



Name: HMS Achilles Namesake: Achilles

Builder: Armstrong Whitworth, Elswick

Laid down: 22 February 1904 Launched: 17 June 1905 Completed: 22 April 1907 Reclassified: Training ship, 1918

Fate: Sold for scrap, 9 May 1921

# General characteristics

Class and type: Warrior-class armoured cruiser

Displacement: 13,550 long tons (13,770 t) (normal), 14,500 long tons (14,700 t) (deep load)

Length: 505 ft 4 in (154.0 m) Beam: 73 ft 6 in (22.4 m)

Draught: 27 ft 6 in (8.4 m) (maximum) Installed power: 23,650 ihp (17,640 kW)

Propulsion: 2 shafts, 4-cylinder triple-expansion steam engines, 19 Yarrow water-tube boilers and 6

cylindrical boilers

Speed: 23 knots (43 km/h; 26 mph)

Range: 7,960 nmi (14,740 km; 9,160 mi) at 10 knots (19 km/h; 12 mph)

Complement: 712

Armament:

• 6 × 1 - BL 9.2-inch (234 mm) Mk X guns

4 × 1 - BL 7.5-inch (191 mm) Mk II or Mk V guns

• 26 × 1 - QF 3-pounder (47 mm) guns

• 3 × 1 - submerged 18-inch (450 mm) torpedo tubes

### Armour:

• Belt: 3–6 in (76–152 mm)

• Decks: 0.75–1.5 in (19–38 mm)

• Barbettes: 3–6 in (76–152 mm)

• Turrets: 4.5–7.5 in (110–190 mm)

• Conning tower: 10 in (250 mm)

• Bulkheads: 2-6 in (51-152 mm)

HMS Achilles was a Warrior-class armoured cruiser built for the Royal Navy in the first decade of the 20th century. She served with the 2nd Cruiser Squadron for most of the First World War. The ship did not participate in the Battle of Jutland in 1916 but did sink the German raider Leopard in 1917. Achilles became a training ship in 1918 and was sold for scrap in 1921.

## General description

Achilles displaced 13,550 long tons (13,770 t) as built and 14,500 long tons (14,700 t) fully loaded. The ship had an overall length of 505 feet 4 inches (154.0 m), a beam of 73 feet 6 inches (22.4 m) and a draught of 27 feet 6 inches (8.4 m). She was powered by four-cylinder triple-expansion steam engines, driving two shafts, which developed a total of 23,650 indicated horsepower (17,640 kW) and gave a maximum speed of 23.3 knots (43.2 km/h; 26.8 mph). The engines were powered by 19 Yarrow water-tube boilers and six cylindrical boilers. The ship carried a maximum of 2,050 long tons (2,080 t) of coal and an additional 600 long tons (610 t) of fuel oil that was sprayed on the coal to increase its burn rate. At full capacity, she could steam for 7,960 nautical miles (14,740 km; 9,160 mi) at a speed of 10 knots (19 km/h; 12 mph).

## Armament

Her main armament consisted of six BL 9.2-inch (234 mm) Mark X guns in single Mk V turrets distributed in two centerline turrets (one each fore and one aft) and four turrets disposed in the corners about the funnels. Her secondary armament of four BL 7.5-inch (191 mm) Mark II or Mark V guns in single Mk II turrets was carried amidships, between the wing 9.2-inch guns. Twenty-six Vickers QF 3-pounders were fitted, ten on turret roofs and eight each on the forward and aft superstructures. The last four ships of the Duke of Edinburgh-class cruisers had a secondary armament of turreted 7.5-inch guns rather than the 6-inch (152 mm) guns in open barbettes of the first two ships; these latter four were sometimes referred to as the Warrior class. Because of the extra topweight of the turrets in comparison to their half-sisters their stability was reduced which made them very good sea boats and steady gun platforms because they did not roll as much. The ship also mounted three submerged 18-inch (457 mm) torpedo tubes, one of which was mounted in the stern.

#### Wartime modifications

A single Hotchkiss QF 6-pounder anti-aircraft gun on a high-angle Mark Ic mounting was mounted on the quarterdeck in 1915.[1] It had a maximum depression of 8° and a maximum elevation of 60°. The gun fired a 6-pound (2.7 kg) shell at a muzzle velocity of 1,765 ft/s (538 m/s) at a rate of fire of 20 rounds per minute. They had a maximum ceiling of 10,000 ft (3,000 m), but an effective range of only 1,200 yards (1,100 m). Achilles's foremast was converted to a tripod mast to support the weight of a fire-control director after the Battle of Jutland in 1916, but when the director was actually fitted is not known.

### Construction and career

Achilles was ordered as part of the 1903–04 naval construction programme as the third of four armoured cruisers. She was laid down on 22 February 1904 at Elswick by Armstrong Whitworth. The ship was launched on 17 June 1905 and completed on 22 April 1907 at the cost of £1,191,103. Like her sister ships, she joined the 5th Cruiser Squadron in 1907, and made a port visit to Russia in 1908. The ship was later transferred to the 2nd Cruiser Squadron in 1909. Achilles, accompanied by her sister Cochrane, and three other armoured cruisers were sent to reinforce the defences of the Shetland Islands on 2 August 1914, days before the start of the First World War. She, and her squadron, was assigned to the Grand Fleet after the beginning of the war.

Achilles missed the Battle of Jutland on 31 May 1916 because she was refitting. On the evening of 18 August, the Grand Fleet put to sea in response to a deciphered message that the High Seas Fleet, minus the II Battle Squadron, would be leaving harbour that night. The Germans planned to bombard the port of Sunderland on 19 August, with extensive reconnaissance provided by airships and submarines. The Germans broke off their planned attack to pursue a lone British battle squadron reported by an airship, which was in fact the Harwich Force under Commodore Tyrwhitt. Realising their mistake, the Germans then set course for home. During the Grand Fleet's sortie, Achilles spotted a U-boat. During another sortie by the High Seas Fleet on 18 October 1916, Achilles and three other armoured cruisers were ordered to patrol the northern end of the North Sea, between the approaches to Pentland Firth and Hardangerfjord in Norway, but they saw no German ships.

On 16 March 1917, Achilles and the armed boarding steamer Dundee were patrolling north of the Shetland Islands when they encountered the disguised German auxiliary cruiser Leopard. The latter ship heaved to when commanded but manoeuvred to prevent Dundee from boarding her and then fired two torpedoes which missed. Dundee retaliated by raking Leopard's stern, badly damaging the German ship and then Achilles opened fire herself. The German ship sank an hour later with no survivors. Achilles was transferred to the North America and West Indies Station in August 1917 for convoy escort duties, but returned to Britain for a refit between February and December 1918. Upon completion of this refit Achilles became a stoker's training ship at Chatham. The ship was sold for scrap on 9 May 1921.

## 16<sup>th</sup> March 1917

The Action of 16 March 1917 was a naval engagement in which the British armed boarding steamer SS Dundee and HMS Achilles, a Warrior-class armoured cruiser, fought the German auxiliary cruiser SMS Leopard, which sank with the loss of all 319 hands and six men of a British boarding party.

Leopard was the former British steamer Yarrowdale which had been captured by the German commerce raider Möwe in 1916 and brought back to Germany. The German Imperial Admiralty converted Yarrowdale into a commerce raider, arming it with guns taken from decommissioned ships and two torpedo tubes. The ship was put into service as SMS Leopard; the new captain, Korvettenkapitän Hans von Laffert sailed in early March 1917 to relieve Möwe.

The British patrol examined neutral ships entering and leaving the North Sea for contraband cargoes and kept watch for German commerce raiders trying to slip around the north of Scotland into the Atlantic. The German Admiralty warned Laffert that the British had changed their wireless cipher, which stopped the reading of British wireless transmissions to and from the Northern Patrol.

Laffert pressed on but Leopard was sunk, he was killed along with his crew and a British boarding party on 16 March, after a determined attempt to engage the British ships, when caught at a serious disadvantage.

## **Background**

### SS Yarrowdale

The German commerce raider SMS Möwe had set out on its third cruise on 23 November 1916, disguised as a Swedish merchant steamer. Möwe (Fregattenkapitän Nikolaus zu Dohna-Schlodien) had evaded the Northern Patrol, assisted by a rudimentary underwater wireless link to a submarine. It took until 7 December for the British to realise that the ship was at sea and four Armed merchant cruisers of the 10th Cruiser Squadron, supported by the light cruiser HMS Weymouth were detached to search for the ship. Eventually 24

British and French warships participated in the search. During a four-month voyage, Möwe sank or captured 25 ships of 123,265 Gross register tons (GRT). On 11 December, Möwe captured the British steamer SS Yarrowdale (4,652 GRT). Yarrowdale carried 117 vehicles, 30,000 coils of barbed wire, 3,300 long tons (3,400 t) of steel bars and 6,300 boxes of small-arms ammunition. Dohna-Schlodien liked the potential of Yarrowdale as a commerce raider in size, speed [23 kn (43 km/h; 26 mph)], room for a large crew and its "unremarkableness". On 13 December, he transferred 469 prisoners (including 89 US citizens) to Yarrowdale and sent the ship with a prize crew to Swinemünde (now Świnoujście).

### SMS Leopard

Under the command of Acting Leutnant Reinhold Badewitz, the ship was sailed to Germany, unwittingly assisted along the way by a strike by Liverpool boilermakers, which contributed to the Northern Patrol being reduced from 23 to six vessels at sea. Yarrowdale slipped past the cordon on 24–25 December 1916 and passed an inspection by a Swedish officer when the ship was sheltering from a gale in Swedish waters. Badewitz bluffed him that the freighter was a coaling ship and entitled to be in Swedish waters, while the prisoners were kept quiet below by being threatened with pistols. Badewitz brought the ship safely home and the prisoners were disembarked on 5 January 1917. The fast, modern ship was ideal for conversion to a commerce raider. Yarrowdale was renamed SMS Leopard on 9 January 1917 and armed with five 150 mm guns forward and four 88 mm guns taken from decommissioned ships and hidden behind false doors and shutters, along with four sideways-facing torpedo tubes and room for mines. The ship carried no armour but seven watertight compartments had been installed, increasing its resistance to flooding. The armament meant that Leopard could outgun any ship smaller than a modern cruiser.

Disguised as the Norwegian freighter Rena Norge, Leopard (Korvettenkapitän Hans von Laffert) sailed on 7 March 1917 to relieve Möwe The genuine Rena was off South Africa, having visited Port Natal in late February. The Kaiserliche Admiralität provided a great deal of information to Laffert on the number, dispositions and movements of the Northern Patrol, gleaned from deciphered British wireless messages. Neither side had fully grasped the likelihood that if they could decipher the signals of the opponent, then the opponent was probably doing the same to them.[5] On 7 March, German signals intelligence reported that British patrols between Scotland and Greenland had been reinforced, which was signalled to Laffert, who decided to press on. Leopard passed through the Little Belt of the Kattegat towards the North Sea on 7 March 1917. On 10 March Laffert was informed that the British had changed their cipher and asked to postpone the voyage unless circumstances changed; Laffert replied "Have received telegram, long live the Emperor" and pressed on.

### Northern Patrol

In March 1916, Admiral John Jellicoe, the commander in chief of the Grand Fleet, reinforced the Northern Patrol (10th Cruiser Squadron) with cruisers from three of the cruiser squadrons of the Grand Fleet, to keep one cruiser on watch between the latitudes of 62° and 65° on the meridian of the Shetland Isles, through which he predicted that German commerce raiders would pass. The patrol supplemented the ships of the 10th Cruiser Squadron further to the west. At first the ships were taken from the 2nd Cruiser Squadron, 3rd Cruiser Squadron and the 7th Cruiser Squadron but eventually devolved onto the 2nd Cruiser Squadron. The intention was to keep a permanent watch by a cruiser and an armed boarding steamer but by early 1917, three of each were kept at sea.

After a false alarm caused by decoded German wireless messages by the code breakers of Room 40 at the Admiralty, another warning in March led the Admiralty to order commander in chief of the Grand Fleet, Admiral David Beatty, to reinforce the Northern Patrol and to watch the Norwegian coast. Two cruisers were ordered to patrol north of the Shetland Isles along the meridian of 1° West and sent the 4th Cruiser Squadron and four destroyers to guard the Norwegian coast between Nordfjorden and Sognefjorden. The ships returned on 14 March having seen nothing and were not sent back. On 11 March 1917, Rear-Admiral Sir Sydney Fremantle, the commander of the 2nd Cruiser Squadron, ordered that the patrol line north of the Shetlands was to be taken up indefinitely by ships of the 2nd Cruiser Squadron, sailing from Swarbacks Minn on the west coast of Shetland.

HMS Achilles (Captain Francis Martin-Leake) and the Armed boarding steamer (ABS) SS Dundee (Captain Selwyn Day). Dundee was a 2,187 GRT ship, armed with two 4 in (100 mm) guns and two 3-pounder guns. Minotaur and ABS Royal Scot and Duke of Edinburgh with the ABS Fiona were also on patrol. Ship sightings were common and from 12 to 15 March the British ships had conducted routine examinations of vessels every day. The patrols were uneventful until 16 March, the day appointed for their relief.[6] Achilles and Dundee were at the north end of the patrol line due to turn south, in wintry weather, the difficulty of which had led to Achilles having 19 men on sick. The sky was covered by dull grey clouds, being pushed northwards by a south-easterly wind, with occasional darker patches bringing snow or freezing rain; the temperature was 3.3 °C (37.9 °F).[8] Near noon, a ship was sighted to the east of Achilles.

### **Prelude**

Leake signalled Dundee to follow and turned east but it took until 2:00 p.m. for Achilles, eventually steaming at 18 kn (21 mph; 33 km/h), to overhaul the ship and signal it to stop, then turn towards Dundee, which had fallen behind. Day was ordered to send an examination party to inspect the ship, which aroused his suspicion because it flew a Norwegian flag and had the name Rena but had a large "N" painted on the hull upside-down. The vessel also looked much bigger than the 3,000 Gross register ton-ship listed in Lloyd's Register of Shipping. Day could see that woodwork had been removed, no visible wireless equipment and had managed to steam at 13 kn (15 mph; 24 km/h) for some hours, unusual for a merchant ship.

The second in command of Dundee would normally lead a boarding party but was off the ship, along with another officer and eleven ratings. Day voiced his suspicions to Lieutenant Frederick Lawson Royal Naval Reserve (RNR), an Australian, who volunteered to lead a boarding party because of the inexperience of the officer who would normally deputise for the second in command. At 2:45 p.m. the boarding party rowed over to the ship and went out of sight as it rounded the ship to the starboard (lee [downwind] side). As Day waited for Larson to signal, he moved Dundee, to keep on the weather (upwind) quarter, at right angles to the unknown ship, ready to fire broadside. The position was dangerous because a broadside from the ship would sink Dundee at once and Day could only prevent the other ship from getting broadside on. After a few minutes Day realised that the merchant ship moving in a continuous turn. Day kept the gun-crews ready and at 3:40 p.m. the Norwegian flag painted on the side of the ship fell off into the water.

### Action

Destruction of the German raider Leopard, disguised as the Norwegian ship Rena, 1917 (RMG PU6814) Day ordered his gun crews to open fire and shells hit Leopard from the stern at such close range that every shot hit, smoke and steam rising from the deck. Two torpedoes passed barely 20 yd (18 m) from the stern of Dundee almost immediately. Achilles was 4 nmi (4.6 mi; 7.4 km) distant to the east-north-east with Dundee in grave danger if it opened fire on the strange ship. Leopard began to move and Day manoeuvred past its stern and raked it with Dundee's 4-inch guns and its 3-pounder, which was trained on the bridge of the raider and its twenty hits may have killed the bridge crew early on. At such close range the gunners on Dundee could not miss and smoke and steam soon began to rise from Leopard. Laffert ordered a turn to starboard but Day anticipated this and Dundee turned to port to avoid a broadside. By this time Leopard had been hit forty times and clouds of smoke billowed from Leopard, blown north-west by the wind.

Achilles opened fire on the raider about five minutes after Dundee which then sailed towards Achilles down the smoke from Leopard under the fall of shot. The German ship fired a broadside but the aim was poor and after a few minutes Dundee was safely behind Achilles. About five minutes after Dundee had opened fire on Leopard, Achilles began to register hits on Leopard, which kept disappearing in black smoke, forcing Achilles to pause its firing. The exchange continued for an hour but the heavy shells from Achilles and internal fires started explosions which sent bursts of flame through the smoke; Dundee ceased fire having run out of ammunition.[13] When Leopard began to sink, some observers thought that the fore-end of the ship was redhot, others that it was melting but the crew continued to return fire. A little after 4:30 p.m. Leopard sank with all hands along with the boarding party. A search for survivors was not conducted for fear of submarine attack; the boat that had carried the boarding party was recovered by a merchant ship several months later.

**Aftermath** Casualties

All 319 hands on Leopard plus the six men of the British boarding party were killed; the British vessels suffered slight damage.

## Subsequent operations

No ships were reported missing for six days after the destruction of Leopard then on 22 March a neutral ship reported that it had been stopped on the South American trade route by a sailing ship (SMS Seeadler) on 25 February.