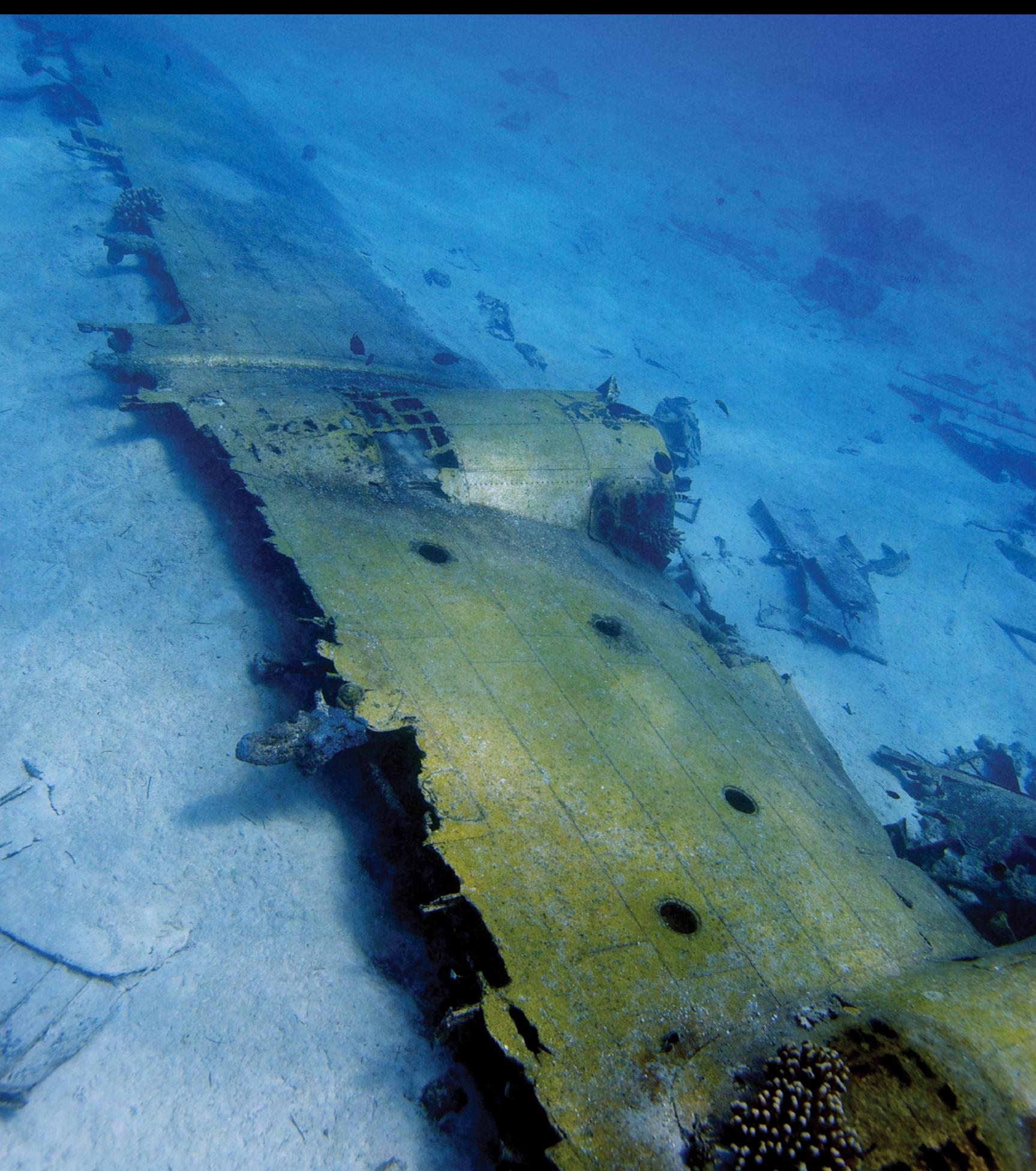
WORLD WAR II MARITIME HERITAGE TRAIL BATTLE OF SAIPAN

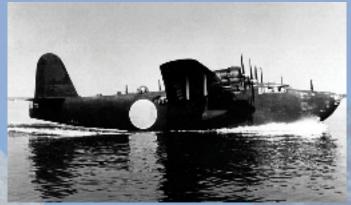






Kawanishi H8K "Emily"

The Kawanishi H8K (Type 2 Large Flying Boat), Allied code name "Emily," was an Imperial Japanese Navy (IJN) flying boat used during WWII. H8Ks were used extensively as reconnaissance planes, bombers, and transports in the Pacific and were considered the "backbone" of the IJN's maritime reconnaissance element during the war. H8Ks were recognized for "possessing exceptional performance" and were considered the fastest flying boats to serve in WWII.



The H8K utilized eight small fuel tanks within its wings, as well as six large tanks in the hull; these were arranged in such a way that bilge pumps could be used to pump fuel from one or more damaged tanks into those that were undamaged. It had robust defensive armament that earned it deep respect among Allied aircrews, who are reported to have nicknamed the H8K the "Flying Porcupine." Defensive weaponry included three turrets (nose, dorsal and tail) containing 20mm Type 99, Model 1 cannons, as well as a single 7.7mm machine gun in each waist hatch.





Aichi E13A "Jake'

The Aichi E13A, Allied code name "Jake," was an IJN long-range reconnaissance seaplane used during WWII for maritime patrol duties. The first E13A1 prototype was completed in 1938; the type was accepted by the IJN the following year and designated the 'Navy Type 0 Reconnaissance Seaplane Model 1.' The model number is significant because it distinguished the E13A1 as the Navy's most important seaplane type. The Aichi E13A1 made its combat debut in 1941 and was used by the IJN until 1945.

E13A1s participated in a number of significant aerial operations prior to Japan's entry into WWII, including bombing attacks on the Canton-Hankow railway in China and reconnaissance flights over Hawaii immediately prior to the attack on Pearl Harbor. These initial successes inspired the Japanese Navy to deploy the aircraft from ships and forward shore bases. They were also used in a limited capacity as bombers, but only in areas where air opposition was restricted or nonexistent. Although largely successful in its designated roles, the Aichi E13A1 was impeded by a handful of issues including a small fuel tank, minimal crew protection and limited defensive armament.





While no historical records have yet been found that indicate why the Aichi E13A1 is located in Tanapag Lagoon, archaeological evidence suggests it was intentionally deposited on the seabed, likely after the end of WWII. Holes near the aircraft's tail appear to be exit points for bullets; however, these ballistic impacts do not appear to have caused enough damage to lead to the Aichi E13A1's loss. Nonetheless, they may provide an explanation for how the aircraft was disposed. During the disposal process, the airframe would sink nose first due to the weight of the engine; however, it is possible the Aichi E13A1 did not submerge entirely due to the presence of air pockets in its tail section. To hasten the process, bullets may have been fired into the tail to puncture these air pockets. A similar process was utilized during the "scuttling" of a PBY Catalina flying boat off Rottnest Island, Australia. In this instance, tomahawks were used to punch holes in the Catalina's airframe prior to its intentional sinking.

A small section of the E13A1's airframe is crimped immediately aft of the bullet holes, and researchers suspect it too may comprise evidence of intentional disposal. The use of a steel cable or chain to lift the aircraft on or off a vessel, or tow it to the disposal site, could very easily have crimped the fuselage. Additional evidence for intentional disposal exists in the form of the non-associated, disarticulated landing gear section rear of the plane. The presence of components from multiple aircraft suggests the location comprised a small dump site for military material. Disposal practices during and after World War II often varied from place to place, and detailed records of these activities are few and far between; consequently, we may never know how or why the aircraft ended up in Tanapag Lagoon.

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Visiting the Aircraft

This aircraft wreck is very popular with divers and is sometimes called the "B-29"; however, extensive archaeological and historical research has confirmed the site's identity as a Kawanishi H8K. The surviving airframe is inverted and lies on the seabed in approximately 20ft (6m) of water at 15 14' 26.37"N, 145 43' 45.23"E (55P 0363527N, 1685342E) (WGS84). The site is vast and has a scattered distribution. The aircraft's extensive wingspan lies in the centre of the wreck area and all four engines and propellers still remain on site. One engine and its undamaged propeller lies facedown near its engine nacelle, while the other engines and propellers are located some distance from their original positions. North of the wing section is the aircraft's surviving cockpit, which includes the pilot's seat, part of the control panel, and the pilot's steering column. The bow turret is located to the west of the wing section and is remarkably intact. It still retains its gun as well as remnants of Plexiglas window panels. Small portions of the fuselage are located north and south of the wing and exhibit remnants of the aircraft's original red and grey paint scheme. The disarticulated and scattered nature of the H8K's remnants indicates it was the victim of a catastrophic wrecking event. Two separate monuments, one Japanese and one Korean, are located on the wreck site and memorialize the lives of those lost during the Battle of Saipan.

Small patch reefs are located around and among the aircraft's surviving components and provide habitat for marine life. Highly mobile fish species frequently move between the wreck's scattered debris and surrounding natural reef including whitecheek surgeonfish (Acanthurus nigricans) and sunset wrasse (Thalassoma lutescens). Smooth flutemouths (Fistularia commersonii) can also be observed hovering over wreck, either on their own or in small groups. Large big-eye bream (Monotaxis grandoculis) rest beneath the wing section during the day and emerge during the night to feed on gastropod invertebrates within nearby reef and wreck areas. The secretive lemonpeel angelfish (Centropyge flavissima) can occasionally be seen hiding among dense coral formations.





The diving public has had a major impact on this site. Despite laws that restrict vandalism and movement or removal of artifacts, these activities occur on a regular basis. Portions of the cockpit have been damaged and rearranged by divers who attempt to sit in it for photographic opportunities; these impacts have been so severe and occur with such frequency that archaeologists noticed a drastic change in the configuration of the seat, control panel and steering column in just a matter of months. If divers continue with this activity, the surviving cockpit may be damaged beyond recognition and will not be available for future visitors to the site to observe and enjoy. Additionally, graffiti has been etched into the aircraft's aluminum wing and bow turret. This graffiti not only causes damage to the biological growth on the wreck, it also creates a new surface for destructive corrosion of the aluminum.

Smaller artifacts located throughout the site have been moved from their original positions. For example, ordnance and gas cylinders have been intentionally moved and piled around a Japanese monument immediately north of the wing section. Movement of artifacts on a historical site destroy contextual information and is therefore viewed as destructive. So if you visit the wreck, please respect it and refrain from moving or looting artifacts.

Visiting the Aircraft

The wreck is located in Tanapag Lagoon, approximately 400yds (365m) south of Managaha Island, and nearly 300yds (275m) west-northwest of an exposed coral patch reef at 15 14' 9.49"N, 145 42' 44.26"E (55P 0361705N, 1684834E) (WGS84). For years the aircraft wreck has been mistakenly called the "Zero" by local tour guides and dive charter operators; however, its identity has been confirmed as an Aichi E13A1 through exhaustive archaeological and historical research. The aircraft is upside down in approximately 25ft (8.5m) of water and is relatively intact. The airframe lists 30 degrees to port and most of the plane's wingspan is exposed above the seabed. A crushed pontoon float rests adjacent to the port wing, and the tail section gradually disappears into the sand. A large landing gear section is located immediately aft of the aircraft, but does not appear to be directly associated with it.

A variety of fish species and invertebrates have made the surviving airframe their home. The majority of marine life comprises small fish species, likely as a result of the site's low relief. Shoals of distinctly banded scissortail sergeants (Abudefdul sexfasciatus) can be observed near the aircraft's wings. Numerous dusky gregories (Stegastes nigricans) can be seen among concentrations of brown algae attached to the engine and propeller. These damselfish are often referred to as "farmer" damsels, as they cultivate and fiercely protect the small patches of brown algae they inhabit. Coral is growing on several parts of the aircraft, the largest example of which is attached to the propeller's nose cone. Research has demonstrated that some marine organisms adhere better to iron objects rather than aluminum; consequently, iron aircraft components (such as the propeller nose cone) are more likely to attract coral growth.





Preserving Our Wrecks

Shipwrecks, aircraft wrecks and other underwater archaeological sites are protected like historical sites are on land. They are nonrenewable resources and although ships and planes continue to sink every day, there will never be another WWII aircraft wreck or submarine chaser wreck. These sites are important because they provide us with the details of history and represent the men and women who served during the conflict. All underwater sites including shipwrecks, aircraft wrecks and other vehicles are protected under CNMI Public Law 3-39. This law protects all archaeological sites on Commonwealth-owned or controlled lands and submerged bottomlands from unauthorized disturbance, excavation, or removal of artifacts. Historic wrecks located in Commonwealth waters are protected just as natural resources are protected, so that future generations may visit, learn from, and enjoy these unique examples of our underwater heritage.

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