SM U @-@ 5 or U @-@ V was the lead boat of the U @-@ 5 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) before and during the First World War. The submarine was built as part of a plan to evaluate foreign submarine designs, and was the first of three boats of the class built by Whitehead & Co. of Fiume after a design by American John Philip Holland.

U @-@ 5 was laid down in April 1907 and launched in February 1909 . The double @-@ hulled submarine was just over 105 feet (32 m) long and displaced between 240 and 273 metric tons (265 and 301 short tons) , depending on whether surfaced or submerged . U @-@ 5 's design had inadequate ventilation and exhaust from her twin gasoline engines often intoxicated the crew . The boat was commissioned into the Austro @-@ Hungarian Navy in April 1910 , and served as a training boat ? sometimes making as many as ten cruises a month ? through the beginning of the First World War in 1914 .

The submarine scored most of her wartime successes during the first year of the war while under the command of Georg Ritter von Trapp . The French armoured cruiser Léon Gambetta , sunk in April 1915 , was the largest ship sunk by U @-@ 5 . The sinking of Italian Troop Transport ship SS Principe Umberto in June 1916 with the loss of 1 @,@ 926 men , was the worst naval disaster of World War I in terms of human lives lost . In May 1917 , U @-@ 5 hit a mine and sank with the loss of six men . She was raised , rebuilt , and recommissioned , but sank no more ships . At the end of the war , U @-@ 5 was ceded to Italy as a war reparation , and scrapped in 1920 . In all , U @-@ 5 sank four ships totaling 21 @,@ 604 gross register tons (GRT) .

= = Design and construction = =

U @-@ 5 was built as part of a plan by the Austro @-@ Hungarian Navy to competitively evaluate foreign submarine designs from Simon Lake , Germaniawerft , and John Philip Holland . The Austro @-@ Hungarian Navy authorized the construction of U @-@ 5 (and sister ship , U @-@ 6) in 1906 by Whitehead & Co. of Fiume . The boat was designed by American John Philip Holland and licensed by Holland and his company , Electric Boat . U @-@ 5 was laid down on 9 April 1907 in the United States , partially assembled , and shipped to Whitehead 's for final assembly , a process which , author Edwin Sieche notes , " caused a lot of trouble " . She was launched at Fiume on 10 February 1909 by Agathe Whitehead , and towed to Pola on 17 August .

U @-@ 5 's design featured a single @-@ hull with a teardrop @-@ shaped body that bore a strong resemblance to modern nuclear submarines . She was 105 feet 4 inches (3 @.@ 11 m) long by 13 feet 9 inches (4 @.@ 19 m) abeam and had a draft of 12 feet 10 inches (3 @.@ 91 m) . She displaced 240 metric tons (260 short tons) surfaced , and 273 metric tons (301 short tons) submerged . Her two 45 @-@ centimeter (17 @.@ 7 in) bow torpedo tubes featured unique , cloverleaf @-@ shaped design hatches that rotated on a central axis , and the boat was designed to carry up to four torpedoes . For surface running , U @-@ 5 was outfitted with 2 gasoline engines , but suffered from inadequate ventilation , which resulted in frequent intoxication of the crew ; her underwater propulsion was by two electric motors .

= = Service career = =

U @-@ 5 was commissioned into the Austro @-@ Hungarian Navy on 1 April 1910 , with Linienschiffsleutnant Urban Passerar in command . Over the next three years she served primarily as a training boat , making as many as ten training cruises per month . On 1 May 1911 , she hosted a delegation of Peruvian Navy officers that inspected her . In June 1912 , she towed a balloon as part of efforts to assess the underwater visibility of hull paint schemes .

At the outbreak of World War I , U @-@ 5 was one of only four fully operational U @-@ boats in the Austro @-@ Hungarian Navy fleet . She was initially stationed at the submarine base on Brioni , but was moved to Cattaro by late 1914 . U @-@ 5 made an unsuccessful attack on a French battleship

squadron off Punta Stilo on 3 November . In December , the ship 's armament was augmented by a 3 @.@ 7 cm / 23 (1 @.@ 5 in) quick @-@ firing (QF) deck gun , and had her first radio receiver installed . In April 1915 , Georg Ritter von Trapp assumed command of U @-@ 5 , and the following month , led the boat in sinking the French armored cruiser Léon Gambetta off Santa Maria di Leuca . On the night of 26 April , Léon Gambetta was patrolling the Straits of Otranto at a leisurely 6 @.@ 5 knots (12 @.@ 0 km / h) without the benefit of a destroyer screen . U @-@ 5 launched two torpedoes at the French cruiser , hitting with both . The ship was rocked by the explosions of the two torpedoes and went down in ten minutes , taking down with her the entire complement of officers , including Rear Admiral Victor Baptistin Sénès . Of the French ship 's complement , 648 were killed in the attack ; there were 137 survivors . Léon Gambetta was the largest ship of any kind sunk by U @-@ 5 .

= = Victims Gallery = =

In June , U @-@ 5 helped search for the lost Austro @-@ Hungarian seaplane L 41 , and in July , received an upgrade of her deck gun to a 4 @.@ 7 cm (1 @.@ 9 in) QF gun . In early August , U @-@ 5 was sent out from Lissa when the Austro @-@ Hungarian Navy received word from a reconnaissance aircraft that an Italian submarine had been sighted at Pelagosa . On the morning of 5 August , the Italian submarine Nereide was on the surface , moored under a cliff in the island 's harbor . When U @-@ 5 surfaced just offshore , Nereide 's commanding officer , Capitano di Corvetta Carlo del Greco , cast off the lines and maneuvered to get a shot at von Trapp 's boat . Nereide launched a single torpedo at U @-@ 5 that missed , after which del Greco ordered his boat submerged . U @-@ 5 lined up a shot and launched a single torpedo at the slowly submerging target , striking her , and sending her to the bottom with all hands . The Italian captain received the Medaglia d 'Oro al Valore Militare for his actions . At the end of August , U @-@ 5 captured the 1 @,@ 034 GRT Greek steamer Cefalonia as a prize off Durazzo . In late November , Friedrich Schlosser succeeded von Trapp as U @-@ 5 's commanding officer .

Schlosser and U @-@ 5 made an unsuccessful attack on an Italian Indomito @-@ class destroyer on 7 June 1916, but the boat managed to torpedo the Italian armed merchant cruiser Principe Umberto off Cape Linguetta on the next day. According to a contemporary account, Principe Umberto and two other ships were transporting troops and materiel under escort of two destroyers. After the torpedo hit, Principe Umberto went down quickly with the loss 1 @,@ 750 men. Principe Umberto was the last ship hit by U @-@ 5.

= = Gallery = =

On 16 May 1917 , U @-@ 5 was conducting a training cruise in the Fasana Channel near Pula when her stern struck a mine . The boat sank at a depth of 36 meters (118 ft) with a loss of 6 of the 19 men on board . From 20 to 24 May the submarine was raised , and through November underwent a refit . During this reconditioning , a new conning tower was added and the deck gun was upgraded again , this time to a 7 @.@ 5 cm / 30 (3 @.@ 0 in) gun . Upon completion , U @-@ 5 was recommissioned , but had no more war successes . In her career , U @-@ 5 sank a total of four ships totaling 21 @,@ 604 GRT . After the war 's end , U @-@ 5 was transferred to Venice where she was inspected by British military commissions . U @-@ 5 was later ceded to Italy as a war reparation in 1920 and was scrapped .