

= HMS Audacious ( 1869 ) =

HMS Audacious was the lead ship of the Audacious @-@ class ironclads built for the Royal Navy in the late 1860s . They were designed as second @-@ class ironclads suitable for use on foreign stations and the ship spent the bulk of her career on the China Station . She was decommissioned in 1894 and hulked in 1902 for use as a training ship . The ship was towed to Scapa Flow after the beginning of the First World War to be used as a receiving ship and then to Rosyth after the war ended . Audacious was sold for scrap in 1929 .

= = Design and description = =

The Audacious @-@ class ironclads were laid out as central battery ironclads with the armament concentrated amidships . They were the first British ironclads to have a two @-@ deck battery with the upper deck guns sponsoned out over the sides of the hull . The ships were fitted with a short , plough @-@ shaped ram and their crew numbered 450 officers and men .

HMS Audacious was 280 feet ( 85 @. @ 3 m ) long between perpendiculars . She had a beam of 54 feet ( 16 @. @ 5 m ) and a draught of 23 feet ( 7 @. @ 0 m ) . The ship was first British ironclad to be completed below her designed displacement ; this meant that she was top heavy and required 360 long tons ( 370 t ) of cement ballast to raise her metacentric height . Audacious , and her sisters , were the steadiest gun platforms among the large British ironclads of their era . Audacious was given an experimental zinc sheath for her hull in an attempt to reduce biofouling that proved unsuccessful .

= = = Propulsion = = =

Audacious had two 2 @-@ cylinder horizontal return connecting rod steam engines made by Ravenhill , each driving a single 16 @-@ foot @-@ 2 @-@ inch ( 4 @. @ 9 m ) propeller . The bronze four @-@ bladed Mangin propellers were not arranged in the usual radial cross shape , but rather in two pairs , one behind the other , on an elongated boss in an attempt to reduce their drag when the ship used her sails . They were later replaced by two @-@ bladed Griffiths propellers . Six rectangular boilers provided steam to the engine at a working pressure of 31 psi ( 214 kPa ; 2 kgf / cm<sup>2</sup> ) . The engines produced a total of 4 @, @ 021 indicated horsepower ( 2 @, @ 998 kW ) during sea trials on 21 October 1870 and Audacious reached a maximum speed of 12 @. @ 83 knots ( 23 @. @ 76 km / h ; 14 @. @ 76 mph ) . The ship carried 460 long tons ( 470 t ) of coal , enough to steam 1 @, @ 260 nautical miles ( 2 @, @ 330 km ; 1 @, @ 450 mi ) at 10 knots ( 19 km / h ; 12 mph ) .

The Audacious @-@ class ironclads were initially ship rigged and had a sail area of 25 @, @ 054 square feet ( 2 @, @ 328 m<sup>2</sup> ) . After the loss of HMS Captain in a storm in 1870 , the ships were modified with a barque rig which reduced their sail area to 23 @, @ 700 square feet ( 2 @, @ 202 m<sup>2</sup> ) . They were slow under sail , only 6 @. @ 5 knots ( 12 @. @ 0 km / h ; 7 @. @ 5 mph ) , partly due to the drag of the twin screws , and their shallow draft and flat bottom meant that they were leewardly when close @-@ hauled . The three ships , Audacious , Vanguard , and Invincible , with balanced rudders were described as unmanageable under sail alone .

= = = Armament = = =

HMS Audacious was armed with ten 9 @-@ inch and four 64 @-@ pounder rifled muzzle @-@ loading guns . Six of the 9 @-@ inch ( 229 mm ) guns were mounted on the main deck , three on each side , while the other four guns were fitted above them on the upper deck . Their gun ports were in each corner of the upper battery and could be worked in all weathers , unlike like the guns on the main deck below them . The 64 @-@ pounder guns were mounted on the upper deck , outside the battery , as chase guns . The ship also had six 20 @-@ pounder Armstrong guns for use as saluting guns .

The shell of the 14 @-@ calibre 9 @-@ inch gun weighed 254 pounds ( 115 @.@ 2 kg ) while the gun itself weighed 12 long tons ( 12 t ) . It had a muzzle velocity of 1 @,@ 420 ft / s ( 430 m / s ) and was credited with the ability to penetrate a nominal 11 @.@ 3 inches ( 287 mm ) of wrought iron armour at the muzzle . The 16 @-@ calibre 64 @-@ pounder gun weighed 3 @.@ 2 long tons ( 3 @.@ 3 t ) and fired a 6 @.@ 3 @-@ inch ( 160 mm ) , 64 @-@ pound ( 29 @.@ 0 kg ) shell that had a muzzle velocity of 1 @,@ 125 ft / s ( 343 m / s ) .

In 1878 Audacious received four 14 @-@ inch ( 356 mm ) torpedo launchers that were carried on the main deck , outside the armoured battery . When the ship was refitted in 1889 ? 90 she received eight 4 @-@ inch breech @-@ loading guns as well as four quick @-@ firing 6 @-@ pounder Hotchkiss and six 3 @-@ pounder Hotchkiss guns for defence against torpedo boats .

= = = Armour = = =

Audacious had a complete waterline belt of wrought iron that was 8 inches ( 203 mm ) thick amidships and tapered to 6 inches ( 152 mm ) thick at the bow and stern . It only protected the main deck and reached 3 feet ( 1 m ) above the waterline at full load and 5 feet ( 1 @.@ 5 m ) below . The guns were protected by a section of 8 @-@ inch armour , 59 feet ( 18 @.@ 0 m ) long , with a 5 @-@ inch ( 127 mm ) transverse bulkhead forward and a 8 @-@ inch ( 203 mm ) bulkhead to the rear . The armour was backed by 8 ? 10 inches ( 200 ? 250 mm ) of teak . The total weight of her armour was 924 long tons ( 939 t ) .

= = Service = =

HMS Audacious was ordered on 29 April 1867 from Robert Napier in Govan , Glasgow . She was laid down on 26 June 1867 and launched on 27 February 1869 in a gale . The winds caught the rear of the ship as she was about halfway down the slipway and twisted her enough that some plates and frames of her bottom were damaged . The ship was completed on 10 September 1870 and commissioned the following month . She cost £ 256 @,@ 291 to build .

Upon completion she became guard ship of the First Reserve at Kingstown , Ireland ( modern Dún Laoghaire ) , but was transferred the following year to Hull where she remained until 1874 . The ship was ordered to the Far East that year to serve as the flagship for the China Station under the flag of Vice @-@ Admiral Sir Alfred Phillips Ryder . Despite the presence of escorting tugs , Audacious grounded twice while she was transiting through the Suez Canal . She relieved her sister Iron Duke in Singapore , and later collided with a merchant ship during a typhoon in Yokohama . Iron Duke relieved her in turn in 1878 . Audacious returned to her previous post in Hull in 1879 , relieving HMS Endymion . She served there until she began a lengthy refit which included new boilers and the addition of a poop deck .

The ship 's refit was complete in March 1883 and she again relieved Iron Duke as flagship of the China Station later that year . Audacious remained there until 1889 when she returned to Chatham where she was refitted , rearmed and replaced her masts and rigging with simple pole masts fitted with fighting tops . Upon the completion of her refit in 1890 she returned to Hull for the third time until the ship was decommissioned in 1894 . Audacious was relegated to 4th class reserve until her engines were removed and she was converted to an unpropelled depot ship in 1902 / 3 . She then acted as depot ship for destroyers at Felixstowe until 1905 , when she paid off ; in April 1904 she had been renamed Fisgard ( after the French translation of the Welsh town Fishguard ) . In 1906 , she was recommissioned as part of the four @-@ ship Fisgard boy artificers training establishment at Portsmouth . The ship was towed to Scapa Flow in 1914 after the start of the First World War to be used as a receiving ship and was renamed Imperieuse . In 1919 she was to be renamed Victorious , but the renaming was cancelled . She was towed from Scapa to Rosyth on 31 March 1920 , where she remained as storeship until 15 March 1927 , when sold to Ward of Inverkeithing for scrap .