

= SM U @-@ 20 ( Austria @-@ Hungary ) =

SM U @-@ 20 or U @-@ XX was the lead boat of the U @-@ 20 class of submarines or U @-@ boats built for and operated by the Austro @-@ Hungarian Navy ( German : Kaiserliche und Königliche Kriegsmarine or K.u.K. Kriegsmarine ) during the First World War . The design for U @-@ 20 was based on submarines of the Royal Danish Navy 's Havmanden class ( three of which had been built in Austria @-@ Hungary ) , and was largely obsolete by the beginning of the war .

U @-@ 20 was just over 127 feet ( 39 m ) long and was armed with two bow torpedo tubes , a deck gun , and a machine gun . U @-@ 20 had no wartime successes and was sunk in early July 1918 by the Italian submarine F @-@ 12 . The wreck of U @-@ 20 was located in 1962 and salvaged . A portion of her conning tower is on display in a military museum in Vienna .

= = Design and construction = =

When it became apparent to the Austro @-@ Hungarian Navy that the First World War would not be a short war , they moved to bolster their U @-@ boat fleet by seizing the plans for Denmark 's Havmanden class submarines , three of which had been built at Whitehead & Co. in Fiume . Although the Austro @-@ Hungarian Navy was not happy with the design , which was largely obsolete , it was the only design for which plans were available and which could be begun immediately in domestic shipyards . The Austro @-@ Hungarian Navy unenthusiastically placed orders for U @-@ 20 and her three sister boats on 27 March 1915 .

U @-@ 20 was one of two boats of the class to be built at the Pola Navy Yard . Due to demands by the Hungarian government , subcontracts for the class were divided between Hungarian and Austrian firms , but this politically expedient solution worsened technical problems with the design and resulted in numerous modifications and delays for the class in general .

U @-@ 20 was an ocean @-@ going submarine that displaced 173 tonnes ( 191 short tons ) surfaced and 210 tonnes ( 231 short tons ) submerged and was designed for a complement of 18 . She was 127 feet 2 inches ( 38 @.@ 76 m ) long with a beam of 13 feet ( 4 @.@ 0 m ) and a draft of 9 feet ( 2 @.@ 7 m ) . For propulsion , she featured a single propeller shaft , a single 450 bhp ( 340 kW ) diesel engine for surface running , and a single 160 shp ( 120 kW ) electric motor for submerged travel . She was capable of 12 knots ( 22 km / h ) while surfaced and 9 knots ( 17 km / h ) while submerged . Although there is no specific notation of a range for U @-@ 20 , the Havmanden class , upon which the U @-@ 20 class was based , had a range of 1 @, @ 400 nautical miles ( 2 @, @ 600 km ) at 10 knots ( 19 km / h ) , surfaced , and 23 nautical miles ( 43 km ) at 8 knots ( 15 km / h ) submerged .

U @-@ 20 was armed with two 45 cm ( 17 @.@ 7 in ) torpedo tubes located in the front and carried a complement of two torpedoes . She was also equipped with a 66 mm / 26 ( 2 @.@ 6 in ) deck gun and an 8 mm ( 0 @.@ 31 in ) machine gun .

U @-@ 20 was laid down on 29 September 1915 , six months after she was ordered , and was launched on 18 September 1916 .

= = Service career = =

Upon completion , U @-@ 20 began diving trials . On her 15 March 1917 trial , she was accidentally rammed by Admiral Spaun in the Fasana Channel . The collision with the Austro @-@ Hungarian light cruiser twisted U @-@ 20 's periscope , extensively damaged the conning tower , and knocked off her deck gun . After seven months of reconstruction , U @-@ 20 was commissioned into the Austro @-@ Hungarian Navy on 20 October .

After initially operating out of Pola , U @-@ 20 was transferred to Trieste in February 1918 . Over the next three months , the U @-@ boat patrolled in the northern Adriatic between the Tagliamento estuary and Venice . U @-@ 20 had an encounter with an enemy submarine on 7 April but was not able to successfully launch an attack . On 3 July , Linien-schiffsleutnant Ludwig Müller sailed U @-@ 20 out from Trieste for the Gulf of Venice . A day later , U @-@ 20 was spotted by the Italian

submarine F @-@ 12 , which was on patrol in the northern Adriatic . F @-@ 12 initially pursued U @-@ 20 underwater , and then on the surface . At a range of 650 yards ( 590 m ) , F @-@ 12 torpedoed U @-@ 20 at position 45 ° 29 ' N 13 ° 05 ' E , sinking her with all hands . There was no wreckage on the surface , only an oil slick . Like all of her sister boats , U @-@ 20 had no wartime successes .

In mid 1962 , the wreck of U @-@ 20 was discovered in the northern Adriatic . Italian salvage crews raised the boat 's rear portion on 22 July and her front section on 21 November . The conning tower and a small midships section of U @-@ 20 were donated to the Heeresgeschichtliches Museum in Vienna , where they are on display , while the rest of the boat was scrapped . The remains of the crewmen were buried on the grounds of the Theresian Military Academy at Wiener Neustadt .