## = French battleship Masséna =

Masséna was a pre @-@ dreadnought battleship of the French Navy , built in the 1890s . She was a member of a group of five broadly similar battleships , along with Charles Martel , Jauréguiberry , Bouvet , and Carnot , that were ordered in response to the British Royal Sovereign class . She was named in honour of Marshal of France André Masséna . Masséna significantly exceeded her design weight and suffered from serious stability problems that inhibited accurate firing of her guns ; as a result , she was considered to be an unsuccessful design .

Masséna served in both the Northern and Mediterranean Squadrons during her career , which included a period as the flagship of the Northern Squadron . She was withdrawn from service before the outbreak of World War I in 1914 . The following year , she was hulked at Toulon . She was later towed to Cape Helles at the end of the Gallipoli peninsula where on 9 November 1915 she was scuttled to create a breakwater to protect the evacuation of the Allied expeditionary force withdrawing from the Gallipoli Campaign .

### = = Design = =

Masséna was the fourth member of a group of five battleships built to a broadly similar design , but different enough to be considered unique vessels . The first ship was Charles Martel , which formed the basis for Masséna and three other ships . Design specifications were identical for each of the ships , but different engineers designed each vessel . The ships were based on the previous battleship Brennus , but instead of mounting the main battery all on the centerline , the ships used the lozenge arrangement of the earlier vessel Magenta , which moved two of the main battery guns to single turrets on the wings . The five ships were built in response to the British Royal Sovereign @-@ class battleships .

# = = = General characteristics and machinery = = =

Masséna was 112 @.@ 65 meters ( 369 ft 7 in ) long between perpendiculars , and had a beam of 20 @.@ 27 m ( 66 ft 6 in ) and a draft of 8 @.@ 84 m ( 29 ft 0 in ) . She was designed to displace 10 @,@ 835 tonnes ( 10 @,@ 664 long tons ) at normal load , but she was significantly overweight when completed , and she displaced 11 @,@ 735 tonnes ( 11 @,@ 550 long tons ) . This caused the ship to sit lower in the water than intended , which partially submerged her armored belt . She was built with a pronounced snout bow to improve her buoyancy . She had a crew of 667 officers and enlisted men .

Masséna had three vertical triple expansion engines each driving a single screw , with steam supplied by twenty @-@ four Lagrafel d 'Allest water @-@ tube boilers . Her propulsion system was rated at 13 @,@ 400 indicated horsepower ( 10 @,@ 000 kW ) , which allowed the ship to steam at a speed of 17 knots ( 31 km / h ; 20 mph ) ; this was a knot slower than her design speed of 18 kn ( 33 km / h ; 21 mph ) . With only two @-@ thirds of her boilers operating for more economic cruising , these figures fell to 9 @,@ 650 ihp ( 7 @,@ 200 kW ) and 15 @.@ 49 kn ( 28 @.@ 69 km / h ; 17 @.@ 83 mph ) , respectively . As built , she could carry 650 t ( 640 long tons ; 720 short tons ) of coal , though additional space allowed for up to 800 t ( 790 long tons ; 880 short tons ) in total .

### = = = Armament and armor = = =

Masséna 's main armament consisted of two Canon de 305 mm Modèle 1893 guns in two single @-@ gun turrets, one each fore and aft. Each turret had an arc of fire of 250 °. The placement of the forward gun turret close to the bow placed a great deal of weight too far forward. This exacerbated stability problems with the ship, and rendered accurate shooting more difficult. She also mounted two Canon de 274 mm Modèle 1893 guns in two single @-@ gun turrets, one amidships on each side, sponsoned out over the tumblehome of the ship 's sides. Her secondary armament consisted of eight Canon de 138 @.@ 6 mm Modèle 1891 guns, which were mounted in

manually operated twin turrets at the corners of the superstructure with 160  $^{\circ}$  arcs of fire . She also carried eight 100 mm ( 3 @.@ 9 in ) quick @-@ firing guns , twelve 3 @-@ pounder quick @-@ firers , and eight 1 @-@ pounder guns . Her armament suite was rounded out by four 450 mm ( 18 in ) torpedo tubes , two of which were submerged in the ship 's hull .

The ship 's armor was constructed with Harvey steel manufactured by Creusot . The main belt was 250 to 450 mm ( 9 @.@ 8 to 17 @.@ 7 in ) thick , and ran for a length of 110 m ( 360 ft ) along the hull . It was 2 @.@ 3 m ( 7 ft 7 in ) wide . Above the belt was 101 mm ( 4 @.@ 0 in ) thick side armor . The bulkheads at either end of the armored belt were 240 mm ( 9 @.@ 4 in ) thick . The main battery guns were protected with 350 to 400 mm ( 14 to 16 in ) of armor , and the secondary turrets had 99 mm ( 3 @.@ 9 in ) thick sides . The main armored deck was 69 mm ( 2 @.@ 7 in ) thick , and the splinter deck below it was 38 mm ( 1 @.@ 5 in ) thick . The conning tower had 350 mm ( 14 in ) thick sides .

### = = Service = =

Masséna was laid down at the Ateliers et Chantiers de la Loire shipyard in September 1892 and launched nearly three years later in July 1895 . She was completed in June 1898 , in time for the Northern Squadron maneuvers conducted in July 1898 . She was assigned as the flagship of the Northern Squadron , and flew the flag of Vice Admiral Ménard . The Northern Squadron conducted annual training exercises in June ; the following month , they joined the Mediterranean Squadron for combined fleet maneuvers . In 1900 , four engineering officers were seriously injured while disassembling a pipe to repair it . They had disassembled it too quickly , and were severely scalded by escaping steam . In 1903 , the ship was transferred from the Northern Squadron to the Mediterranean , where she was assigned to the 2nd Squadron along with several of her half @-@ sister ships .

On 18 August 1903, the ship participated in a gunnery trial with the new battleship Suffren off Île Longue. A mild steel plate 55 centimetres ( 21 @.@ 7 in ) thick, measuring 225 by 95 centimetres ( 7 ft 5 in by 3 ft 1 in ), was attached to the side of Suffren 's forward turret to determine the resistance of an armour plate to a large @-@ calibre shell. Masséna anchored 100 metres ( 330 ft ) away from Suffren and fired a number of 305 @-@ millimetre ( 12 in ) shells at the plate. The first three were training shells that knocked splinters off the armor plate. The last two shells, fired with full charges, cracked the plate, but Suffren 's turret was fully operational, as was her Germain electrical fire @-@ control system and the six sheep placed in the turret were unharmed. One splinter struck Masséna above her armor belt and left a 15 @-@ centimetre sized hole in her hull. Another 50 @-@ kilogram ( 110 lb ) splinter landed within a few meters of the Naval Minister, Camille Pelletan, who was observing the trials.

In September 1906, Jean Cras was assigned to the ship. By 1908, Masséna had been withdrawn from service and placed in the Reserve Squadron, along with five other old battleships. Masséna remained on active duty until 1913, when she was withdrawn and placed out of service. She was reduced to a hulk in 1915. That year, the Triple Entente had launched an invasion at Gallipoli in an attempt to capture Constantinople, knock the Ottoman Empire out of the war, and open a route to supply Russia via the Dardanelles. Too old for active service, Masséna did not take part in the ensuing Gallipoli Campaign, which had stalled by the end of 1915, having made no significant progress. The Entente decided to withdraw from the operation, and the old battleship did see some use here. Masséna was towed from Toulon to Cape Helles on the Gallipoli peninsula at the end of the year, and scuttled there on 9 November to form a breakwater to protect the evacuation effort that withdrew the Allied expeditionary force in January 1916.