

= Bayan @-@ class cruiser =

The Bayan class was a group of four armored cruisers built for the Imperial Russian Navy around the beginning of the 20th century . Two of the ships were built in France , as Russian shipyards had no spare capacity . The lead ship , Bayan , was built several years earlier than the later three . The ship participated in several of the early naval battles of the Russo @-@ Japanese War of 1904 ? 05 , and provided naval gunfire support for the Imperial Russian Army until she struck a mine . Bayan was trapped in harbor during the subsequent Siege of Port Arthur , and was sunk by Japanese artillery . She was salvaged and put into service with the Imperial Japanese Navy with the name of Aso . She mostly served as a training ship before she was converted into a minelayer in 1920 . The ship was sunk as a target in 1932 .

Her three sisters were all assigned to the Baltic Fleet . Pallada was the first ship lost by the Russians during World War I when she was sunk by a German submarine in October 1914 . The two surviving ships were modified to lay mines , and participated in the Battle of Åland Islands in 1915 and the German invasion of the Estonian islands in 1917 . They were decommissioned in 1918 and sold for scrap in 1922 .

= = Background = =

The Bayan class marked a departure from the previous Russian armored cruisers , as they were smaller ships designed to serve as scouts for the fleet rather than as commerce raiders . Authorized in the 1896 ? 1902 building program , the design was outsourced to a French shipyard , Forges et Chantiers de la Méditerranée , because Russian shipyards were already at full capacity . Negotiations began in March 1897 , and a contract was signed in May 1898 for one ship with delivery in 36 months .

The Navy was reasonably pleased with the first ship , Bayan , and decided to order another cruiser after the start of the Russo @-@ Japanese War in February 1904 . Russian shipyards were still unavailable , so the Navy decided to simply order a repeat with minor modifications based on war experience . This was an attempt to minimize the work load on the Naval Technical Committee (Morskoi tekhnicheskii komitet) , but they proved to require more attention than planned and a contract was not signed until 20 April 1905 . The contract specified that all drawings would be turned over to allow for the construction of two identical ships in St. Petersburg , using newly available slipways . These changes generally added weight and the armor was reduced in thickness to compensate , although the change from Harvey armor to more resistant Krupp armor meant that there was little actual loss in protection .

= = Description = =

The Bayan @-@ class ships were 449 feet 7 inches (137 @.@ 0 m) long overall and 443 feet (135 @.@ 0 m) between perpendiculars . They had a maximum beam of 57 feet 6 inches (17 @.@ 5 m) , a draft of 22 feet (6 @.@ 7 m) and displaced 7 @,@ 750 ? 7 @,@ 802 long tons (7 @,@ 874 ? 7 @,@ 927 t) . The ships had a crew of 573 officers and men .

They had two vertical triple @-@ expansion steam engines , each driving a single propeller shaft , using steam provided by 26 Belleville boilers . Designed for a total of 16 @,@ 500 indicated horsepower (12 @,@ 304 kW) intended to propel the cruisers at 21 knots (39 km / h ; 24 mph) , the engines actually developed 17 @,@ 400 ? 19 @,@ 320 indicated horsepower (12 @,@ 980 ? 14 @,@ 410 kW) during their sea trials and drove the ships to maximum speeds of 20 @.@ 9 ? 22 @.@ 55 knots (38 @.@ 71 ? 41 @.@ 76 km / h ; 24 @.@ 05 ? 25 @.@ 95 mph) . They could carry a maximum of 1 @,@ 100 ? 1 @,@ 200 long tons (1 @,@ 118 ? 1 @,@ 219 t) of coal , which gave the first Bayan a range of 3 @,@ 900 nautical miles (7 @,@ 200 km ; 4 @,@ 500 mi) at 10 knots (19 km / h ; 12 mph) .

= = = Armament = = =

The main armament of the Bayan class ships consisted of two 8 inch (203 mm) 45 caliber guns in single gun turrets fore and aft of the superstructure . The guns fired a 194 pound (87 kg) shell at a muzzle velocity of 2 , 920 ft / s (891 m / s) . At an elevation of + 15 ° , they had a range of 12 , 208 yards (11 , 163 m) . The ships ' eight 45 caliber 6 inch (152 mm) Canet Model 1891 quick firing (QF) guns were mounted in casemates on the sides of the ship 's hull . They fired shells that weighed 91 pounds (41 kg) with a muzzle velocity of 2 , 600 ft / s (792 m / s) . They had a range of 12 , 602 yards (11 , 523 m) when fired at an elevation of + 20 ° .

A number of smaller guns were carried for close range defense against torpedo boats . These included twenty 50 caliber 75 millimeter (3 in) Canet Model 1891 QF guns . Eight of these were mounted in casemates in the side of the hull and in the superstructure . The remaining guns were located above the 6 inch gun casemates in pivot mounts with gun shields . The gun fired 10 8 pound (4 kg) shells to a range of about 8 , 606 yards (7 , 869 m) , at an elevation of + 20 ° degrees with a muzzle velocity of 2 , 830 ft / s (862 m / s) . The Bayan class also mounted eight (Bayan) or four 47 millimeter (1 9 in) Hotchkiss guns in the three later ships . They fired a 3 2 pound (1 kg) shell . In addition , Bayan was fitted with two 37 millimeter (1 5 in) Hotchkiss guns that fired a 1 1 pound (0 kg) shell at a muzzle velocity of 1 , 540 ft / s (470 m / s) .

Bayan was equipped with two submerged 15 inch (381 mm) torpedo tubes , one on each broadside , while those of the three later ships were 18 inches (457 mm) in size .

== Protection ==

The waterline belt of the Bayan class ships was 6 9 ? 7 9 inches (175 ? 200 mm) thick over her machinery spaces . Fore and aft , it reduced to 3 5 ? 3 9 inches (90 ? 100 mm) . The upper armor strake and the armor protecting the casemates was 2 4 inches (60 mm) thick . The thickness of the armored deck was 2 inches (50 mm) ; over the central battery it was a single plate , but elsewhere it consisted of a 1 2 inch (30 mm) plate over two 0 39 inch (10 mm) plates . The gun turret sides were protected by 5 2 ? 5 9 inches (132 ? 150 mm) of armor and their roofs were 1 2 inches thick . The barbettes were protected by armor plates 6 7 inch (170 mm) thick . The sides of the conning tower were 5 4 ? 6 3 inches (136 ? 160 mm) thick .

== Ships ==

== Service ==

Bayan was assigned to the First Pacific Squadron after completion , and based at Port Arthur from the end of 1903 . She suffered minor damage during the Battle of Port Arthur at the beginning of the Russo - Japanese War and participated in the action of 13 April 1904 , when Vice Admiral Tōgō Heihachirō successfully lured out a portion of the Pacific Squadron , including Vice Admiral Stepan Makarov 's flagship , the battleship Petropavlovsk . When Makarov spotted the five Japanese battleships , he turned back for Port Arthur , and Petropavlovsk struck a minefield and quickly sank after a mine detonated one of her magazines . After bombarding Imperial Japanese Army positions on 27 July , Bayan struck a mine and was under repair for the next month or so . She was subsequently trapped in Port Arthur and sunk at her mooring by Japanese howitzer shells on 8 December .

The ship was refloated by Japanese engineers the following year ; repairs , re -boiling , and the replacement of her armament with Japanese weapons took until 1908 to complete . Renamed Aso in Japanese service , she initially served as a training ship before she was converted into a

minelayer in 1920 . Aso was decommissioned on 1 April 1930 and renamed Hai Kan No. 4 . She was sunk as a target on 4 August 1932 by two submarine torpedoes .

All three of the later ships were assigned to the Baltic Fleet upon completion , although Admiral Makarov was detached to the Mediterranean several times before the start of World War I in 1914 . During the first month of the war , Pallada captured codebooks from the German cruiser Magdeburg that had run aground . She was torpedoed by the German submarine SM U @-@ 26 on 11 October 1914 and was lost with all hands . Her wreck was discovered in 2000 .

The surviving sisters were modified to lay mines shortly after the war began . They laid mines themselves during the war and provided cover for other ships laying minefields . Admiral Makarov and Bayan fought several inconclusive battles with German ships during the war , including the Battle of Åland Islands in mid ? 1915 , and they also defended Moon Sound during the German invasion of the Estonian islands in late 1917 , where Bayan was badly damaged . Their 75 mm guns were removed in 1916 ? 17 and replaced by one 8 @-@ inch and four 6 @-@ inch guns . A pair of anti @-@ aircraft guns were also added . Admiral Makarov was in Helsingfors when Finland declared independence in March 1918 , and was forced to evacuate even though the Gulf of Finland was still frozen over . She reached Kronstadt after what became known as the " Ice Voyage " . The sisters were decommissioned in 1918 and sold for scrap in 1922 .