

# ÇANAKKALE PASSING SUBMARINE

# AE2

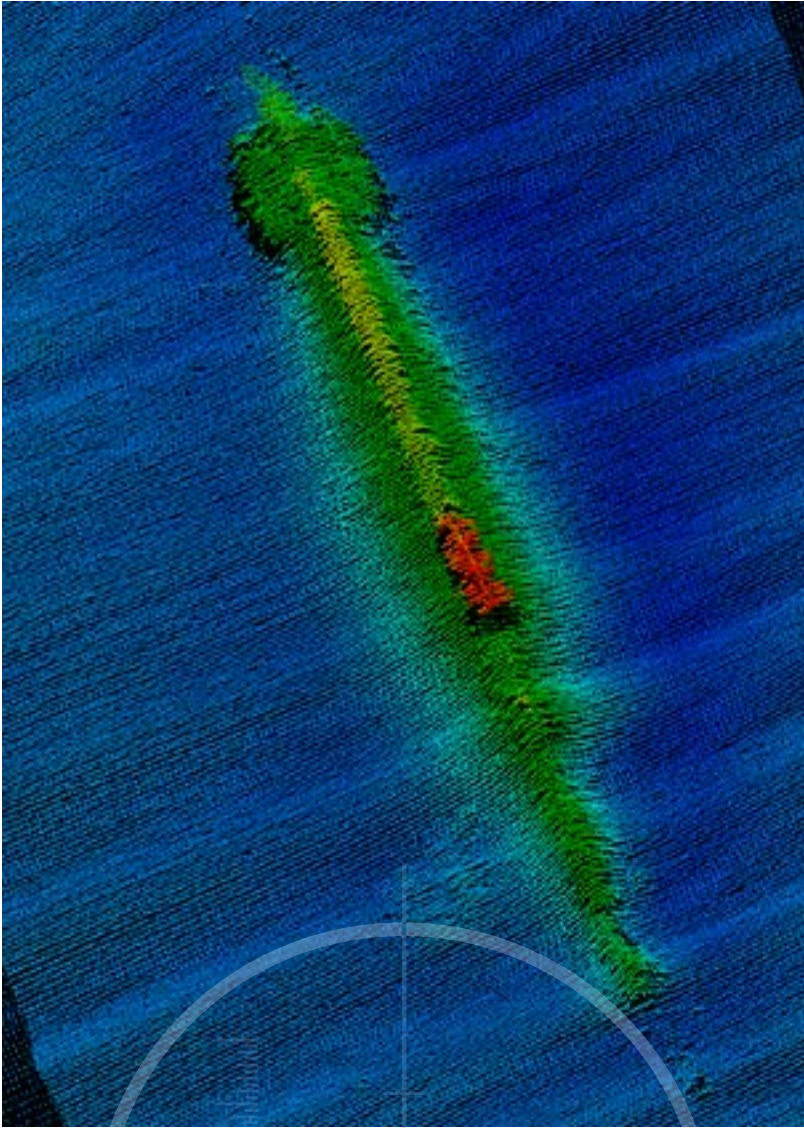


AE2 of the Royal Australian Navy strait during the Battle of Gallipoli passed and entered the Sea of Marmara. Due to the wounds he received, he surrendered to the Sultanhisar torpedo boat on April 30, 1915, and was sunk by his captain off the coast of Karabiga in Çanakkale. Australian and Turkish divers went to the wreck at a depth of 72 meters in June. His dive meets the readers for the first time in Atlas.

TEXT AND PHOTOS: ALİ ETHEM KESKİN

Due to the turbidity of the near-surface layer of the Sea of Marmara, the depths where AE2 is located are pitch black even in the middle of the day. 9 June During the dives on the day, the teams entered the water in groups of two. In the photo, Doruk Dündar, AE2 He examines the bow section. In the black-and-white photo, the submarine crew is seen together. The crew would be captured in Çanakkale.





Written by Selçuk Kolay, Savaş Karakaş and Mithat Atabayfrom the deep reflectionsMultibeam sonar image of AE2 in the book titled showing its bottom position (above).

View of the Dardanelles from the Horse Harbor in Seddülbahir. In the Battle of Dardanelles on March 18, 1915, the Allied forces could not pass the Dardanelles, but The E2 class AE2 submarine of the Australian Navy was launched on 25 April 1915. Despite the minefields, he crossed the strait and entered the Marmara (below).



**D**uring the dive, I began to float from the surface of the sea towards the depth. The first situation I had to deal with was crossing the very cold body of water called the “crystal layer” in the Marmara Sea, located between 10 meters and 25 meters deep. Secondly, the blurriness in the water at 10 meters on the surface was causing it to gradually decrease. As we passed 40 meters, the light faded away. From now on, we would continue our dive in a completely dark environment, almost like a night dive. I continued my descent by illuminating the cargo line leading to the bottom with the flashlight in my hand.

It would take about four minutes to descend to 72 metres. On the one hand, I was looking at my dive computer on my wrist and keeping track of how many meters were left to the bottom, and on the other hand, I was following my diving partner, Doruk Dündar. He was moving a few meters below me. When I reached the bottom, I saw that the weight of the goods had fallen right next to the submarine. I'm thinking "Bravo Captain Uğur!" I said. I was experiencing one of the happiest moments of my life. Because diving on the AE2 submarine was a privilege. When I thought about the Australian groups that had dived before us, I said to myself, "Who knows how excited they must have been?" The submarine lay completely flat on the bottom. This was another opportunity. In 2014, a marker buoy was placed 60 meters north of the wreck. In this way, the risk of trawl nets getting entangled in the shipwreck was completely eliminated. AE2,

AE2 was the first submarine to enter the Sea of Marmara during the Battle of Gallipoli. He managed to cross the Dardanelles on April 26, 1915. While surrendering to Turkish forces on April 30, 1915, she was sunk by her captain 4 nautical miles north of Karabiga. But the route he followed guided the submarines that came after him, and thanks to him, the Allied Powers managed to introduce other submarines to the Marmara. Thus, they had the opportunity to damage sea shipments going to Turkish forces. This role of the AE2 also had a role in the Allied Powers' decision to continue the war, if it had not been for it, perhaps the Battle of Gallipoli would have ended earlier and with fewer losses for both sides.

### FROM NEW GUINEA TO ÇANAKKALE

Built in England in 1914 and belonging to the Royal Australian Navy, AE2 first went to German New Guinea, then known as German New Guinea, against the Germans when the First World War began. Since the German forces were withdrawn and there was no need for submarines in the region, it was decided to send them to the Mediterranean. Its commander, Major Henry Hugh Gordon Stoker, set out for the Mediterranean. He arrived in Port Said, Egypt, on January 28, 1915. Here he was assigned to participate in submarine operations in the Gallipoli War.

AE2 reached Çanakkale waters in early February 1915. However, it was detected and was badly damaged as it sat on the bottom and hid. The submarine, which was repaired in Malta, returned to active duty and made its first attack attempt on April 24, but was withdrawn due to damage to the front pair of wings. He made his second attack attempt at around 02.30 on April 25. Its aim is to land in the Sea of Marmara when the landings begin,

It was to attack Ottoman war and transport ships. Although he was detected by Ottoman artillery and came under fire, he continued to advance by diving rapidly. To avoid being detected, he crossed the Dardanelles by sitting on the bottom, brushing against the mine chains several times and continuing his course. It entered the Marmara waters around 09:00 on April 26, 1915.

AE2 submarine, 26-28 April He made an unsuccessful attack. on April 28

During the cruise, she also failed in her torpedo attack against a group of four ships accompanied by the torpedo boat Muavenet-i Milliye. She experienced a similar situation the next day when she encountered a torpedo boat and three transport ships.

Ottoman authorities commissioned the Sultanhisar torpedo boat to locate and destroy the AE2 submarine. on April 30 at ●●

AE2 reached the waters of Çanakkale in early February 1915.

Front view of AE2's turret. Underwater life forms, years inside it largely covered the submarine.





HMAS AE2 submarine is underway. Commanders on deck are wearing ceremonial uniforms. It shows that the submarine was not on active duty at that time.



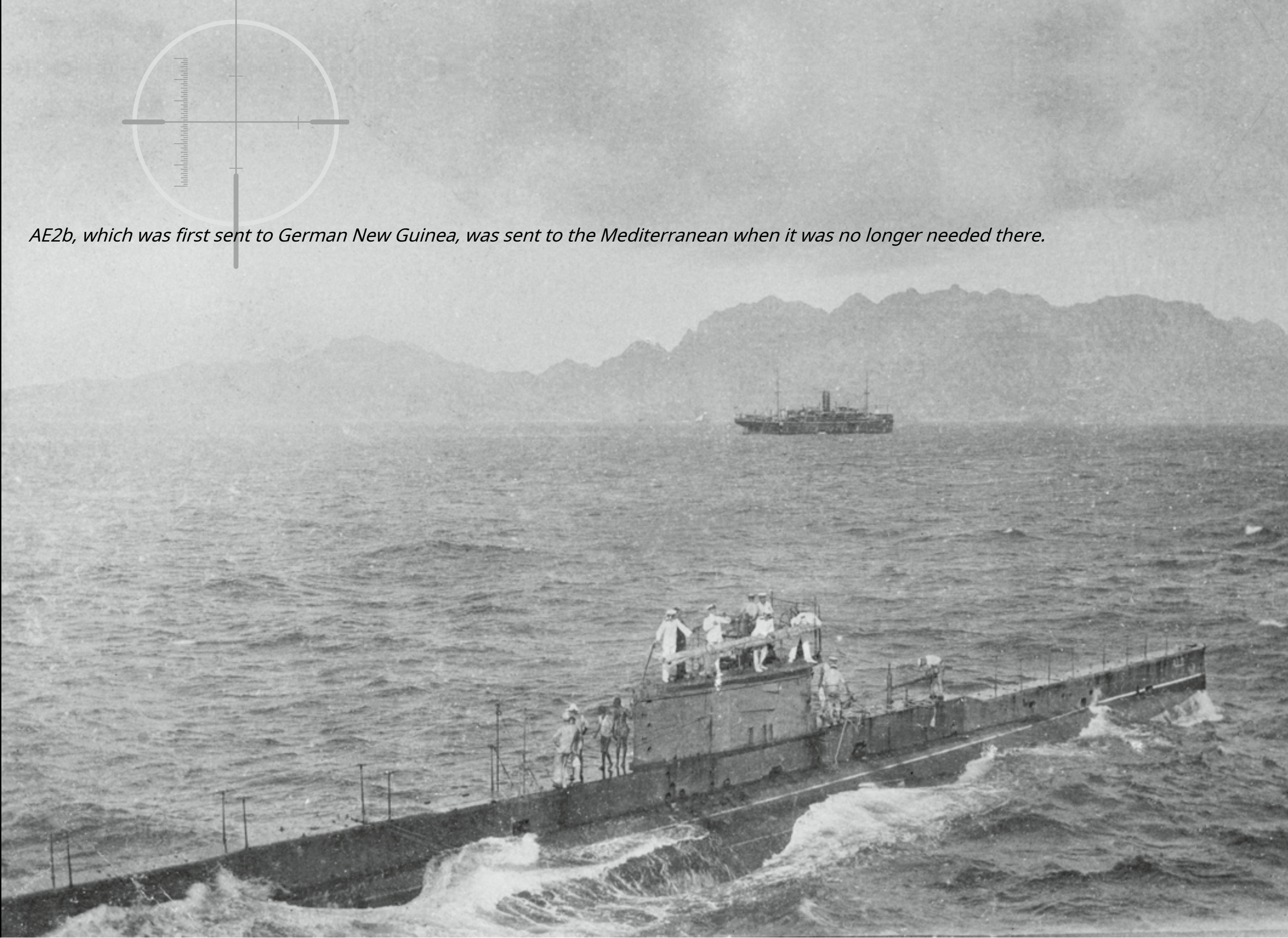
*AE2b, which was first sent to German New Guinea, was sent to the Mediterranean when it was no longer needed there.*



**AE2 submarine ID card**

It belongs to the HMAS AE2 E class submarines of the Royal Australian Navy. Its construction was completed in England on February 28, 1914. She then departed for Australia with her sister submarine AE1.

- Length:** 55 meters
- Width:** 6.86 meters
- Thrust power:** Above water 2×8 cylinder diesel engine, 1750 horsepower and underwater battery powered engine, 550 horsepower.
- Speed:** 15 knots above water, 10 knots underwater
- Range:** 3,225 nautical miles at 10 knots above water and 25 nautical miles at 5 knots underwater
- 32 people**
- Its capacity:**
- Weapon equipment:** 4×18 inch torpedo tube





At 08.20, a torpedo boat advanced on the submarine detected in front of Karaburun and opened cannon fire. Meanwhile, the submarine went out of control in escape and attack manoeuvres. The torpedo boat's two torpedoes did not find the target. Thereupon, an attempt was made to sink the submarine by spurring it, but AE2, unable to stay underwater due to the cannon fire hits it received, had to surrender. The crew of 32 people was taken to Sultanhisar. The British commander and his two assistants sank the submarine to prevent it from falling into Ottoman hands before surrendering. The British commander and his crew, who were captured by Sultanhisar torpedo boat captain Ali Rıza Bey, were held as prisoners of war in Afyonkarahisar for four years.

DETAILED ARCHAEOLOGICAL STUDY

After years of work, marine researcher Selçuk Kolay managed to locate AE2 in 1998 and dived into the wreck. In 2014, a detailed underwater archeology study was carried out for a more comprehensive investigation of the submarine and its interior. The expedition, supported by the Turkish and Australian governments, was carried out within the framework of the "Silent Anzac Protection Project". The interior of the submarine's hull was investigated, its condition and historical location were determined, important features were documented, and observable archaeological artifacts were identified.

This study provided a better understanding of long-term corrosion and decay processes in AE2. The shipwreck was repaired by materials conservator Dr. from the Western Australian Museum. Under the direction of Ian MacLeod, the world's largest cathodic protection system was installed. This system requires constant monitoring of anode replacement and wear rate. A surface marker buoy was also mounted on the wreck; It aimed to safeguard the AE2's legacy of amazing engineering marvels by limiting damage caused by fishing hooks and anchoring.

Many ships, landing boats and submarines that sank during the March 18 Çanakkale Naval Battle and the subsequent Gallipoli operation lie deep in Çanakkale. Gallipoli Wars Gallipoli Historical Area Presidency took an important step to better recognize this historical heritage by opening the Gallipoli Historical Underwater Park to diving on October 2, 2021. Some of these wrecks could not be dived in the past due to reasons such as their proximity to military areas. Gallipoli Historical Underwater



AE2's commander Henry HDG Stolker (center) and his assistants are in the prison camp in Afyonkarahisar. Stolker left the navy after the war because his achievements were not appreciated, and he spent the rest of his life He continued acting in a theater (above).

AE2, which participated in the operation on 18 March 1915, sank to the bottom and was damaged. Repair Some of the 32-person crew is on deck (below).



View of the foredeck from the tower of the AE2 wreck. The sunken submarine is covered in coral.

With the opening of the Park, diving will now be possible in all the shipwrecks around the peninsula, especially HMS Majestic. Thus, a new dive site emerged that was exciting for divers from all over the world.

However, there was another problem to be solved. According to the equipped diving regulations published by the Turkish Underwater Sports Federation (TSSF), amateur scuba diving was limited to a depth limit of 40 meters. It was not possible to dive into shipwrecks such as HMS Triumph, Midilli (Breslau), HMS Hyte and Karthage because they lay at depths below 40 meters. Because it was possible to go below 40 meters with technical diving discipline. In technical diving, more than one gas and tank are used, especially oxygen. It also has its own gradual training depending on the depth. TSSF, now Technical Advisory

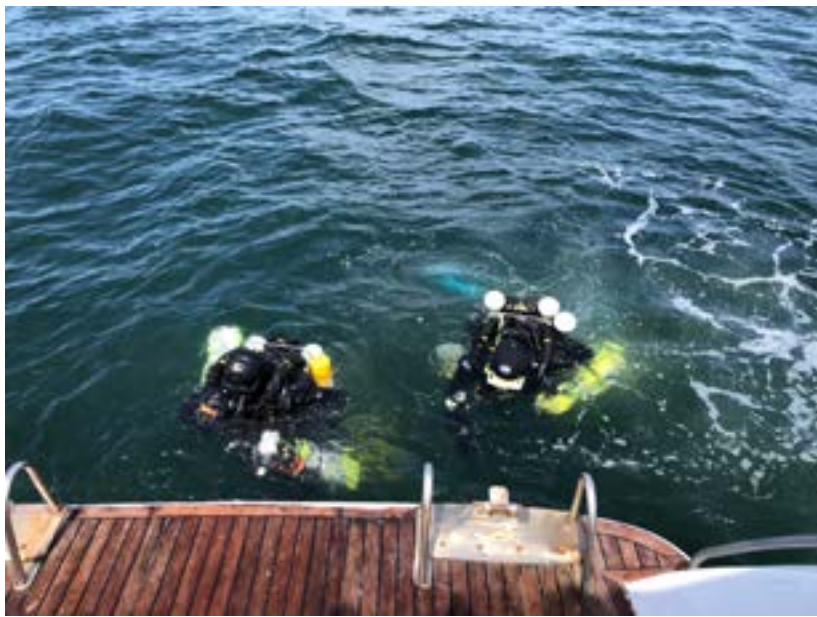
It prepares the Labor Regulations and relevant training documents. In parallel, Çanakkale Gallipoli Historical Area Presidency contacted the Australian Consulate and invited technical divers to the Gallipoli Historical Underwater Park to shed light on future technical diving and raise awareness. The consulate assigned four technical divers for this project.

I have been working with a technical diving team of four people for years. As a team, we dived to wrecks at a depth of 70-80 meters, such as Midilli, Carthage, HMS Triumph and HMS Hyte, which was dived for the first time in 2022, with special permissions. The Area Directorate assigned me to meet the logistical needs of technical divers coming from Australia. As a result of correspondence and online meetings, Australian and Turkish teams will be able to work within the scope of the project between 5-9 June 2023.



During the last dives, white soft coral was found in the tower section of the submarine. *paralcyonium spinulosum* colonies were encountered. This is good news because it indicates that the submarine's protection system is working. Surrounding AE2 is an anode system consisting of zinc blocks, made by an Australian initiative in 2014, to delay its decay. Thanks to the system, when oxidation decreases, living creatures can be seen on the surface of the submarine.





The Australian technical diving team included Ian Scoley, Jamie Hardwick, Mark Ryan and Chris Edwards. Diving to AE2, underwater medicine and hyperbaric medicine expert faculty member Dr. It took place under the supervision of Selin Gamze Sümen (above).

**AE2 before dives**

The submarine was branded with the goods line. Ali Hakan Eğilmez and Volkan Türkay entered the water first to check whether the cargo line that would guide the divers hit the submarine (above).

Agreed on a dive plan. I suggested to the Australian team to dive to the wrecks of HMS Triumph and Midilli, but they stated that they definitely wanted to dive to the AE2 submarine in Marmara. AE2 was lying off Karabiga. However, there were no suitable boats for technical diving either in Karabiga or in Şarköy on the opposite shore. This meant that the boat we rented for the project had to reach the coast of Karabiga after a long journey from Kabatepe.

Before departing for Çanakkale, Australian and Turkish team members held a face-to-face meeting in Istanbul on 3 June. The Australian team naturally wished to dive into the AE2, which they had an emotional attachment to, in the first place. However, the HMS Triumph wreck in Kabatepe

He was 2 miles offshore. The fact that the shipwreck was close to the shore would ensure that any technical problems would reach land and be resolved in a short time. The teams agreed to meet at Kabatepe Harbor on the evening of June 4 and make preparations for the first dive the next day. The weather was quite harsh on June 5th. Australian and Turkish divers decided to dive organized in groups of two. Despite the wind and high waves, all four groups were able to dive aboard HMS Triumph. In this way, the teams got to know each other a little better and experienced the possibilities of the boat. Now everyone was ready for the dive into AE2.

There would be no diving on June 7 due to the workshop organized by the Area Directorate. On June 8, our boat “Blackfish Byem” was able to reach Şarköy under difficult conditions due to the storm in Marmara. The storm was still raging on the morning of June 9, but the good news was that weather reports said the winds would calm down by the afternoon. After all preparations were made, our boat set out towards the coordinates where AE2 sank at 13.00. Indeed, as time progressed, the wind calmed down and the sea became as calm as a sheet.

#### MEETING WITH THE SUBMARINE

If there is a depth of 72 meters below you and you want to dive into a submarine that is 55 meters long and 7 meters wide at its widest point, you need to mark it very well. Marking begins with locating the wreck. Then, with the boat maneuvers, the silhouette of the wreck appears on the sonar screen. The directions in which the shipwreck extends are determined. When the image of the shipwreck appears on the sonar once again, the goods are thrown into the water. The rig is a line with a weight at one end and a buoy at the other. Divers ascend and descend to the wreck using this line. Uğur Taşdelen, the experienced captain of our boat, developed an interesting method by using a very heavy sack in the goods line. Because the sack was heavy, it enabled the goods line to reach the shipwreck from the surface to the bottom in a very short time and without any errors. In this way, the AE2 was branded very easily. Order, It was time for the dives that everyone was eagerly waiting for. The first group to dive included Ali Hakan Eğilmez and Türkay Volkan. This group would use propellant underwater devices called "scooters" that could go against the current. In this way, they will quickly determine whether the item hit the shipwreck or not, and if it did, they will be able to ensure that other groups do not go down to that depth in vain.●●●

they would crack. The dive has begun. 15 minutes passed. It was understood that the malya hit the shipwreck. The groups started diving at 15-minute intervals...

Me and Doruk Dünder prepared as the last team and started diving. Diving into AE2 was such a gift for us. Since we had done hundreds of dives in the Sea of Marmara, we knew the conditions more or less. From those who have dived in AE2 before, we could predict that the bottom would be quite blurry. As we floated from the surface to the depths, we greeted other groups at the waiting stops in the goods line. The water was crystal clear up to 62 metres. However, as we approached the bottom, visibility gradually decreased, as expected. When I looked at the sea floor and saw the hull of the submarine, I let out a deep sigh of relief. Doruk slowly moved from the front towards the submarine's tower. So I took a few photos and followed him. I saw that there was a fairly dense population of soft corals in the submarine's turret. This was very exciting because there was a 2014 law that prevented the submarine from decaying.

It was an indication that the anode system was working. Then we turned back to AE2, took one last look and began to ascend.

When we returned to the boat, the happiness of the Australian team was worth seeing. Because AE2 was very important to them. Another Australian submarine that participated in World War I, AE1, was launched in New Guinea in 2017. 300 meters off the Isle of York found at depth. But today it dive deep

It is impossible to make. This Therefore, AE2 continues to maintain its importance. Technical diving is an important and developing branch. Countries such as the USA, Mexico and Malta are among the pioneers of the sector. We hope that technical diving develops gradually in Turkey and divers from all over the world visit these waters to see the values of the Gallipoli Historical Underwater Park -

*The AE2 wreck is a world-class discovery point for technical diving.*





# AE2wreck discovery story

The location of the submarine remained a mystery for years. After long studies, researcher Selçuk Kolay managed to locate AE2 in 1998.



After the construction of the AE2 submarine was completed, it was sent to Portsmouth Harbor in England on 17 February 1914. arrival (above). In order to preserve and archaeologically evaluate AE2, Turkish and Australian scientists carried out the project called "Silent Anzac" in 2014. Marine researcher who discovered AE2 Selçuk Kolay (left) and Australian archaeologist Tim Smith led the work (below left). View of the submarine on the echo sonar screen (bottom right).



DEAD, which has a special place in the history of naval warfare, is a submarine from the First World War that has been a subject of great interest to researchers, especially Australians, for years.

It caught his attention. But despite all searches, no trace of AE2 was found for many years, and the sunken submarine remained a mystery for 83 years. After three and a half years of work, marine researcher Selçuk Kolay managed to locate the AE2 shipwreck in July 1998 and ensured the exact location of the shipwreck with his dives. Savaş tells the story of the discovery of the shipwreck as follows:

“Actually, my search for AE2 started in the 1980s. German naval history researcher Bernd Langensiepen, *The Ottoman Steam Navy* He was writing his book and asked me to help him with many issues. While working with him, I read about the collision of AE2 with the Sultanhisar boat and its sinking off the coast of Karabiga, and I examined this incident. However, I postponed delving into this issue in more detail to a later date.

Towards the end of 1994, at a party in Istanbul, a tall man came to me and asked the Australian Ambassador, Mr. He said it was David Evans. He said that the AE2 shipwreck was very important to them and asked if I could work on finding the shipwreck. I collected all the documents I could find from the Australian, British and Ottoman archives and started working on them. After that, I decided to go out into the field. However, my research yielded very different results. In fact, the coordinates in one of the German documents showed the location of the shipwreck on a cliff on Ekinlik Island. There was a huge difference of 18 nautical miles between the sunset point stated in the Ottoman archives and the point given in the German archives. I went into the field for the first time in March 1995 and after three and a half years of work, I found the location of the AE2 shipwreck. During my studies, a year before I found AE2, I found another shipwreck whose dimensions matched it exactly, located about 2 miles to the northwest. I dived into it too. I couldn't see anything at first because it was covered in trawl nets. Later, we dived with the Australian team that came to Turkey in a hurry. When we partially removed the nets, we saw that it was one of the Ottoman Bosphorus ferries making shipments to the front. A year later, I finally found AE2...”