

= HMS Glorious =

HMS Glorious was the second of the Courageous class battlecruisers built for the Royal Navy during the First World War . Designed to support the Baltic Project championed by the First Sea Lord , Lord Fisher , they were very lightly armoured and armed with only a few heavy guns . Glorious 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 .

Glorious was paid off after the end of the war , but was rebuilt as an aircraft carrier during the late 1920s . She could carry 30 % more aircraft than her half sister Furious which had approximately the same tonnage . After recommissioning she spent most of her career operating in the Mediterranean Sea . After the start of the Second World War , Glorious spent the rest of 1939 unsuccessfully hunting for the German cruiser Admiral Graf Spee in the Indian Ocean before returning to the Mediterranean . She was recalled in April 1940 to support British operations in Norway . While evacuating British aircraft from Norway in June , the ship was sunk by the German battleships Scharnhorst and Gneisenau in the North Sea with the loss of over 1,200 lives .

= = Design and description = =

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 . To obtain ships suitable for traditional battlecruiser roles , such as scouting for fleets and hunting enemy raiders , he settled on a design 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 .

Glorious 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 . Glorious and her sisters were the first large warships in the Royal Navy to have geared steam turbines . To save time the installation used in the light cruiser Champion , the first cruiser in the Royal Navy with geared turbines , was simply doubled . The Parsons turbines were powered by eighteen Yarrow small tube boilers . They were designed to produce a total of 90,000 shaft horsepower (67,113 kW) at a working pressure of 235 psi (16.20 kPa ; 17 kgf / cm²) . During the ship 's abbreviated sea trials she reached 31.42 knots (58.19 km / h ; 36.16 mph) .

The ship was designed to normally carry 750 long tons (760 t) of fuel oil , but could carry a maximum of 3,160 long tons (3,210 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) .

Glorious carried four BL 15 inch Mark I guns in two twin hydraulically powered Mark I * turrets , one each fore (' A ') and aft (' Y ') . Her secondary armament consisted of eighteen BL 4 inch Mark IX guns mounted in six manually powered triple T.I. Mark I mounts . These mounts had the three breeches too close together and the 23 loaders tended to interfere with one another . This rather negated the mount 's intended purpose to provide a high rate of fire against torpedo boats and other smaller craft . A pair of QF 3 inch 20 cwt anti aircraft guns were fitted abreast the mainmast on Glorious . She mounted two submerged tubes for 21 inch torpedoes and 10 torpedoes were carried .

= = World War I = =

Her keel was laid down on 1 May 1915 by Harland and Wolff at their Belfast shipyard . Glorious was launched on 20 April 1916 and completed on 14 October 1916 . During her sea trials in November

1916 , Courageous sustained structural damage while running at full speed in a rough head sea and had the damaged areas stiffened shortly afterwards to prevent a recurrence . Glorious did not suffer any similar damage and did not receive her stiffening until 1918 . Upon commissioning , Courageous served with the 3rd Light Cruiser Squadron of the Grand Fleet . After most of the 1st Cruiser Squadron was sunk at the Battle of Jutland , the squadron was re @-@ formed with Courageous as flagship along with her sister ship Glorious . She cost £ 1 @,@ 967 @,@ 223 to build (costs to 23 Nov 1916) . Glorious received a half a dozen torpedo mounts , each with two tubes in mid @-@ 1917 : 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 16 October 1917 the Admiralty received word of German ship movements , possibly indicating some sort of 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 ordered to sea , 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 in the British patrols and destroyed 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 were ordered to intercept , but were 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 and the Admiralty decided on a larger operation to destroy the minesweepers and their light cruiser escorts . 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 .

The German ships , four light cruisers of II Scouting Force , eight destroyers , three divisions of minesweepers , eight sperrbrecher (cork @-@ filled trawlers) and two trawlers to mark the swept route , were spotted at 7 : 30 am , silhouetted by the rising sun . Courageous and the light cruiser Cardiff opened fire with their forward guns seven minutes later . The Germans responded by laying a smoke screen and this made spotting targets very difficult . The British continued in pursuit , but lost track of most of the smaller ships in the smoke and concentrated fire on the light cruisers as opportunity permitted . One 15 @-@ inch hit was made on a gun shield of SMS Pillau , but it did not affect her speed . At 8 : 33 the left @-@ hand gun in Glorious 's forward turret was wrecked when a shell detonated inside the gun barrel . At 9 : 30 the 1st Cruiser Squadron broke off their pursuit so they would not enter a minefield marked on their maps ; the ships turned south , playing no further role in the battle .

Glorious required five days of repairs to right the damage caused from the premature detonation and from her own muzzle blast . She fired 57 15 @-@ inch and 213 4 @-@ inch shells during the engagement . The ship received flying @-@ off platforms on top of her turrets in 1918 . A Sopwith Camel was carried on the rear turret and a Sopwith 1 ½ Strutter on the forward turret . She was present at the surrender of the German fleet on 21 November 1918 . Glorious was reduced to reserve at Rosyth on 1 February 1919 and served as a turret drill ship , being also flagship of the Rear @-@ Admiral Commanding the Devonport Reserve between 1921 and 1922 .

= = Conversion = =

The Washington Naval Treaty of 1922 severely limited the amount of capital ship tonnage and the Royal Navy was forced to scrap many of its older battleships and battlecruisers . However up to 66 @,@ 000 long tons (67 @,@ 059 t) of existing ships could be converted into aircraft carriers , for which the Courageous @-@ class ships ' combination of a large hull and high speed made them an

ideal candidate for conversion . Glorious began her conversion at Rosyth in 1924 , but was towed to Devonport for completion , and she was re-commissioned on 24 February 1930 . During the ship's post-conversion sea trials she reached 29.4 knots (54.0 km / h ; 33.0 mph) . Her fifteen 4-inch turrets were placed into storage and later reused during World War II for HMS Vanguard , the Royal Navy's last battleship .

Her 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 , each level 16 feet (4.9 m) high and 550 feet (167.6 m) long , was built on top of the remaining hull ; the upper hangar level opened on to 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 x 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 as 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 .

Glorious received a dual-purpose armament of sixteen QF 4.7-inch Mark VIII guns in single High-Angle Mark XII mounts . One mount was on each side of the lower flight deck and a pair was on the quarterdeck . The remaining twelve mounts were distributed along the sides of the ship . During her 1935 refit , Glorious received three octuple 2-pounder pom-pom Mark VI mounts , one on each side of the flying-off deck , forward of the 4.7-inch guns , and one behind the island on the flight deck . She also received four water-cooled .50-calibre Mark III machine guns in a single quadruple mounting .

Glorious recommissioned on 24 February 1930 for service with the Mediterranean Fleet , but was attached to the Home Fleet from March to June 1930 . She relieved Courageous in the Mediterranean Fleet in June 1930 and remained there until October 1939 . In a fog on 1 April 1931 Glorious rammed the French ocean liner Florida amidships while steaming at 16 knots (30 km / h ; 18 mph) . The impact crumpled 60 feet (18.3 m) of the flying-off deck and killed 1 seaman aboard Glorious and 24 passengers and crew aboard Florida . Glorious was forced to put into Gibraltar to temporary repairs . She had to sail to Malta for permanent repairs which lasted until September 1931 . Sometime in the early 1930s , traverse arresting gear was installed . She was refitted at Devonport from July 1934 to July 1935 where she received two hydraulic accelerators (catapults) on her upper flight deck , which was also extended to the rear , her quarterdeck was raised one deck and she received her multiple pom-pom mounts . Glorious participated in the Coronation Fleet Review at Spithead on 20 May 1937 for George VI before returning to the Mediterranean .

== Air group ==

Glorious could carry up to 48 aircraft ; when first recommissioned , she carried Fairey Flycatcher fighters , Blackburn Dart and Blackburn Ripon torpedo bombers , and Fairey III F reconnaissance planes of the Fleet Air Arm . From 1933 until Glorious returned to the United Kingdom in April 1940 , aside from a period when refitting in the mid-1930s , she carried 802 Squadron which flew a mixture of nine Hawker Nimrod and three Hawker Osprey fighters , until re-equipping with a dozen Gloster Sea Gladiators in May 1939 . 812 and 823 Squadrons were embarked for reconnaissance and anti-ship attack missions . They flew the Blackburn Ripon , the Blackburn Baffin and the Fairey Swordfish torpedo bombers and as well as Fairey III F and Fairey Seal reconnaissance aircraft . When Glorious recommissioned after her refit in 1935 825 Squadron was embarked , initially with Fairey III F's , but the squadron converted to Fairey Swordfish in May 1936 .

== World War II ==

Glorious served briefly with the Mediterranean Fleet for a time after World War II broke out . In

October 1939 , she moved through the Suez Canal to the Indian Ocean where she became part of Force J which was organized to hunt for the Admiral Graf Spee in the Indian Ocean . It was not successful and Glorious remained in the Indian Ocean until December when she returned to the Mediterranean .

= = = Norwegian Campaign = = =

She was recalled to the Home Fleet in April 1940 to provide air cover for British forces landing in Norway . Eighteen Gloster Gladiators of No. 263 Squadron RAF were flown aboard to be transferred to Norwegian airbases . Eleven Blackburn Skuas of 803 Squadron , plus eighteen Sea Gladiators from 802 and 804 Squadrons were also embarked . Glorious and Ark Royal arrived off central Norway on 24 April where 263 Squadron was flown off and their own aircraft attacked targets in and south of Trondheim before Glorious had to return to Scapa Flow late on 27 April to refuel and embark new aircraft . Glorious 's Sea Gladiators provided air cover for the two carriers . They damaged one Heinkel He 111 bomber on a reconnaissance mission . Before departing she transferred four serviceable Skuas to Ark Royal . She returned on 1 May , but had been unable to load many new aircraft because of poor weather . Only a dozen Swordfish of 823 Squadron , three Skuas and one Blackburn Roc managed to be flown aboard . The task force was under heavy air attack by the Luftwaffe all day and was withdrawn that evening . One Junkers Ju 87 Stuka dive bomber was shot down after it dropped its bomb by the Sea Gladiators on patrol .

Glorious returned on 18 May with six Supermarine Walrus amphibious flying boats of 701 Squadron and 18 Hawker Hurricanes of No. 46 Squadron RAF . The latter aircraft had been loaded aboard by crane . The Walruses were quickly flown off to Harstad , but the airfield at Skånland was not yet ready for the Hurricanes and they were still aboard when Glorious returned to Scapa on 21 May . Glorious came back to the Narvik area on 26 May and the Hurricanes were quickly flown off .

However , even this success proved to be ephemeral and British forces were ordered withdrawn a few days later . The evacuation (Operation Alphabet) began in the north on the night of 3 / 4 June and Glorious arrived off the coast on 2 June to provide support although she only carried nine Sea Gladiators of 802 and six Swordfish from 823 Squadrons for self @-@ defence as it was hoped to evacuate the RAF fighters if at all possible . Ten Gladiators of 263 Squadron were flown aboard during the afternoon of 7 June and the Hurricanes of 46 Squadron were also flown aboard without any significant problems in the early evening despite having a much higher landing speed than the biplanes . These had been flown off from land bases to keep them from being destroyed in the evacuation after the pilots discovered that a 7 @-@ kilogram (15 lb) sandbag carried in the rear of the Hurricane allowed full brakes to be applied immediately on landing . This was the first time that high performance monoplanes without tailhooks had been landed on an aircraft carrier .

= = = The sinking = = =

The commanding officer of Glorious , Captain Guy D 'Oyly @-@ Hughes , was a former submariner who had been executive officer of Courageous for ten months . He was granted permission to proceed independently to Scapa Flow in the early hours of 8 June to hold a court @-@ martial of his Commander (Air) , J. B. Heath , who had refused an order to carry out an attack on shore targets on the grounds that the targets were at best ill @-@ defined and his aircraft were unsuited to the task , and who had been left behind in Scapa to await trial . On the way through the Norwegian Sea the funnel smoke from Glorious and her two escorting destroyers , Acasta and Ardent , was spotted by the German battleships Scharnhorst and Gneisenau at about 3 : 46 pm . The German ships were not spotted until shortly after 4 : 00 and Ardent was dispatched to investigate . Glorious did not alter course or increase speed . Five Swordfish were ordered to the flight deck but Action Stations was not ordered until 4 : 20 . No combat air patrol was being flown , no aircraft were ready on the deck for quick take @-@ off and there was no lookout in Glorious 's crow 's nest . Scharnhorst opened fire on Ardent at 4 : 27 at a range of about 16 @,@ 000 yards (15 @,@ 000 m) , causing the destroyer to withdraw , firing torpedoes and making a smoke screen . Ardent scored one hit with her

4 @. @ 7 @-@ inch (120 mm) guns on Scharnhorst but was hit several times by the German ships ' secondary armament and sank at about 5 : 25 .

Scharnhorst switched her fire to Glorious at 4 : 32 and scored her first hit six minutes later on her third salvo , at an approximate range of 26 @, @ 000 yards (24 @, @ 000 m) , when one 28 @. @ 3 @-@ centimetre (11 @. @ 1 in) hit the forward flight deck and burst in the upper hangar , starting a large fire . This hit destroyed two Swordfish being prepared for flight and the hole in the flight deck prevented any other aircraft from taking off . Splinters penetrated a boiler casing and caused a temporary drop in steam pressure . At 4 : 58 a second shell hit the homing beacon above the bridge and killed or wounded the captain and most of the personnel stationed there . The smokescreen became effective enough to impair the visibility of the Germans from about 4 : 58 to 5 : 20 so they ceased fire on Glorious .

Glorious was hit again in the centre engine room at around 5 : 20 and this caused her to lose speed and commence a slow circle to port . She also developed a list to starboard . The German ships closed to within 16 @, @ 000 yards and continued to fire at her until about 5 : 40 . Glorious sank at about 6 : 10 , approximately at 68 ° 38 ' N 03 ° 50 ' E , with only 43 survivors .

As the German ships approached Glorious , the destroyer Acasta , which had been trying to maintain the smokescreen , broke through her own smoke and fired two volleys of torpedoes at Scharnhorst . One of these hit the battleship at 5 : 34 abreast her rear turret and badly damaged her . Acasta also managed one hit from her 4 @. @ 7 @-@ inch guns on Scharnhorst , but was riddled by German gunfire and sank at around 6 : 20 .

According to Winton , survivors ' estimates were that about 900 men abandoned Glorious . The German ships did not try to save survivors . The Royal Navy knew nothing of the sinking until it was announced on German radio . The Norwegian ship Borgund , on passage to the Faroe Islands , arrived late on June 10 and picked up survivors , eventually delivering 37 alive to Thorshavn of whom two died . Another Norwegian ship , Svalbard II , also making for the Faeroes , picked up five survivors but was sighted by a German aircraft and forced to return to Norway , where the four still alive became prisoners of war for the next five years . It is also believed that one more survivor from Glorious was rescued by a German seaplane . Therefore , the total of survivors was 40 , including one each from Acasta and Ardent . The total killed or missing was 1 @, @ 207 from Glorious , 160 from Acasta and 152 from Ardent , a total of 1 @, @ 519 .

The disaster and the failure to mount an effective rescue was clearly an embarrassment for the Royal Navy . All ships encountering the enemy should routinely broadcast a sighting report , and so the lack of a sighting report from Glorious was eventually raised in the House of Commons . It later became known that the heavy cruiser HMS Devonshire had passed within 30 ? 50 miles of the battle , flying the flag of Vice Admiral John Cunningham , who was carrying out orders to evacuate the Norwegian Royal Family to the UK and maintain radio silence . Some surviving eyewitnesses from Glorious and HMS Devonshire later testified that the sighting report had been correctly sent , and received by HMS Devonshire , but that it had been suppressed by Cunningham , who departed at high speed in accordance with his orders . It has also been alleged by Howland that there was some confusion over the use of wireless telegraphy frequencies on board Glorious which could have contributed to the failure of any other ship or shore @-@ station to receive a sighting report . Howland also cites the absence of normal airborne patrols over Glorious and its attendant destroyers , in conditions of maximum visibility , as a contributory factor to the sinking of Glorious and her escorts .

= = = Memorials = = =

For many years the only memorial to the seamen lost in the three ships was a stained @-@ glass window in the church of St Peter Martindale in Cumbria , on the east side of Ullswater . On 8 June 2010 , 70 years after the loss of Glorious , Acasta and Ardent , a memorial plaque inscribed in English and Norwegian was unveiled near the Trondenes Historical Centre in Harstad , Norway , the two destroyers ' last port of call .

= = Acclaimed model = =

A model of HMS Glorious by renowned marine model maker Norman A. Ough , built for the Royal United Services Museum , is now on display in the Fleet Air Arm Museum at RNAS Yeovilton .