

= HMS Enterprise (1864) =

The seventh HMS Enterprise of the Royal Navy was an armoured sloop launched in 1864 at Deptford Dockyard . Originally laid down as a wooden screw sloop of the Camelion class , she was redesigned by Edward Reed and completed as a central battery ironclad . The ship spent the bulk of her career assigned to the Mediterranean Fleet before returning to England in 1871 where she was paid off . Enterprise was sold for scrap in 1885 .

= = Design and description = =

The ship had a length between perpendiculars of 180 feet (54 @. @ 9 m) , a beam of 36 feet (11 @. @ 0 m) , and a draught of 15 feet 10 inches (4 @. @ 83 m) at deep load . She displaced 1 @, @ 350 long tons (1 @, @ 370 t) . Her crew consisted of 130 officers and men .

Enterprise 's wooden hull was remodeled shortly after she was laid down ; she was given a plough @- @ shaped ram bow and a semi @- @ circular stern . The ship had only two decks : the main deck , very close to the ship 's waterline , and the upper deck which carried her armament , about 6 @. @ 5 feet (2 @. @ 0 m) above the waterline . She was the first ship of composite construction in the Royal Navy , with iron upperworks .

= = = Propulsion = = =

Enterprise had a Ravenhill , Salkeld & Co. direct @- @ acting horizontal single @- @ expansion 2 @- @ cylinder direct acting steam engine driving a single propeller . Steam was provided by a pair of tubular boilers . The engine produced 690 indicated horsepower (510 kW) which gave the ship a maximum speed around 9 @. @ 9 knots (18 @. @ 3 km / h ; 11 @. @ 4 mph) . Enterprise carried 95 long tons (97 t) of coal . As built , her funnel was mounted in the middle of the battery for protection , which impaired the working of her guns until it was relocated forward of the battery in November 1864 . She was barque @- @ rigged with three masts and had a sail area of 18 @, @ 250 square feet (1 @, @ 695 m²) . Her best speed under sail and steam was 9 @. @ 8 knots (18 @. @ 1 km / h ; 11 @. @ 3 mph) .

= = = Armament = = =

Enterprise was armed with two 100 @- @ pounder smoothbore , muzzle @- @ loading Somerset cannon and two rifled 110 @- @ pounder breech @- @ loading guns . The breech @- @ loading guns were of a new design from Armstrong and much was hoped for them . Firing tests carried out in September 1861 against an armoured target , however , proved that the 110 @- @ pounder was inferior to the 68 @- @ pounder smoothbore gun in armour penetration , and repeated incidents of breech explosions during the Battles for Shimonoseki and the Bombardment of Kagoshima in 1863 ? 64 caused the navy to withdraw the guns from service shortly afterwards .

In an attempt to provide axial fire the sides of the hull at the upper deck level were cut away in front and behind the battery and covered by a 12 @- @ foot (3 @. @ 7 m) bulwark . The bulwark hinged inwards and covered a gun port through which a gun could traverse and fire . While providing better coverage than the traditional broadside layout this still left a 120 ° arc forward and another aft on which no gun could bear .

The 9 @. @ 2 @- @ inch (234 mm) solid shot of the Somerset gun weighed approximately 113 pounds (51 kg) while the gun itself weighed 13 @, @ 514 pounds (6 @, @ 130 kg) . The gun had a velocity of 1 @, @ 462 ft / s (446 m / s) at 563 feet (171 @. @ 6 m) and had a range of 5 @, @ 253 yards (4 @, @ 803 m) . The 7 @- @ inch (178 mm) shell of the 110 @- @ pounder Armstrong breech @- @ loader weighed 107 ? 110 pounds (48 @. @ 5 ? 49 @. @ 9 kg) . It had a muzzle velocity of 1 @, @ 150 ft / s (350 m / s) and , at an elevation of 11 @. @ 25 ° , a maximum range of 4 @, @ 000 yards (3 @, @ 700 m) . The 110 @- @ pounder gun weighed 9 @, @ 520 pounds (4 @, @ 320 kg) . All of the guns could fire both solid shot and explosive shells . Both guns were

mounted on wooden gun carriages with slides " which were difficult to traverse even on an even keel ; in a seaway few captains would have run the risk of casting them loose . "

Enterprise was rearmed during her 1868 refit with four 7 @-@ inch (180 mm) rifled muzzle @-@ loading guns . The 16 @-@ calibre 7 @-@ inch gun weighed 6 @.@ 5 long tons (6 @.@ 6 t) and fired a 112 @-@ pound (50 @.@ 8 kg) shell . It was credited with the ability to penetrate 7 @.@ 7 @-@ inch (196 mm) armour .

= = = Armour = = =

Enterprise had a complete waterline belt of wrought iron that was 4 @.@ 5 inches (114 mm) thick . It protected only the main deck and was shallow , reaching just 3 feet 6 inches (1 @.@ 1 m) below the waterline . The guns were protected by a section of 4 @.@ 5 @-@ inch armour , 34 feet (10 @.@ 4 m) long , and by 4 @.@ 5 @-@ inch transverse bulkheads . The armour was backed by 19 @.@ 5 inches (500 mm) of teak wood . The total weight of her armour was 195 long tons (198 t) .

= = Service = =

The ship was laid down on 5 May 1862 at the Royal Dockyard in Deptford , England , as the 17 @-@ gun sloop Circassian . She was renamed Enterprise in July 1862 and reclassified as an armoured corvette . Construction had barely begun before she was redesigned with an iron upper hull as well as armoured sides and battery . The ship was launched on 9 February 1864 , commissioned on 5 May 1864 and completed on 3 June 1864 . She cost £ 62 @,@ 474 to build . Enterprise initially served with the Channel Fleet , but was transferred to the Mediterranean Fleet where she remained until 1871 when she returned to England . She was refitted and rearmed at Malta in 1868 . Upon her return the ship was paid off into 4th Class Reserve in August 1871 at Sheerness . Enterprise was sold for scrap in 1885 for £ 2 @,@ 072 .