AA gun, Fifteen boats were laid down before the war and four were completed during hostilities. Production was continued post-war (with modifications to the bridge modelled on those of German Uboats) and-82 boats had been built by 1952. Some were transferred to satellite navies; those of the Polish Navy, seen here during the 1950s, have had their deck guns removed.



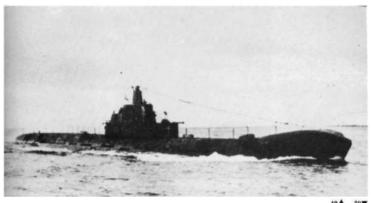


47. The 5-class boats of 837/ 1,073 tons and 19.5/9 knots were armed with six 533mm torpedo tubes, and single 100mm and 45mm AA guns; S9 of the Baltic Fleet was laid down at the inland shipyard Krasnoe Sormovo in Gorki and after her launch in 1938 she was transferred via the inland waterways to Leningrad for fitting out. She was sunk by German light forces on 5 September 1943 when trying to make her way to the open sea through the net barrier closing the Gulf of Finland.

48. Design of the S class was subsequently modified, first by abandoning large gunshields and later, on the 'Series IXbis' boats (seen here), by improving hull lines and conning tower. A total of 34 of this class had been completed by the end of 1945. (Official US Navy Photo)

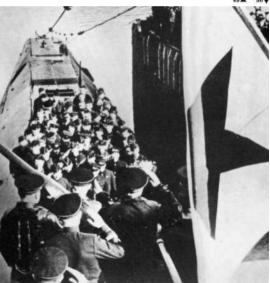


▲47 ¥48



49. The K-class 'Series XIV ocean-going submarines of 1.487 2,102tons, 22/10 knots, armed with ten 533mm torpedo tubes, two single 100mm, two 45mm AA guns and 20 mines. were the largest and undoubtedly the best Russian wartime boats. The six boats completed before the war in Leningrad were transferred to the Northern Fleet. They proved to be wet forward in the open sea so the five completed from 1942 to 1944 had a bulbous bow fitted, as seen here. (Marek Twardowski)

50. The solemn ceremony aboard K21 of the Northern Fleet held in honour of Captain Lunin and his crew for damaging the German battleship Tirpitz during her action against Convoy PQ17. In fact, the five torpedoes fired by the Russian submarine were not even noticed by the Germans, and the hits were claimed by Lunin following two explosions reported by his hydroacoustic instrument operator. The Russian submarine service did not develop a reliable system to record hits: their captains claimed the sinking of some 87 warships and 322 merchantmen totalling 938,000GRT.



51. The Baltic Fleet Uraganclass guard ship with a Type 7U destroyer. (Imperial War Museum, Neg No. RUS49)

7 51





52. The Uragan-class guard ship Smerch of the Northern Fleet shown after her 1943 reconstruction, wearing a camouflage pattern specially devised to conceal her against the shore. (Boris Lemachko) 53. Fleet guard ship Yastreb of the Baltic Fleet in 1945. She was the prototype of the fast escorts of the 1938 Programme. Of 920 tons and 31 knots, she carried three 100mm and four 37mm AA guns, three twin 12.7mm machine-guns, triple 456mm tornedo tubes, 24 mines and 40 depth-charges. Note the sweeping gear in the stern and depth-charge racks built into the transom. Of the fifteen laid down by 1941, only two were completed during the war, and six after 1945. (Boris Lemachko)

54. The 1.760-ton, 14-knot armoured gunboat Krasnove Znamya (ex-Khrahryi) built in 1895, was modernized from 1937 to 1939 and armed with five 130mm, three 76mm and three 45mm AA guns. She was torpedoed on 18 November 1942 off Lavansaari Island by the Finnish motor torpedo-boat Vihuri (formerly the Russian N2141 of the G5 class, sunk in 1941 but repaired by the Finns). The gunboat was raised and recommissioned in 1944, as shown here, while Vihuri was returned to the Russian Navy following the armistice and recommissioned as TK80 (Marek Twardowski)

55. The gunboat fionstruktor bx-Sibirskiy Strielok) in 1944. She was the sole survivor of the Okhotnik-dass 625-ton, 25-knot tornedo-boats built in 1906. An experimental vessel since 1926. she was returned to line service with the Ladoga Lake Flotilla in August 1941, with three 100mm, two 45mm AA guns and machine-guns. On 4 November 1941 her bow section was destroyed by Cerman divebombers; by the spring of 1942 it had been replaced, but the boat was now 5 metres shorter because of the lack of steel. In 1945 she returned to experimental service until she was scrapped in 1957. (Boris Lemachko)













56. Fifteen of the 59 SH4-class motor torpedo-boats built from 1927 to 1932 remained in line service during the Great Patriotic War. Number 64 of this class is seen here, with her crew escorting Roumanian prisoners following a sortie behind enemy lines for a 'tongue'. Commissioned with the Black Sea Fleet in 1932 as No. 66 she was renumbered 61 in 1934, then 65 in 1937, and 164 in 1940. Relegated to training duties in April 1941 as U3. she returned to line service. in October 1941, changing her number to 184. and finally to 64 in August 1942. Note the homemade launcher for the M8-type rockets carried in the bows of the boat in the background.

57. This C5-class motor torpedo-boat was commissioned into the Black Sea Fleet in 1940 as No. 185. She was renumbered 182 in August 1941 and finally became 125 a year later. She was sunk by German coastal artillery off Novorossisk on 11 October 1943. These 'Series 10' boats were powered by two CAM-34BS-type 850bhp petrol engines and could achieve 53 knots in calm water. They were armed with two 533mm torpedoes in troughs and one 12.7mm DShK-type machine-gun. During the war 73 boats of the class were lost and 31 were discarded. (Jerzy Micinski)

58. The C5-class No. 47 being examined by German seamen following her surrender to Eboats on 27 June 1941 off Liepaja. In July political commissars were placed in all ships of the Russian Navy to ensure the loyalty of the crews. (Jerzy Micinski) 59. The C5-class No. 106 of the Black Sea Fleet has a *Katyusha* rocket-launcher above the bridge.

60. The G5-class motor torpedo-boats Nos. 72, 82, 92 and 102 of the Black Sea Fleet, photographed in 1942. The first and third boats of this group did not survive into the following year. (Jerzy Micinski)



59 60









61. Two C5-class motor torpedo-boats putting to sea. Note the torpedo-launching gear and the additional 12.7mm DShK-type machine-gun on the structure above. (Jerzy Micinski)

62. From the mid-1930s the Soviet Navy conducted a series of experiments with motor torpedo-boats of various sizes built either from aluminium alloy, steel or wood. This wreck of an experimental boat was photographed in 1942 off Sevastopol. (Aldo Fraccaroli)

63. The D3-class TK116 of the Northern Fleet in 1944. She is carrying two 533mm torpedoes, one single and one twin 20mm gun, one 12.7mm machine-gun and eight depth-charges. She was built in Leningrad from 1939 to 1943 and was transferred to the Arctic in December 1943. She returned to the Baltic Fleet in April 1945 to be transferred to the Polish Navy the following year. (Boris Lemachkol

64. The Komsomolec class of 20.5-ton, 46-knot motor torpedo-boats with aluminium alloy hulls, armed with two 533mm torpedo tubes and two twin 12.7mm machine-guns. were evaluated in 1940 to replace the G5 class, but series production was suspended until the end of 1944 because of the German invasion. By the end of 1945, a total of 31 'Series 12' boats, as seen here, powered by Lend-Lease Packard engines. had entered service. Boats of the Baltic Fleet scored some hits on the German evacuation fleet in the Gulf of Danzig during April 1945. (Boris Lemachkol

65. The MO4-dass sub-chaser No. 125 of the Northern Fleet with landing party aboard. These small but sturdy boats were used in a variety of roles; for patrol duties, as transports or landing crafts. (Imperial War Museum, Neg No. RUS4165)



63 64 7









66. MO4-class boats on Lake Ladoga. Note details on boat in the foreground: aft 45mm gun, empty depth-charge racks (the enemy did not use submarines there) with smoke generators atop, and a 12.7mm DShK-type machine-gun to the right. Dazzle camouflage as seen on the boat in the background gave the visual effect of a shortened hull. (Imperial War Museum, Neg No. RUS3647)

67. An MO4-class boat disabled after hitting a mine in the Gulf of Finland on 12 October 1941. (Marek Twardowski)

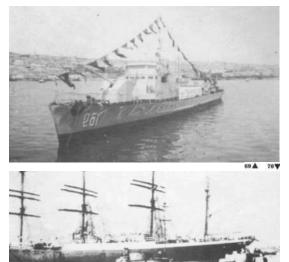
68. Design of the OD200-class wooden-hulled sub-chasers was developed in Leningrad in 1941 as a slightly heavier (47 tons) but under-engined (28 knots) modification of the D3-class motor torpedo-boats armed with a single 37mm AA gun, two 12.7mm machine-guns and two depth-charge racks. Production of hulls began in 1943 in small inland yards. After construction they were transported by rail to Batum for fitting out. By the end of 1944 88 boats had been completed and distributed between the Baltic. Black Sea and Pacific Fleets. Seen here is MO328 of the Baltic Fleet in April 1946 during her passage to Poland where she was commissioned as Dzielny:



69. The Artillerist class of large (240-on, 25-knot) sub-chasers were armed with one 76mm AA, two 74mm AB, and by 1945 23 boats had been built. Production continued post-war and a further 50 boats were completed until the introduction of the Kronshtadt class. BO261 of the Caspian Flotilla is seen here in 1946. (Borts Lemachko)

**70.** The *BMO*-class armoured patrol boat *MO622* of the Baltic Fleet entered service after the termination of hostilities. Note the simple layout of this emergency-built type. (Boris Lemachko)

71. Seventy-eight US SC-class sub-chases: were transferred to the Russian Navy in 1943 and 1944. SC1486, seen here on 25 September 1944 wearing Russian colours, was commissioned into the Northern Fleet on 30 January 1945 as BO275. She was scuttled in the Barents Sea in 1955 under American supervision. (US Navy Official Photo)







▲72 ¥73







72. Lenin gex-Shtorm) (seen here) and her six sisters of the class of 1,100-ton, 15-knot river monitors built in 1911, were unquestioned masters of the River Amur from the late 1820s onwards, and confirmed their reputation during actions against the Kwantung Army in 1945. At that time Lenin was armed with four twin 120mm, Asix 12.7mm machine-guns and protected by a 75mm belt.

73. Zheleznyakov was the sole survivor of the class of skx 230ton. 9-knot river monitors built from 1935 to 1939 for the River Dinejer Fiolitila. By the end of the war she carried twin 102mm, twin and single 45mm. two 37mm M guns and three 12.7mm machine-guns. The photograph shows her preserved at Kiev where she has been on display since 1967.

74. In the face of Russian aggression the Poles scuttled all the ships of the Pinsk Flotilla from 17 to 20 September 1939. Few of them were retrieved by the Russians: an exception was a Warszawa-class monitor which was designated Smolensk class in the Russian Navy. Seen here after her salvage, she became the nucleus of the Russian Pinsk Flotilla which was formed in June 1940 but was destroyed on 28 September 1941 by the advancing Germans. (Boris Lemachko)

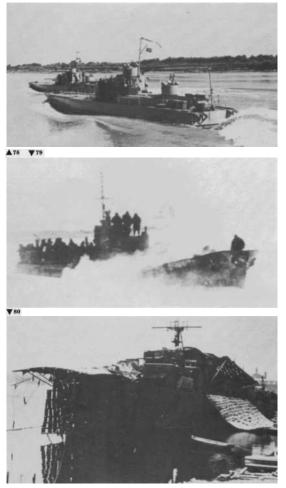
75. The 1124 Type 47-ton, 21-knot armoured motor gunboats of the early series production were armed with two 76mm guns in T28-type tank turrets. twin 12.7mm machine-guns and could carry 10 mines. (Imperial War Museum. Neg No. RUS693) **76.** Two 1124 Type armoured motor gunboats on the Danube near Belgrade in October 1944. Note the T34-type tank turret with periscope sight on top and observation slits on the sides.

77. Number 63 and another 1125 Type armoured motor gunbat cleared for action. The cylindrical object forward of the tank turret is an armoured machine-gun turret trained athwartship. These boats were nicknamed river tanks'. (Imperial War Museum, Neg No. RUS304)



76 4 77





78. BK232 and her sister, both of the 1125 Type, under way on the Dambe near Vienna in March 1945. These armoured river gunboats proved exceptionally successful, and the Germans were never able to oppose them with boats of equal fighting qualities. Note the shielded twin mountings of the Shielded twin mountings of the Goris Lemachko)

79. The MBK-class of sea-going armoured motor gunboat was developed in Leningrad from 1942 to 1943. These 163-ton, 1943 to 1943. These 163-ton, 1943 to 1943. These 163-ton, 1940 to 1943. These 163-ton, Somma and a 30mm deck armour, were armed with two 76mm guns in tank turrets, two 45mm and one 37mm AA guns and two 12.7mm machine-guns. The class proved unsuccessful, being top-heavy, cramped and permanently wet forward. Only twenty were built.

80. The former imperial yacht Shtandart, built in 1896, was converted to a minelaver from 1938 to 1936 and was commissioned into the Baltic Fleet as Marti The reconstruction was not a success as only 320 mines could he carried on her 5.665-ton displacement, while 14 knots were insufficient for an offensive minelaying capability. With an armament of four 130mm, seven 76mm and three 45mm AA guns and two 12.7mm machine-guns, she was used as a floating battery in Leningrad (seen here camouflaged as a precaution against reconnaissance aircraft). (Boris Lemachko)

81. A Fugas-class minesweeper seen in August 1941 prior to the introduction of additional 37mm AA guns. (Imperial War Museum. Neg No. RUS469)

82. Of the 42 700-ton, 22.5knot, turbine-powered minesweepers of the Vladimir Polukhin class, planned under the 1938 Programme, only fifteen were launched before the war. The prototype (seen here with mast cut down to deceive German rangefinders) entered service with the Baltic Fleet in 1942, armed with two 100mm guns, one 45mm, three 37mm and two 20mm AA guns, four machine-guns and minesweeping gear. She was followed by thirteen others which had been completed by 1948. (Boris Lemachko)

83. A 755/class coastal minesweeper in Polish service during the early 1950s. The shortcomings of wartime mass production are evident when studying her hull: straight lines, 'bones' visible because of inexperienced welding and traces of excessive hammering at stern. Note the sweepinggear. trawl winch, roller fairlead and derricks.









84. The 10-ton, 12-knot, single-shaft worden-bulled minesweeping boats of the *KMIV* class, armed with one 7.62mm machine-gun, were ideveloped from the 4 class built in Finland in 1917 for the Imperial Russian Navy. Approximately 221 were built from 1938 to 1945. Mary of them were ueed as patrol boats.

85. From 1936 to 1937, 56 *R*class 30-ton, 9-knot, steelhulled coastal boats were built for use as minesweepers or patrol boats. They were usually armed with one or two 7.62mm machine-guns. 86. Many of the 48 steel YA5class river dispatch vessels (23tons, 10-knots) built from 1942 to 1945 were used for a variety of tasks other than patrol duties: KEMTSHCH772 (preserved) was commissioned in November 1942 with the Volga Flotilla as a fire support boat. 1942 was armed with one M-8-M-type rocket-launcher and two 12.7mm machine-guns. In 1943 she was deployed with the Dnieper Flotilla, and from the summer of 1944 she served as a minesweeping boat of the Black Sea Fleet, the missile-launcher being replaced by a 45mm gun. (Marek Twardowskil





87. To enable the Russians to attack Japan in 1945, the US Nay supplied the Pacific Fleet with 55 landing craft. This LCI (Landing Craft Infanty). designated DS class by the Russians, is seen with naval infantry aboard, but dressed for inspection rather than action.







89. To overcome the lack of landing capability in the southern theatre. 150 DB-class 15-ton, 8.5-knot steel landing boats, capable of carrying sixty fully equipped men, were built at the inland yard at Gorki form 1942 to 1945. Forty of them were latter equipped as AA defence boats. This one (preserved at Kerch) carried single 37mm and 20mm (Operlikon) AA guns.



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