WORLD WAR II MARITIME HERITAGE TRAIL
BATTLE OF SAIPAN

U.S. AIRCRAFT

Foreground: Map of WWII Maritime Heritage Trail wreck sites and PBM Mariner in flight
Background: TBM Avenger wreck site in Tanapag Lagoon
The Avenger was operated by three crew members: a pilot, turret gunner, and radio operator/bombardier/ventral gunner. Armament consisted of one nose-mounted .30 caliber machine gun, one .50 caliber machine gun mounted immediately adjacent to the turret gunner in a rear-facing electrically powered turret, and a single .30 caliber hand-fired machine gun mounted ventrally beneath the aircraft’s tail. The latter weapon was operated by the radio operator/bombardier/ventral gunner, who faced forward on a folding bench to operate the radio and sight in homing bombs, but would then stand up and bend forward into the ventral turret to fire the machine gun. Later models of the Avenger substituted the .30 caliber mast gun in favor of two wing-mounted .50 caliber machine guns. The updated weapons provided better firepower and improved the aircraft’s strafing capabilities.

The Martin PBM Mariner was a U.S. flying boat involved in all major campaigns in the Pacific, including the Battle of Saipan, where they participated in attacks on Japanese submarines, freighters, and aircraft. The Mariner was dubbed the “Flying Flying Boat” due to its service in heavily armed reconnaissance missions. Often these aircraft are overshadowed by the famous Catalina seaplane; however, PBMs were the second most widely used U.S. flying boat in operation during WWII.

The U.S. Navy designated Catalina seaplanes as patrol bombers, and were in need of a heavily armed flying boat for the purposes of bombing naval shore installations as well as locating and attacking enemy warships. Consequently, they invited proposals for a twin-engine aircraft that could meet these needs. The Martin Company was granted the development contract to produce a single prototype, and in 1939 they created a three-eights scale model of the design to test its projected performance. After several modifications to the original design, the first service-ready PBM-1 was delivered in 1941. During its long career, the Mariner served in many roles for the U.S. Navy. According to Shaddox, “PBM Martin Mariners served the U.S. Navy as a long-range patrol bomber and were used in reconnaissance and for a variety of purposes, ranging from cargo transport to ferrying troops. One of its very important functions was to rescue airmen who were downed in the ocean, or survivors of surface vessels in trouble.”

Mariners were used for search, patrol, reconnaissance and rescue missions during and after the Battle of Saipan. During the battle, Mariners operated in the sea outside Tanapag Lagoon, a situation that made them vulnerable to rough waters and resulted in damage to one aircraft. Their similarity to Japanese military aircraft also had dire consequences, as two Mariners were downed in the ocean, or survivors of surface vessels in trouble.”

Visiting the Wreck

The wreck of the TBM Avenger is located just inside the barrier reef, near the northern edge of the main shipping channel at 15 14’ 8.22” N, 145 41’ 57.82” E (E550 06319.4, 16447191 W) (WGS84). It is located at approximately 7-10ft (2.5-3m) of water, and is easily accessible to both scuba divers and snorkelers. The surviving airframe lies upside down on the seabed and consists primarily of wing structure. The engine, propeller, and tail sections are all missing but the landing gear struts are intact and fully extended. Debris associated with the aircraft can be found surrounding the wreck including part of the radial engine, a section of fuselage with attached observation port, and a turn ring. During extreme low tides, portions of the landing gear struts are exposed above the water, and have been used in the past as a mooring point for boats. Unfortunately, mooring activities have taken toll on the landing gear structure, and could result in its complete collapse or removal if not discontinued. Please help preserve this wreck and refrain from mooring on or near the wreck structure.

The wreck has been nearly covered by the surrounding reef, and is covered with a variety of corals and sponges on both its interior and exterior surfaces. Schools of herbivorous steephead parrotfish (Chlorurus Chlorurus) and brown surgeonfish (Acanthurus nigricaudus) can be seen grazing on algae. Small groups of stick ray (Thalassoma hardwickii) swim through the landing gear struts, searching for small crustaceans and fish. Territorial jellies darts (Pleurobrachia luteolata) occupy holes around the wreckage. Juvenile species of the species possess the iridescent blue spots that give this fish its common name.

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 CMNI Public Law 3-39. This law protects all archaeological sites on Commonwealth lands regardless of their status as historical or other. The purpose of the law is to protect the site in its entirety from additional activity by the public 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.

Visiting the Wreck

The Mariner wreck is located in Tanapag Lagoon, approximately 600m south-southwest of Managaha Island at 15 14’ 10.95” N, 145 43’ 0.64” E (E550 0626948.6, 16448762) (WGS84). Its airframe is upside down on the seabed in approximately 3.5ft (7m) of water. Interestingly, the site was only positively identified by researchers in 2009, even though its location has been known to local divers for several years. One of the characteristics that contributed to the Mariner’s identification was its dished (angled) wing section of which can be observed sitting proud of the seabed. The wreck is widely scattered and the exposed wing section is perhaps its most recognizable feature. The disarticulated and dispersed nature of the site suggests the Mariner suffered a catastrophic wrecking event, although no specific archival information has yet been discovered that illustrates the circumstances surrounding its loss.

A portion of the aircraft’s tail is located aft of the wing section and retains articulated framing of one of the tail fins. One of its very important functions was to rescue airmen who were downed in the ocean, or survivors of surface vessels in trouble.”

This material is hauled up with a scooper by a crew of the Department of Interior, National Park Service, and are those of the author(s) and do not necessarily reflect the views of the Department of Interior.

References

Shaddox, R. 1991. The Douglas PB4Y-1 Privateer AIRCRAFT Living History 

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