

= SMS Lützow =

SMS Lützow was the second Derfflinger @-@ class battlecruiser built by the German Kaiserliche Marine ( English : Imperial Navy ) before World War I. Ordered as a replacement for the old protected cruiser Kaiserin Augusta , Lützow was launched on 29 November 1913 , but not completed until 1916 . Lützow was a sister ship to Derfflinger from which she differed slightly in that she was armed with an additional pair of 15 cm ( 5 @.@ 9 inch ) secondary guns and had an additional watertight compartment in her hull . She was named in honor of the Prussian general Ludwig Adolf Wilhelm von Lützow who fought in the Napoleonic Wars .

Lützow was commissioned on 8 August 1915 , but did not join the I Scouting Group until 20 March due to engine damage during trials . This was after most of the major actions conducted by the German battlecruiser force had taken place . As a result , Lützow saw very little action during the war . She took part in only one bombardment operation : the Bombardment of Yarmouth and Lowestoft on 24 ? 25 April 1916 , after which she became Admiral Franz von Hipper 's flagship . One month later , the ship was heavily engaged during the Battle of Jutland , on 31 May ? 1 June . During the battle , Lützow sank the British battlecruiser HMS Invincible and is sometimes given credit for the armored cruiser HMS Defence . However , she was heavily damaged by an estimated 24 heavy @-@ caliber shell hits . With her bow thoroughly flooded , the ship was unable to make the return voyage to German ports ; her crew was evacuated and she was sunk by torpedoes fired by one of her escorts , the torpedo boat G38 .

= = Construction = =

Lützow was ordered as Ersatz Kaiserin Augusta , to replace the elderly protected cruiser Kaiserin Augusta , which was by then 20 years old . Built by Schichau @-@ Werft in Danzig , her keel was laid down in May 1912 , and she was launched on 29 November 1913 . Lützow was commissioned on 8 August 1915 for trials , and was sent to Kiel on 23 August . There she completed her final fitting out , including her armament . While on trials on 25 October , Lützow 's port low @-@ pressure turbine was badly damaged . Repairs were conducted in Kiel until late January 1916 , after which the ship underwent further trials . These were finished on 19 February ; Lützow was assigned to the I Scouting Group on 20 March , and arrived at her new unit four days later .

On completion she displaced nearly 27 @, @ 000 t ( 27 @, @ 000 long tons ; 30 @, @ 000 short tons ) and was 210 @. @ 40 metres ( 690 ft 3 in ) long . The ship was capable of a top speed of 26 @. @ 4 knots ( 48 @. @ 9 km / h ; 30 @. @ 4 mph ) , and could steam for 5 @, @ 600 nautical miles ( 10 @, @ 400 km ; 6 @, @ 400 mi ) at a cruising speed of 14 knots ( 26 km / h ; 16 mph ) . Mounting a main armament of eight 30 @. @ 5 cm ( 12 in ) guns , Lützow was the largest and most powerful German battlecruiser at the time , along with her elder sister Derfflinger .

= = Service = =

= = = Bombardment of Yarmouth and Lowestoft = = =

Lützow ' first major operation was the bombardment of Yarmouth and Lowestoft on 24 ? 25 April . Rear Admiral Franz von Hipper , the commander of the I Scouting Group , was away on sick leave , so the German ships were under the command of Rear Admiral Friedrich Boedicker . The German battlecruisers Seydlitz , the flagship , followed by Derfflinger , Lützow , Moltke , and Von der Tann left the Jade Estuary at 10 : 55 on 24 April , and were supported by a screening force of 6 light cruisers and two torpedo boat flotillas . The heavy units of the High Seas Fleet sailed at 13 : 40 , with the objective to provide distant support for Boedicker 's ships . The British Admiralty was made aware of the German sortie through the interception of German wireless signals , and deployed the Grand Fleet at 15 : 50 .

By 14 : 00 , Boedicker 's ships had reached a position off Norderney , at which point he turned his

ships northward to avoid the Dutch observers on the island of Terschelling . At 15 : 38 , Seydlitz struck a mine , which tore a 15 @-@ metre ( 49 ft ) long hole in her hull , just abaft of the starboard broadside torpedo tube , allowing 1 @,@ 400 short tons ( 1 @,@ 250 long tons ) of water to enter the ship . Seydlitz turned back with the screen of light cruisers at a speed of 15 knots ( 28 km / h ) . The four remaining battlecruisers turned south immediately in the direction of Norderney to avoid further mine damage . By 16 : 00 , Seydlitz was clear of imminent danger , so the ship stopped to allow Boedicker to disembark . The torpedo boat V28 brought Boedicker to Lützow .

At 04 : 50 on 25 April , the German battlecruisers were approaching Lowestoft when the light cruisers Rostock and Elbing , which had been covering the southern flank , spotted the light cruisers and destroyers of Commodore Tyrwhitt 's Harwich Force . Boedicker refused to be distracted by the British ships , and instead trained his ships ' guns on Lowestoft . The German battlecruisers destroyed two 6 in ( 15 cm ) shore batteries and inflicted other damage to the town . In the process , a single 6 in shell from one of the shore batteries struck Moltke , but the ship sustained no significant damage .

At 05 : 20 , the German raiders turned north , towards Yarmouth , which they reached by 05 : 42 . The visibility was so poor that the German ships fired one salvo each , with the exception of Derfflinger , which fired fourteen rounds from her main battery . The German ships turned back south , and at 05 : 47 encountered for the second time the Harwich Force , which had by then been engaged by the six light cruisers of the German screening ships . Boedicker 's ships opened fire from a range of 12 @,@ 000 m ( 13 @,@ 000 yards ) . Tyrwhitt immediately turned his ships around and fled south , but not before the cruiser Conquest sustained severe damage . Due to reports of British submarines and torpedo attacks , Boedicker broke off the chase and turned back east towards the High Seas Fleet . At this point , Scheer , who had been warned of the Grand Fleet 's sortie from Scapa Flow , turned back towards Germany .

= = = Battle of Jutland = = =

At 02 : 00 CET , on 31 May 1916 , the I Scouting Group departed the Jade estuary ; Lützow , Hipper 's flagship , was the leading vessel , followed by her sister Derfflinger , Seydlitz , Moltke , and Von der Tann . The ships were accompanied by the II Scouting Group , under the command of Rear Admiral Boedicker , composed of the four light cruisers Frankfurt , Wiesbaden , Pillau , and Elbing . The reconnaissance force was screened by 30 torpedo boats of the II , VI , and IX Flotillas , directed by the cruiser Regensburg .

An hour and a half later , the High Seas Fleet ? under the command of Admiral Scheer ? left the Jade with 16 dreadnoughts . It was accompanied by the IV Scouting Group , composed of the light cruisers Stettin , München , Hamburg , Frauenlob , and Stuttgart , and 31 torpedo boats of the I , III , V , and VII Flotillas , led by the light cruiser Rostock . The six pre @-@ dreadnoughts of the II Battle Squadron had departed from the Elbe roads at 02 : 45 , and rendezvoused with the battle fleet at 5 : 00 . The operation was to be a repeat of previous German fleet actions : to draw out a portion of the Grand Fleet and destroy it .

= = = Opening actions = = =

Shortly before 16 : 00 , Hipper 's force encountered Vice Admiral Beatty 's 1st Battlecruiser Squadron . At 16 : 00 , Hipper ordered the signal " Distribution of fire from left " be hoisted on Lützow . The German ships were the first to open fire , at a range of approximately 15 @,@ 000 yards ( 14 @,@ 000 m ) . The two leading British battlecruisers , Lion and Princess Royal , concentrated their fire on Lützow . The British rangefinders had misread the range to their German targets , and so the first salvos fired by the British ships fell a mile beyond their German opponents . As the two lines of battlecruisers deployed to engage each other , Lützow began to duel with her opposite in the British line , Lion . By 16 : 51 , Lützow had hit her opponent twice , but caused no significant damage . Nine minutes later , Lion scored the first hit on Lützow ; a salvo from the British ship struck the battlecruiser on her forecastle , but no major damage was done . Nearly

simultaneously , Lützow dealt a tremendous blow to Lion ; one of her 30 @. @ 5 cm shells penetrated the roof of Lion 's center " Q " turret and detonated the munitions that were stored inside . Only by the resolute actions of the turret commander ? Major Francis Harvey , who ordered the magazine be flooded ? did the ship avoid a catastrophic magazine explosion . Indeed , approximately 30 minutes after the turret was destroyed , the fire in the turret spread to the working chamber that was directly above the magazine ; there it detonated propellant charges that had been stored there . The resulting explosion would have likely destroyed the ship if the ammunition magazine had not been flooded .

At 17 : 03 , the rearmost British battlecruiser , Indefatigable , was struck by several shells from her opponent , Von der Tann . The forward ammunition magazines were penetrated and set on fire ; the resulting explosion tore the ship apart . Shortly thereafter , Lützow scored several more hits on Lion , though without serious damage being done . In an attempt to regroup his ships , Admiral Beatty sought to turn his ships away by 2 degrees while the Queen Elizabeth @-@ class battleships of the 5th Battle Squadron arrived on the scene and provided covering fire . As the British battlecruisers began to turn away , Seydlitz and Derfflinger were able to concentrate their fire on Queen Mary . Witnesses reported at least 5 shells from two salvos hit the ship , which caused an intense explosion that ripped the Queen Mary in half . Shortly after the destruction of Queen Mary , both British and German destroyers attempted to make torpedo attacks on the opposing lines . The British destroyers Nestor and Nicator each fired two torpedoes at Lützow , though all four missed .

The leading ships of the German battle fleet had by 18 : 00 come within effective range of the British ships , and had begun trading shots with the British battlecruisers and Queen Elizabeth @-@ class battleships . During the engagements between the combined German fleet and the British 1st Battlecruiser and 5th Battle Squadrons , Lützow had both of her wireless transmitters damaged ; after that point , the only method of communication between ships was via searchlight .

= = = = Battlefleets engage = = = =

Shortly after 19 : 00 , the German cruiser Wiesbaden had become disabled by a shell from the battlecruiser Invincible ; the German battlecruisers made a 16 @-@ point turn to the northeast and made for the crippled cruiser at high speed . The III Battle Squadron of the German fleet , which contained the most powerful battleships of the German navy , also altered course to assist Wiesbaden . Simultaneously , the British III and IV Light Cruiser Squadrons began a torpedo attack on the German line ; while advancing to torpedo range , they smothered Wiesbaden with fire from their main guns . During the turn to the northeast , the British destroyers Onslow and Acasta approached to launch torpedoes at Lützow , though without success . Onslow was hit three times by Lützow 's secondary battery and was forced to withdraw .

At 19 : 15 , the German battlecruisers spotted the British armored cruiser Defence , which had joined the attack on Wiesbaden . Hipper initially hesitated , believing the ship was the German cruiser Rostock , but at 19 : 16 , Kapitän zur See ( KzS ) Harder , Lützow 's commanding officer , ordered his ships ' guns to fire . The other German battlecruisers and battleships joined in the melee ; Lützow fired five broadsides in rapid succession . In the span of less than 5 minutes , Defence was struck by several heavy @-@ caliber shells from the German ships . One salvo penetrated the ship 's ammunition magazines and , in a massive explosion , destroyed the cruiser .

By 19 : 24 , the 3rd Battlecruiser Squadron had formed up with Beatty 's remaining battlecruisers ahead of the German line . The leading British ships spotted Lützow and Derfflinger , and began firing on them . In the span of 8 minutes , the battlecruiser Invincible scored eight hits on Lützow ; these hits were mainly concentrated in the ship 's bow and were the primary cause of the flooding that would eventually cause her to sink . In return , both Lützow and Derfflinger concentrated their fire on Invincible , and 19 : 33 , Lützow 's third salvo penetrated Invincible 's center turret and ignited the magazine ; the ship disappeared in a series of massive explosions .

By 19 : 30 , the High Seas Fleet , which was by that point pursuing the British battlecruisers , had not yet encountered the Grand Fleet . Scheer had been considering retiring his forces before darkness exposed his ships to torpedo boat attack . He had not yet made a decision when his

leading battleships encountered the main body of the Grand Fleet . This development made it impossible for Scheer to retreat , for doing so would have sacrificed the slower pre @-@ dreadnought battleships of the II Battle Squadron . If he chose to use his dreadnoughts and battlecruisers to cover their retreat , he would have subjected his strongest ships to overwhelming British fire . Instead , Scheer ordered his ships to turn 16 points to starboard , which would bring the pre @-@ dreadnoughts to the relative safety of the disengaged side of the German battle line .

= = = Lützow withdraws = = =

The other battlecruisers followed the move , but Lützow had lost speed and was unable to keep up . Instead , the ship tried to withdraw to the southwest to escape the punishing British gunfire . By 20 : 00 , flooding in the forward part of the ship had reached the magazine for the forward turret . The gun crew brought up as many shells and propellant charges as could be stored in the working chamber below the turret . Shortly before , at 19 : 50 , Kommodore Michelson , aboard the cruiser Rostock , dispatched the torpedo boats of I Half @-@ Flotilla to assist Lützow . G39 came alongside and took Hipper and his staff aboard , in order to transfer him to one of the other battlecruisers . V45 and G37 began laying a smoke screen between the battered ship and the British line , but at 20 : 15 , before it was finished , Lützow was struck in quick succession by four heavy @-@ caliber shells . One pierced the ship 's forward superfiring turret and temporarily disabled it . The shell detonated a propellant charge and the right gun was destroyed . The second hit disabled the electric training gear of the rearmost turret , which now had to be operated by hand . Lützow fired her last shot at 20 : 45 , at which point the smoke screen had successfully hidden her from the British line .

As the German fleet began to withdraw after nightfall , Lützow , steaming at 15 knots , attempted to pass behind the German line to seek the safety of the disengaged side . By 22 : 13 , the last German ship in the line lost sight of Lützow , which was unable to keep up with the fleet . Admiral Reinhard Scheer , the commander of the High Seas Fleet , hoped that in the foggy darkness , Lützow could evade detection and successfully return to a German port . By 21 : 30 , the ship was settling deeper into the sea . Water began to wash onto the deck and into the forecastle above the main armored deck ; this would prove to be a significant problem .

= = = Lützow scuttled = = =

At midnight , there was still hope that the severely wounded Lützow could make it back to harbor . The ship was capable of 7 knots up until around 00 : 45 when she began taking on more water . By 01 : 00 , there was too much water in the hull for the pumps to handle . Water began to enter the forward generator compartments , which forced the crew to work by candlelight . Lützow was so low in the water by 01 : 30 that water began to flood the forward boiler room . By that point , almost all of the compartments in the forward part of the ship , up to the conning tower and below the main armored deck , were thoroughly flooded . Water had also entered the ship through shell holes in the forecastle above the armored deck ; the majority of the upper portion of the ship forward of the forward @-@ most barbette was flooded as well . The battlecruiser 's crew attempted to patch the shell holes three times , but as the flooding worsened and the draft increased , water increasingly washed over the deck and inhibited progress on the repair work .

The crew attempted to reverse direction and steam backwards , but this had to be abandoned when the bow became so submerged that the propellers were pulled partially out of the water ; forward draft had increased to over 17 meters . By 2 : 20 , an estimated 8 @, @ 000 tons of water was in the ship , and she was in serious danger of capsizing , so KzS Harder gave the order to abandon ship . The torpedo boats G37 , G38 , G40 , and V45 came alongside the stricken battlecruiser to evacuate the ship 's crew , though six men were trapped in the bow and could not be freed . By 02 : 45 Lützow was submerged up to her bridge . G38 fired two torpedoes into the ship , and two minutes later she disappeared below the waves . The ship was approximately 60 km ( 37 mi ) north @-@ west of Horns Reef when she was scuttled . The position of the wreck is estimated to be 56 ° 15 ' N 5 ° 53 ' E .

During the battle , Lützow had fired an estimated 380 main battery shells and 400 rounds from her secondary guns , as well as two torpedoes . In return , she was hit 24 times by British heavy @-@ caliber shells . The ship 's crew suffered 115 men killed and another 50 wounded , second only to Derfflinger , which lost 157 men killed and 26 wounded .

In 2015 , the survey ship HMS Echo conducted an exploration of the area while laying a tide gauge . During the search , Echo 's sonar located Lützow on the sea floor , some eight miles from her last recorded position . Echo took sonar images of the wreck , which her commander stated would " ensure the ship 's final resting place is properly recognised as a war grave . "