= SMS Magdeburg =

SMS Magdeburg (" His Majesty 's Ship Magdeburg ") was a lead ship of the Magdeburg class of light cruisers in the German Kaiserliche Marine (Imperial Navy) . Her class included three other ships : Breslau , Strassburg , and Stralsund . Magdeburg was built at the AG Weser shipyard in Bremen from 1910 to August 1912 , when she was commissioned into the High Seas Fleet . The ship was armed with a main battery of twelve 10 @.@ 5 cm SK L / 45 guns and had a top speed of 27 @.@ 5 knots (50 @.@ 9 km / h ; 31 @.@ 6 mph) . Magdeburg was used as a torpedo test ship after her commissioning until the outbreak of World War I in August 1914 , when she was brought to active service and deployed to the Baltic .

In the Baltic , Magdeburg fired the first shots of the war against the Russians on 2 August , when she shelled the port of Libau . She participated in a series of bombardments of Russian positions until late August . On the 26th , she participated in a sweep of the entrance to the Gulf of Finland ; while steaming off the Estonian coast , she ran aground off the island of Odensholm and could not be freed . A pair of Russian cruisers appeared and seized the ship . Fifteen crew members were killed in the brief engagement . They recovered three intact German code books , one of which they passed to the British . The ability to decrypt German wireless signals provided the British with the ability to ambush German units on several occasions during the war , including the Battle of Jutland . The Russians partially scrapped Magdeburg while she remained grounded before completely destroying the wreck .

= = Design = =

Magdeburg was ordered under the contract name " Ersatz Bussard " and was laid down at the AG Weser shipyard in Bremen in 1910 and launched on 13 May 1911 , after which fitting @-@ out work commenced . She was commissioned into the High Seas Fleet on 20 August 1912 . The ship was 138 @.@ 7 meters ($455~\rm ft$) long overall and had a beam of 13 @.@ 5 m ($44~\rm ft$) and a draft of 4 @.@ 4 m ($14~\rm ft$) forward . She displaced 4 @,@ 570 t ($4~\rm g$,@ 500 long tons ; 5 @,@ 040 short tons) at full combat load . Her propulsion system consisted of two sets of AEG @-@ Vulcan steam turbines driving two 3 @.@ 4 @-@ meter ($11~\rm ft$) propellers . They were designed to give 25 @,@ 000 shaft horsepower ($19~\rm g$,@ 000 kW) , but reached 33 @,@ 482 shp ($24~\rm g$,@ 968 kW) in service . These were powered by sixteen coal @-@ fired Marine @-@ type water @-@ tube boilers , although they were later altered to use fuel oil that was sprayed on the coal to increase its burn rate . These gave the ship a top speed of 27 @.@ 5 knots ($50~\rm g$.@ 9 km / h ; 31 @.@ 6 mph) . Magdeburg carried 1 @,@ 200 tonnes ($1~\rm g$,@ 200 long tons) of coal , and an additional 106 tonnes ($104~\rm long$ tons) of oil that gave her a range of approximately 5 @,@ 820 nautical miles ($10~\rm g$,@ 780 km ; 6 @,@ 700 mi) at 12 knots ($22~\rm km$ / h ; 14 mph) . She had a crew of 18 officers and 336 enlisted men .

The ship was armed with twelve 10 @.@ 5 cm SK L / 45 guns in single pedestal mounts . Two were placed side by side forward on the forecastle , eight were located amidships , four on either side , and two were side by side aft . The guns had a maximum elevation of 30 degrees , which allowed them to engage targets out to 12 @,@ 700 m (41 @,@ 700 ft) . They were supplied with 1 @,@ 800 rounds of ammunition , for 150 shells per gun . She was also equipped with a pair of 50 cm (19 @.@ 7 in) torpedo tubes with five torpedoes submerged in the hull on the broadside . She could also carry 120 mines . The ship was protected by a waterline armored belt that was 60 mm (2 @.@ 4 in) thick amidships . The conning tower had 100 mm (3 @.@ 9 in) thick sides , and the deck was covered with up to 60 mm thick armor plate .

= = Service history = =

After her commissioning, Magdeburg was used as a torpedo test ship. Following the outbreak of World War I in August 1914, she was assigned to the Baltic Sea, under the command of Rear Admiral Robert Mischke. Magdeburg fired the first shots of the war with Russia on 2 August when

she shelled the Russian port of Libau while Augsburg laid a minefield outside the harbor . The Russians had in fact already left Libau , which was seized by the German Army . The minefield laid by Augsburg was poorly marked and hindered German operations more than Russian efforts . Magdeburg and the rest of the Baltic forces then conducted a series of bombardments of Russian positions , including one ten days later , on 12 August , where Magdeburg shelled the Dagerort lighthouse . On 17 August , Magdeburg , Augsburg , three destroyers , and the minelayer Deutschland encountered a pair of powerful Russian armored cruisers , Admiral Makarov and Gromoboi . The Russian commander , under the mistaken assumption that the German armored cruisers Roon and Prinz Heinrich were present , did not attack and both forces withdrew .

Prince Heinrich , the overall commander of the Baltic naval forces , replaced Mischke with Rear Admiral Behring . Behring ordered another operation for 26 August to sweep for Russian reconnaissance forces in the entrance to the Gulf of Finland . Early that morning , Magdeburg ran aground off the lighthouse at Odensholm on the Estonian coast . Her escorting destroyer , V.26 , attempted to pull her free but was unable to do so and began taking off part of Magdeburg 's crew . While the evacuation was going on , the Russian cruisers Bogatyr and Pallada appeared and shelled the stranded cruiser . The Germans destroyed the forward section of the ship , but could not complete her destruction before the Russians reached the ship . Fifteen crew members from Magdeburg were killed in the attack . The German code books were also not destroyed ; the Russians were able to recover three of the books along with the current encryption key . They passed one copy to the British Royal Navy via a pair of Russian couriers on 13 October . The Russian Navy partially scrapped the ship in situ and eventually destroyed the wreck .

The capture of the code books proved to provide a significant advantage for the Royal Navy . The Admiralty had recently created a deciphering department known as Room 40 to process intercepted German wireless signals . With the code books and cipher key , the British were able to track the movements of most German warships ; this information could be passed on to the Admiral John Jellicoe , the commander of the Grand Fleet . This allowed the British to ambush parts of or the entire German fleet on several occasions , most successfully at the Battles of Dogger Bank in January 1915 and Jutland in May 1916 .