

= Yugoslav submarine Mali?an =

Mali?an ( pennant number : P @-@ 901 ) was a CB @-@ class midget submarine in service with the Yugoslav Navy ( Serbo @-@ Croatian : Jugoslavenska ratna mornarica ; JRM ) . Mali?an was laid down in 1943 as CB @-@ 20 for the Regia Marina ( Royal Navy ) . Following the Italian Armistice in September 1943 , the unfinished boat was captured by the Germans who handed it to the Navy of the Italian Social Republic . The boat was captured by Yugoslav Partisans in Pula in 1945 and commissioned in the JRM shortly after the war .

The boat was decommissioned at some point in the 1950s after a brief service life . In 1959 , it was handed over to the Technical Museum in Zagreb , where it has been on display ever since . Beginning in 2008 , Mali?an underwent restoration of its interior and exterior which included returning its original Italian paint scheme and designation .

= = Design and building = =

Mali?an was laid down in 1943 by Caproni , Milan as CB @-@ 20 for service in the Regia Marina ( English : Royal Navy ) . The boat measures 15 m ( 49 ft 3 in ) in length , with a 3 m ( 9 ft 10 in ) beam and a 2 @.@ 05 ? 3 m ( 6 ft 9 in ? 9 ft 10 in ) draught . Undewater it displaced 45 tonnes ( 44 long tons ) compared to 35 @.@ 4 tonnes ( 34 @.@ 8 long tons ) when surfaced . Maximum diving depth was 55 m ( 180 ft 5 in ) . The boat 's complement during wartime was made of four crew members , one officer and three seamen , while during peacetime the boat could have been operated by a crew of just two . Armament consisted of two 450 mm ( 18 in ) external torpedo tubes located on the sides of the hull .

Propulsion consisted of a 88 @.@ 4 hp ( 65 @.@ 9 kW ) Isotta Fraschini D 80 diesel engine and a 60 hp ( 45 kW ) Marelli Motore Corrente Contina MG 754 S electric motor , mounted on a single shaft . Maximum speed was 7 @.@ 5 knots ( 13 @.@ 9 km / h ; 8 @.@ 6 mph ) surfaced and 6 knots ( 11 km / h ; 6 @.@ 9 mph ) when underwater . Traveling surfaced at a speed of 5 knots ( 9 @.@ 3 km / h ; 5 @.@ 8 mph ) the boat had a range of 1 @,@ 000 ? 1 @,@ 400 nmi ( 1 @,@ 900 ? 2 @,@ 600 km ; 1 @,@ 200 ? 1 @,@ 600 mi ) , with the exact figure varying between sources . Traveling underwater at a speed of 3 knots ( 5 @.@ 6 km / h ; 3 @.@ 5 mph ) the boat had a range of 50 ? 60 nmi ( 93 ? 111 km ; 58 ? 69 mi ) .

= = Service history = =

After the Kingdom of Italy surrendered to the Allies on 3 September 1943 , the unfinished CB @-@ 20 was captured by German forces and completed by March 1944 . The boat was then handed over to the Italian Social Republic where it saw service with the Tenth Flotilla performing reconnaissance and landing saboteurs . At some point between September and October 1944 , CB @-@ 20 was relocated to its new home port in Pula , where it was captured by the Partisans on 3 May 1945 . Renamed Mali?an ( P @-@ 901 ) , translating as nipper in English , the boat was overhauled at the Uljanik Shipyard and commissioned in 1948 . The Yugoslav Navy used it for training new submariners as well as evaluating the concept of midget submarines for future use , which eventually materialized in the form of the Una @-@ class midget submarines three decades later . Depending on the source , the exact time Mali?an was decommissioned differs from the early 1950s to 1957 .

= = Aftermath = =

In 1959 , the boat was donated to the Technical Museum in Zagreb , where it has remained since . It the only known preserved boat of its class . In 2007 , the museum decided to restore the boat , which was beginning to show signs of deterioration . Work started in 2008 , and was focused on restoring the interior by dismantling all removable parts from the command section and the engine room . The removed parts were preserved and restored with a detailed documentation about their

state before and after restoration . A custom crane had to be constructed and mounted in order to extract the compressor , electric motor and other equipment weighing more than 100 kilograms ( 220 lb ) .

Work on the exterior began in 2009 ; the tail section with the propeller and the torpedo tubes were dismantled and restored . The boat itself was raised by 80 cm ( 31 in ) and placed on new carriers to make it more accessible for visitors from the museum gallery . Work on the exterior also included the restoration of the boat 's original Italian paint scheme and name in favor of its later Yugoslav service . Although the decision was questioned by some , the changes were allegedly carried out because of " greater historical relevance " and a " more reliably documented history under its original name and flag " . The fully restored boat was reopened for the public in early April 2010 .