

= HMS Courageous (50) =

HMS Courageous was the lead ship of the Courageous class cruisers built for the Royal Navy during the First World War . Designed to support the Baltic Project championed by First Sea Lord John Fisher , the ship was very lightly armoured and armed with only a few heavy guns . Courageous was completed in late 1916 and spent the war patrolling the North Sea . She participated in the Second Battle of Heligoland Bight in November 1917 and was present when the German High Seas Fleet surrendered a year later .

Courageous was decommissioned after the war , then rebuilt as an aircraft carrier during the mid 1920s . She could carry 48 aircraft compared to the 36 carried by her half sister Furious on approximately the same displacement . After recommissioning she spent most of her career operating off Great Britain and Ireland . She briefly became a training carrier , but reverted to her normal role a few months before the start of the Second World War in September 1939 . Courageous was torpedoed and sunk in the opening weeks of the war , going down with more than 500 of her crew .

= = Origin and construction = =

During the First World War , Admiral Fisher was prevented from ordering an improved version of the preceding Renown class battlecruisers by a wartime restriction that banned construction of ships larger than light cruisers in 1915 . To obtain ships suitable for the doctrinal roles of battlecruisers , such as scouting for fleets and hunting enemy raiders , he settled on ships with the minimal armour of a light cruiser and the armament of a battlecruiser . He justified their existence by claiming he needed fast , shallow draught ships for his Baltic Project , a plan to invade Germany via its Baltic coast .

Courageous had an overall length of 786 feet 9 inches (239 . 8 m) , a beam of 81 feet (24 . 7 m) , and a draught of 25 feet 10 inches (7 . 9 m) at deep load . She displaced 19 , 180 long tons (19 , 490 t) at load and 22 , 560 long tons (22 , 922 t) at deep load . Courageous and her sisters were the first large warships in the Royal Navy to have geared steam turbines . To save design time , the installation used in the light cruiser Champion , the first cruiser in the navy with geared turbines , was simply replicated for four turbine sets . The Parsons turbines were powered by eighteen Yarrow small tube boilers . They were designed to produce a total of 90 , 000 shaft horsepower (67 MW) at a working pressure of 235 psi (16 . 2 kPa ; 17 kgf / cm²) . The ship reached an estimated 30 . 8 knots (57 . 0 km / h ; 35 . 4 mph) during sea trials .

The ship 's normal design load was 750 long tons (762 t) of fuel oil , but she could carry a maximum of 3 , 160 long tons (3 , 211 t) . At full capacity , she could steam for an estimated 6 , 000 nautical miles (11 , 110 km ; 6 , 900 mi) at a speed of 20 knots (37 km / h ; 23 mph) .

Courageous carried four BL 15 inch Mk I guns in two hydraulically powered twin gun turrets , designated ' A ' and ' Y ' from front to rear . Her secondary armament consisted of eighteen BL 4 inch Mk IX guns mounted in six manually powered mounts . The mount placed three breeches too close together , causing the 23 loaders to get in one another 's way , and preventing the intended high rate of fire . A pair of QF 3 inch 20 cwt anti aircraft guns were fitted abreast the mainmast on Courageous . She mounted two submerged tubes for 21 inch torpedoes and carried 10 torpedoes for them .

= = First World War = =

Courageous was laid down on 26 March 1915 , launched on 5 February 1916 and completed on 4 November . During her sea trials later that month , she sustained structural damage while running at full speed in a rough head sea ; the exact cause is uncertain . The forecastle deck was deeply buckled in three places between the breakwater and the forward turret . The side plating was visibly

buckled between the forecastle and upper decks . Water had entered the submerged torpedo room and rivets had sheared in the angle irons securing the deck armour in place . The ship was stiffened with 130 long tons (130 t) of steel in response . As of 23 November 1916 , she cost £ 2 @, @ 038 @, @ 225 to build .

Upon commissioning , Courageous was assigned to the 3rd Light Cruiser Squadron of the Grand Fleet . She became flagship of the 1st Cruiser Squadron near the end of 1916 when that unit was re @-@ formed after most of its ships had been sunk at the Battle of Jutland in May . The ship was temporarily fitted as a minelayer in April 1917 by the addition of mine rails on her quarterdeck that could hold over 200 mines , but never laid any mines . In mid @-@ 1917 , she received half a dozen torpedo mounts , each with two tubes : one mount on each side of the mainmast on the upper deck and two mounts on each side of the rear turret on the quarterdeck . On 30 July 1917 , Rear @-@ Admiral Trevelyen Napier assumed command of the 1st Cruiser Squadron and was appointed Acting Vice @-@ Admiral Commanding the Light Cruiser Force until he was relieved on 26 October 1918 .

On 16 October 1917 , the Admiralty received word of German ship movements , possibly indicating a raid . Admiral Beatty , the commander of the Grand Fleet , ordered most of his light cruisers and destroyers to sea in an effort to locate the enemy ships . Courageous and Glorious were not initially included amongst them , but were sent to reinforce the 2nd Light Cruiser Squadron patrolling the central part of the North Sea later that day . Two German Brummer @-@ class light cruisers managed to slip through the gaps between the British patrols and destroy a convoy bound for Norway during the morning of 17 October , but no word was received of the engagement until that afternoon . The 1st Cruiser Squadron was ordered to intercept , but was unsuccessful as the German cruisers were faster than expected .

= = = Second Battle of Heligoland Bight = = =

Throughout 1917 the Admiralty was becoming more concerned about German efforts to sweep paths through the British @-@ laid minefields intended to restrict the actions of the High Seas Fleet and German submarines . A preliminary raid on German minesweeping forces on 31 October by light forces destroyed ten small ships . Based on intelligence reports , the Admiralty allocated the 1st Cruiser Squadron on 17 November 1917 , with cover provided by the reinforced 1st Battlecruiser Squadron and distant cover by the battleships of the 1st Battle Squadron , to destroy the minesweepers and their light cruiser escorts .

The German ships ? four light cruisers of II Scouting Force , eight destroyers , three divisions of minesweepers , eight Sperrbrechers (cork @-@ filled trawlers) and two other trawlers to mark the swept route ? were spotted at 7 : 30 am . Courageous and the light cruiser Cardiff opened fire with their forward guns seven minutes later . The Germans responded by laying an effective smoke screen . The British continued in pursuit , but lost track of most of the smaller ships in the smoke and concentrated fire on the light cruisers . Courageous fired 92 fifteen @-@ inch shells and 180 four @-@ inch shells during the battle , and the only damage she received was from her own muzzle blast . One fifteen @-@ inch shell hit a gun shield of the light cruiser SMS Pillau but did not affect her speed . At 9 : 30 the 1st Cruiser Squadron broke off their pursuit so that they would not enter a minefield marked on their maps ; the ships turned south , playing no further role in the battle .

After the battle , the mine fittings on Courageous were removed , and she spent the rest of the war intermittently patrolling the North Sea . In 1918 , short take @-@ off platforms were fitted for a Sopwith Camel and a Sopwith 1 ½ Strutter on both 15 @-@ inch (380 mm) turrets . The ship was present at the surrender of the German High Seas fleet on 21 November 1918 . Courageous was placed in reserve at Rosyth on 1 February 1919 and she again became Napier 's flagship as he was appointed Vice @-@ Admiral Commanding the Rosyth Reserve until 1 May , The ship was assigned to the Gunnery School at Portsmouth the following year as a turret drill ship . She became flagship of the Rear @-@ Admiral Commanding the Reserve at Portsmouth in March 1920 . Captain Sidney Meyrick became her Flag Captain in 1920 . He was relieved by Capt John Casement in August 1921 .

= = Between the wars = =

= = = Conversion = = =

The Washington Naval Treaty of 1922 severely limited capital ship tonnage , and the Royal Navy was forced to scrap many of its older battleships and battlecruisers . The treaty allowed the conversion of existing ships totalling up to 66 @, @ 000 long tons (67 @, @ 059 t) into aircraft carriers , and the Courageous class 's combination of a large hull and high speed made these ships ideal candidates . The conversion of Courageous began on 29 June 1924 at Devonport . Her fifteen @-@ inch turrets were placed into storage and reused during the Second World War for HMS Vanguard , the Royal Navy 's last battleship . The conversion into an aircraft carrier cost £ 2 @, @ 025 @, @ 800 .

The ship 's new design improved on her half @-@ sister HMS Furious , which lacked an island and a conventional funnel . All superstructure , guns , torpedo tubes , and fittings down to the main deck were removed . A two @-@ storey hangar was built on top of the remaining hull ; each level was 16 feet (4 @. @ 9 m) high and 550 feet (167 @. @ 6 m) long . The upper hangar level opened onto a short flying @-@ off deck , below and forward of the main flight deck . The flying @-@ off deck improved launch and recovery cycle flexibility until new fighters requiring longer takeoff rolls made the lower deck obsolete in the 1930s . Two 46 @-@ by @-@ 48 @-@ foot (14 @. @ 0 m × 14 @. @ 6 m) lifts were installed fore and aft in the flight deck . An island with the bridge , flying control station and funnel was added on the starboard side , since islands had been found not to contribute significantly to turbulence . By 1939 the ship could carry 34 @, @ 500 imperial gallons (157 @, @ 000 l ; 41 @, @ 400 US gal) of petrol for her aircraft .

Courageous received a dual @-@ purpose armament of sixteen QF 4 @. @ 7 @-@ inch Mk VIII guns in single HA Mark XII mounts . Each side of the lower flight deck had a mount , and two were on the quarterdeck . The remaining twelve mounts were distributed along the sides of the ship . During refits in the mid @-@ 1930s , Courageous received three quadruple Mk VII mounts for 40 @-@ millimetre (1 @. @ 6 in) 2 @-@ pounder " pom @-@ pom " anti @-@ aircraft guns , two of which were transferred from the battleship Royal Sovereign . Each side of the flying @-@ off deck had a mount , forward of the 4 @. @ 7 @-@ inch guns , and one was behind the island on the flight deck . She also received four water @-@ cooled .50 @-@ calibre Mk III anti @-@ aircraft machine guns in a single quadruple mounting . This was placed in a sponson on the port side aft .

The reconstruction was completed on 21 February 1928 , and the ship spent the next several months on trials and training before she was assigned to the Mediterranean Fleet to be based at Malta , in which she served from May 1928 to June 1930 . In August 1929 , the 1929 Palestine riots broke out , and Courageous was ordered to respond . When she arrived off Palestine , her air wing was disembarked to carry out operations to help to suppress the disorder . The ship was relieved from the Mediterranean by Glorious and refitted from June to August 1930 . She was assigned to the Atlantic and Home Fleets from 12 August 1930 to December 1938 , aside from a temporary attachment to the Mediterranean Fleet in 1936 . In the early 1930s , traverse arresting gear was installed and she received two hydraulic aircraft catapults on the upper flight deck before March 1934 . Courageous was refitted again between October 1935 and June 1936 with her pom @-@ pom mounts . She was present at the Coronation Fleet Review at Spithead on 20 May 1937 for King George VI . The ship became a training carrier in December 1938 when Ark Royal joined the Home Fleet . She was relieved of that duty by her half @-@ sister Furious in May 1939 . Courageous participated in the Portland Fleet Review on 9 August 1939 .

= = = Air group = = =

Courageous could carry up to 48 aircraft ; following completion of her trials and embarking stores and personnel , she sailed for Spithead on 14 May 1928 . The following day , a Blackburn Dart of

463 Flight made the ship 's first deck landing . The Dart was followed by the Fairey Flycatchers of 404 and 407 Flights , the Fairey IIIFs of 445 and 446 Flights and the Darts of 463 and 464 Flight . The ship sailed for Malta on 2 June to join the Mediterranean Fleet .

From 1933 to the end of 1938 Courageous carried No. 800 Squadron , which flew a mixture of nine Hawker Nimrod and three Hawker Osprey fighters . 810 , 820 and 821 Squadrons were embarked for reconnaissance and anti @-@ ship attack missions during the same period . They flew the Blackburn Baffin , the Blackburn Shark , the Blackburn Ripon and the Fairey Swordfish torpedo bombers as well as Fairey Seal reconnaissance aircraft . As a deck landing training carrier , in early 1939 Courageous embarked the Blackburn Skua and Gloster Sea Gladiator fighters of 801 Squadron and the Swordfish torpedo bombers of 811 Squadron , although both of these squadrons were disembarked when the ship was relieved of her training duties in May .

= = Second World War and sinking = =

Courageous served with the Home Fleet at the start of World War II with 811 and 822 Squadrons aboard , each squadron equipped with a dozen Fairey Swordfish . In the early days of the war , hunter @-@ killer groups were formed around the fleet 's aircraft carriers to find and destroy U @-@ boats . On 31 August 1939 she went to her war station at Portland and embarked the two squadrons of Swordfish . Courageous departed Plymouth on the evening of 3 September 1939 for an anti @-@ submarine patrol in the Western Approaches , escorted by four destroyers . On the evening of 17 September 1939 , she was on one such patrol off the coast of Ireland . Two of her four escorting destroyers had been sent to help a merchant ship under attack and all her aircraft had returned from patrols . During this time , Courageous was stalked for over two hours by U @-@ 29 , commanded by Captain @-@ Lieutenant Otto Schuhart . The carrier then turned into the wind to launch her aircraft . This put the ship right across the bow of the submarine , which fired three torpedoes . Two of the torpedoes struck the ship on her port side before any aircraft took off , knocking out all electrical power , and she capsized and sank in 20 minutes with the loss of 519 of her crew , including her captain . The survivors were rescued by the Dutch ocean liner Veendam and the British freighter Collingworth . The two escorting destroyers counterattacked U @-@ 29 for four hours , but the submarine escaped .

An earlier unsuccessful attack on Ark Royal by U @-@ 39 on 14 September , followed by the sinking of Courageous three days later , prompted the Royal Navy to withdraw its carriers from anti @-@ submarine patrols . Courageous was the first British warship to be sunk by German forces . (The submarine Oxley had been sunk a week earlier by the British submarine Triton .) The commander of the German submarine force , Commodore Karl Dönitz , regarded the sinking of Courageous as " a wonderful success " and it led to widespread jubilation in the Kriegsmarine (German navy) . Grand Admiral Erich Raeder , commander of the Kriegsmarine , directed that Schuhart be awarded the Iron Cross First Class and that all other members of the crew receive the Iron Cross Second Class .