SM U @-@ 1 or U @-@ I was the lead boat of her class of submarine or U @-@ boat built for and operated by the Austro @-@ Hungarian Navy (German : Kaiserliche und Königliche Kriegsmarine or K.u.K. Kriegsmarine) . U @-@ 1 was designed by American Simon Lake 's Lake Torpedo Boat Company and built at the navy yard in Pola . She was one of two Lake @-@ designed submarines purchased as part of a competitive evaluation of foreign submarine designs .

U @-@ 1 was launched in February 1909 and was 100 feet (30 m) long and displaced between 230 and 249 tonnes (254 and 274 short tons) depending on whether surfaced or submerged . She was originally powered by gasoline engines for surface running , but during her trials , they were found to be incapable of reaching the contracted speed . U @-@ 1 was commissioned in April 1911 and served as a training boat through 1914 .

At the beginning of World War I, U @-@ 1 was in drydock awaiting new batteries and replacement diesel engines. U @-@ 1 returned to service as a training boat until October 1915. From November she conducted reconnaissance cruises out of Trieste and Pola until she was declared obsolete in early 1918. She continued to serve in a training role at the submarine base on Brioni, but was at Pola at the end of the war. She was awarded to Italy as a war reparation in 1920 and scrapped at Pola. U @-@ 1 did not sink any ships during the war.

= = Design and construction = =

U @-@ 1 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 ordered plans for U @-@ 1 (and sister ship U @-@ 2) in 1906 from the Lake Torpedo Boat Company of Bridgeport , Connecticut . U @-@ 1 was built at the Pola Navy Yard and was launched on 10 February 1909 .

U @-@ 1 had several features typical of Lake 's designs, including a diving chamber under the bow and two variable pitch propellers. Lake 's design also called for two retractable wheels that allowed travel over the seabed. The design also placed the diving tanks above the waterline of the single, cylindrical hull, which necessitated a heavy ballast keel for vertical stability. This arrangement required mechanical pumping, a procedure that took 8 minutes. U @-@ 1 's propulsion system consisted of two gasoline engines for surface running and two electric motors for running while submerged.

The boat was 100 feet (30 m) long by 15 feet 9 inches (4 @.@ 80 m) abeam and had a draft of 12 feet 8 inches (3 @.@ 86 m) . As designed , her displacement was 229 @.@ 7 long tons (233 @.@ 4 t) surfaced and 248 @.@ 9 long tons (252 @.@ 9 t) submerged . She was outfitted with three 45 @-@ centimeter (17 @.@ 7 in) torpedo tubes ? two in the bow , one in the stern ? and could carry up to five torpedoes , but typically carried three . U @-@ 1 was also armed with a 3 @.@ 7 @-@ centimeter (1 @.@ 5 in) deck gun .

= = Service career = =

Upon U @-@ 1 's completion , the Austro @-@ Hungarian Navy conducted trials of the submarine throughout most of 1910 . On 5 April both of U @-@ 1 's electric motors were damaged in a flooding incident during her trials . U @-@ 1 's gasoline engines were never able to meet the speed called for in the contract during the Navy evaluations , and were considered not suitable for wartime use . As a result , the Navy only paid for U @-@ 1 's hull and armament , and arranged a lease of the gasoline engines while replacement diesel engines were ordered from the Austrian firm Maschinenfabrik Leobersdorf . Despite the engine problems , U @-@ 1 and her sister ship had the best performance in diving and steering amongst the U @-@ boats under evaluation by the Navy .

U @-@ 1 was commissioned into the Austro @-@ Hungarian Navy on 15 April 1911 and served as a training boat ? conducting up to ten training cruises per month ? through 1914 . On 13 January 1914 , the submarine was accidentally rammed by the Austro @-@ Hungarian cruiser Sankt Georg

in the Fasana Channel , which damaged the her periscope . At the outbreak of World War I , U @-@ 1 was in drydock awaiting the installation of new batteries and her new diesel engines . To accommodate the new engines , she was lengthened by about 11 inches ($28~\rm cm$) . The modifications and new engines lowered her surface displacement to 223 @.@ 0 tonnes ($245~\rm @.@$ 8 short tons) but increased her submerged displacement to 277 @.@ 5 tonnes ($305~\rm @.@$ 9 short tons) .

Upon completion in early 1915 , U @-@ 1 returned to training duties through 4 October . She was stationed at Trieste in early November and conducted reconnaissance cruises from that port through December 1917 , when she was assigned to the naval base at Pola . On 11 January 1918 , she was declared obsolete , but was retained as a training boat at the submarine base on Brioni . U @-@ 1 was at Pola at the war 's end , and was scrapped after her cession to Italy as a war reparation in 1920 . U @-@ 1 did not sink any ships during the war .