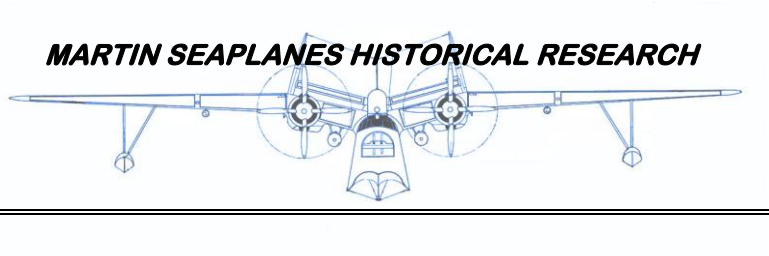


by Bruce D. Barth, Historian/Author *www.vpmma.org*

Swan Song for Lake Washington PBM

In 1993, the Mariner/Marlin Association championed the final effort to save one of the last known Martin PBM Mariner seaplanes, a Navy PBM-5, BuNo 59172, lying upside down on the bottom of Lake Washington near Seattle. In the ensuing years that followed, the project gained momentum quickly and grew into one of the largest salvage operations of its kind undertaken by the U.S. Navy.

The victim of a landing accident in 1949, the subject of salvaging the Lake Washington PBM was not new and was considered by the Navy in the early 1980s at the request of the National Museum of Naval Aviation. However, due to funding restrictions and other considerations, no formal attempt was made to recover the aircraft until 1990.

Through the persistent efforts of the National Museum of Naval Aviation and the Commander of the Navy's Mobile Diving and Salvage Unit 522, based at Everett, WA, the first operational attempt to salvage the aircraft commenced in August 1990. During this attempt, one on the Navy divers suffered a fatal heart attack and died, suspending the project after only 10 days. The interest to salvage the aircraft was still strong, but in order to proceed with a second attempt, it would require a significant effort to coordinate the activity and secure the needed financial commitments necessary to raise the aircraft and perform an eventual restoration.

In 1994, the Mariner/Marlin Association accepted the challenge to devise and organize a plan for a second attempt to raise the aircraft. Through the primary efforts of three members, director and historian Bruce Barth, and retired Navy Captains Bruce Handler and Richard Hoffman, a team was formed. Thus began the long and arduous job of finding a permanent home for the plane, securing financial commitments for recovery, transportation and restoration, and securing the federal, state and local permits required to proceed with the recovery operation.

During the course of the next two years, the team faced many obstacles which were seemingly impossible to overcome and could jeopardize the success of the project. Determined to succeed, the team remained optimistic and continued in their effort to enlist the support of individuals, community organizations and government agencies to secure the necessary means to raise the Mariner. Commitments for manpower, materials and expenses started to come in, and the list of endorsements for support continued to grow, not only from government agencies, but companies like Boeing and Lockheed-Martin, who each made significant contributions to the project. By August 1996, six years after the first salvage attempt, the second attempt to raise BuNo 59172 was ready to begin.

Working under the direction of Navy Mobile Diving and Salvage Unit One, Pearl Harbor, Hawaii, the Navy commenced preliminary diving operations in late August. The salvage plan consisted of five major parts: survey, excavation, righting, and floating and shore recovery. By far the most difficult part of the plan facing the divers was in the excavating and righting of the aircraft which had been partially buried in hard mud and covered with five feet of fine Cedar River silt and ash for 47 years. Still virtually intact with relatively little apparent damage, the aircraft lies 65 feet down just a few hundred yards from shore.

As the divers continued with the excavation, it became apparent that the PBM was buried deeper in the mud than originally thought, and that the wings, which had been covered for so long, had filled with heavy silt. After performing over 600 dives, and removing more than 1200 cubic yards of mud and silt, floatation devices were placed in the fuselage and under the wings to attempt to right the aircraft underwater.

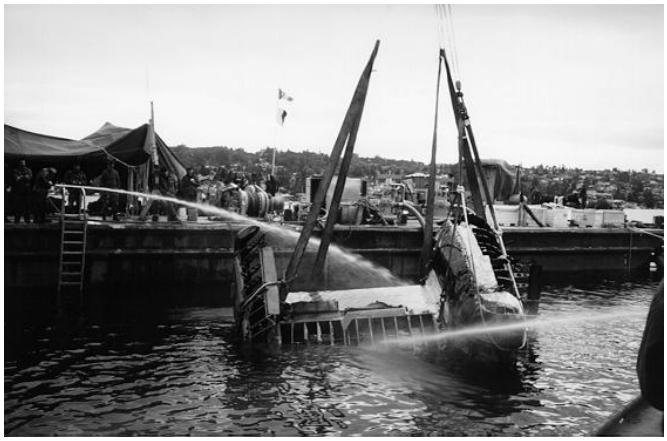
In early October 1996, after over two years of planning, the final attempt to raise the aircraft intact failed due to the excessive weight of the silt that had built up in the wings and fuselage. During the lifting attempt, the rear fuselage separated just forward of the waist hatches. The reason was determined to be caused by the weight of the silt and the reluctance of the forward section of the aircraft to break free of the bottom. The latter caused the aircraft to split open longitudinally, discouraging any further attempts at this time to salvage the balance of the fuselage. Portions of the severed rear fuselage, tail assembly, and other items were successfully recovered by the Navy and transferred to the National Museum of Naval Aviation, Pensacola, Florida, for preservation and possible display.

Devising a plan to successfully raise an aircraft the size and weight of a fully equipped PBM from the lake, under the circumstances of BuNo 59172, was a known calculated risk, but one that had to be taken. Everyone involved in the project felt it worthwhile and remained optimistic until the end. But the team was also realistic and consciously aware of the dangers involved in such an undertaking and was prepared for the worst in the event of failure. Regardless of the success or failure of the mission, there is satisfaction in knowing that as a team, the Mariner/Marlin Association and the Navy did everything possible to save the aircraft.

Overall, the team raised nearly $2M dollars in in-kind donations toward the salvaging and restoration of the PBM-5. Special recognition is given to the following individuals and organizations for their help and support on the project: Capt. Bruce Handler, Capt. Richard Hoffman, Capt. Marc Jones, Cdr. Jim Korbein, Bruce Barth, Stan Piet, Valerie Wright, Naval Historical Center, Navy Mobile Diving and Salvage Units, Seattle Museum of Flight, Army Corp. of Engineers, Glenn L. Martin Aviation Museum, National Museum of Naval Aviation, The Boeing Company, Lockheed-Martin Corporation, AAHP, Naval Base Seattle, and the U.S. Air Force Reserve.

History

On May 6, 1949, Navy Lieutenant Ralph W. Frame was ferrying a Martin PBM-5 Mariner flying boat, BuNo 59172, from the Naval Facility at Sand Point on what would be its final flight. His destination was the aircraft storage facility at the Army Air Corps base, Renton, Washington. There, the high-time aircraft was to be removed from active service with the Navy and placed in long storage. While approaching the seaplane ramp at what is now the Boeing Company's Renton assembly plant, the aircraft struck a small pier while attempting to maneuver on the water against the changing wind conditions, severely damaging a wing-tip float. Tipping over on the damaged wing, the aircraft capsized and sank intact within a few hundred feet of shore, coming to rest upside down in approximately 70 feet of water. BuNo 59172 remained on the bottom of Lake Washington virtually undisturbed for the next 47 years. It is the only known example of a turret equipped Martin PBM Mariner.



Tail section being raised less one stabilizer

Complete Martin twin .50 cal tail turret less glass

Rear fuselage section - top portion separated during lifting

Fabric deteriorated but otherwise sound vertical stabilizer

Recovery of Martin PBM-5, BuNo 59172, from Lake Washington
Renton, WA - October 1996