

= Croatian submarine Velebit (P @-@ 01) =

Velebit (pennant number P @-@ 01) was a modified Una @-@ class midget submarine and the only submarine to see service with the Croatian Navy . It was built for the Yugoslav Navy during the 1980s where it was named So?a . At the outbreak of the Croatian War of Independence So?a was being overhauled in the Brodogradilište specijalnih objekata division of Brodosplit shipyard in Split , Croatia . Although stripped of all equipment , it was preserved from the retreating Yugoslav forces by the shipyard workers .

With modifications that were aimed at improving the ships endurance by including a diesel generator , it was launched as Velebit (P @-@ 01) in 1996 . A few years later it was out of service because of the need to acquire a new set of batteries , which in turn , never happened . After unsuccessful attempts of selling it to a foreign buyer , it was offered to various museums in Croatia with a final destination still pending .

= Design and construction =

Velebit was completed as So?a in 1987 at the Brodogradilište specijalnih objekata division of Brodosplit shipyard in Split , Croatia , as the fourth boat in its class . It measures 21 @. @ 09 metres (69 @. @ 2 feet) in length , has a draft of 2 @. @ 4 m (7 @. @ 9 ft) , a 2 @. @ 7 m (8 @. @ 9 ft) beam and displaces 88 tonnes (87 long tons) when surfaced or 98 @. @ 5 tonnes (96 @. @ 9 long tons) when submerged . It was constructed as a single hull design with the internal compartment divided into three sections : forward (command / steering) position , exit chamber and the propulsion section in the back . During underwater operations two battery groups with a total of 256 cells power two 20 kW Kon?ar electric motors mounted on a single shaft that spins a five blade propeller . Surface propulsion and battery recharging is provided by a single diesel generator .

Maximum speed is eight knots (15 kilometres per hour ; 9 @. @ 2 miles per hour) underwater and seven knots (13 kilometres per hour ; 8 @. @ 1 miles per hour) surfaced . The boat 's range is 250 nautical miles (460 kilometres ; 290 miles) with a speed of four knots (7 @. @ 4 kilometres per hour ; 4 @. @ 6 miles per hour) . It has an underwater endurance of up to 6 ? 7 days which is an improvement compared to 96 hours of other Una @-@ class boats . Maximum diving depth is 120 metres (390 ft) .

Because the class was designed with reconnaissance , small scale minelaying and special operations in mind , it does not possess any offensive weapons such as torpedoes . The submarine was to use its small dimensions to easily maneuver in the relatively shallow waters of the Adriatic sea , staying undetected and transporting up to six special forces personnel who had 6 ? 12 limpet mines and four AIM @-@ M70 (M70 / 1) bottom mines or four R @-@ 1 submersibles at their disposal . Velebit had a crew of four .

= Service =

Before the Croatian War of Independence Velebit served with the 88th Submarine Flotilla of the Yugoslav Navy entering service during the late 1980s . Velebit , then named So?a , was like other Una @-@ class submarines , named after rivers in Yugoslavia . In 1991 , it was being overhauled in Brodogradilište specijalnih objekata until the beginning of the war , when Croatian forces captured it . In 1993 , Brodarski Institut (BI) of Zagreb started a modification program to improve the operational capabilities of the submarine captured two years earlier . The hull was lengthened to create space needed for the installation of a single MTU 105 kW diesel generator , a feature the original Una @-@ class design lacked . A new steering system developed by BI was also installed .

It was recommissioned as Velebit in 1996 . According to the 2007 edition of The Naval Institute Guide to Combat Fleets of the World , Velebit was fitted with a STN @-@ Atlas Elektronik PP @-@ 10 active and PSU @-@ 1 @-@ 2 passive sonar and a portable navigational radar may have been used on board along with the GPS . The claim is contradicted by other sources with news reports stating the submarine was completed without an active sonar , effectively being " blind " underwater

. During the 1990s Velebit had the pennant number " 3 " painted on its side . After the existing battery set needed for underwater propulsion expired and needed replacement , crew training and boat operations were limited to surface drives .

= = Decommissioning and aftermath = =

In February 2005 Velebit was raised from the sea , placed on a small platform within the Lora Naval Base and has remained there since . In June 2006 the Croatian Ministry of Defence released the Croatian Armed Forces Long Term Development Plan 2006 ? 2015 (Croatian : Dugoro?ni plan razvoja Oru?anih snaga Republike Hrvatske 2006 ? 2015) in which it was stated that :

The HRM [Croatian Navy] does not possess anti @-@ submarine warfare capabilities . It possesses one submarine which is not operationally usable . It 's designed for offensive minelaying and transporting underwater special forces . The Armed Forces of Croatia will not keep its submarine capabilities and the submarine will be decommissioned .

- Croatian Armed Forces Long Term Development Plan 2006 ? 2015

The defence minister at the time , Berislav Ron?evi? , explained that because Croatia was to join NATO in the spring 2008 , it would be a part of the collective defense of the entire alliance , and the need to develop all aspects of the defence system , including a submarine force , would be unnecessary . In 2007 it was confirmed that the submarine was put up for sale through the state @-@ owned " Alan Agency " that deals with weapons sales , with a starting price of 8 million Croatian kunas (approximately 1 @.@ 07 million Euros) . Acting commander of the Croatian Navy at the time , Ante Urli? , among other propositions , mentioned the possibility of installing a new set of batteries , sonar and overhauling the submarine . Fully operational , Velebit would then be sold for a much higher price of around 15 million euros . Considering the potential overhaul and sale didn 't happen , a decision was made to donate the submarine to a museum .

In 2009 it appeared that the submarine would be given to the Technical Museum in Zagreb under an agreement between mayor Milan Bandi? and the government agencies , but this project was canceled due to the difficulty of transporting the 4 @.@ 42 metres (14 @.@ 5 feet) tall submarine through the city center to the museum . The Croatian Maritime Museum in Split also expressed interest in obtaining Velebit as a part of its display , especially considering it was built in Split and homeported in the city throughout its service career . The main obstacle to this option is that the Maritime Museum is located in the Gripe fortress ; because the plans for moving the Maritime Museum to the more spacious port of Split have been put on hold , a new option that includes moving Velebit to the Military Museum that 's being created in Zagreb , has also appeared . As of November 2013 , the final location has yet to be decided .