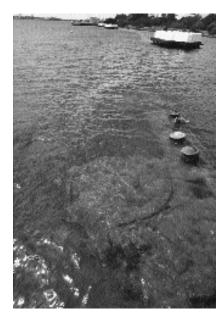
Jim Adams

World War II Battlefields and National Parks in the Pacific

Memorial spanning the sunken hull of the USS Arizona. Photo courtesy USS Arizona Memorial.

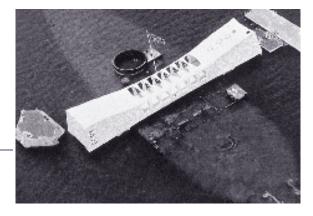
USS Arizona wreckage and oil slicks. Photo courtesy STK Photos. Generally when most people think about the history of Pearl Harbor it is the Japanese attack against the United States' Pacific Naval Fleet on December 7, 1941, that comes to mind. The USS Arizona Memorial, located within the Pearl Harbor Naval Base, on the island of O'ahu, Hawai'i, is an icon seen by over 1.5 million visitors annually. The Memorial is unique to many other historic sites in the recency of the history



USS Arizona wreckage and mooring quay. Photo courtesy STK Photos. it portrays. Where many areas have been attenuated in the mind of the visiting public by the passage of time, there is an immediacy to the USS Arizona Memorial that lends a heavy significance to the site and the event that is being commemorated. This significance is especially apparent to citizens of the United States born before the 1940s. but the worldwide scope of World War II has made this site important to people of almost every country and age group. There is much more to historic Pearl Harbor than this memorial,

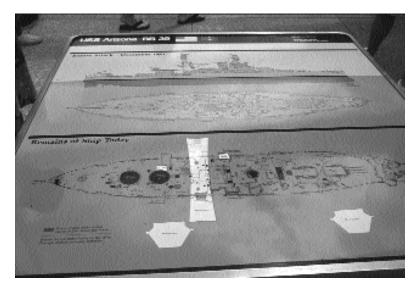
though, more that deals with the history of December 7, more that deals with the history of World War II, and more that deals with a much earlier Hawaiian history before there was a naval base and before the arrival of Westerners.





Unarguably, the sunken battleship USS Arizona, with her memorial spanning her midships, remains the most important single object for historic preservation in Pearl Harbor. A complex site for historic preservationists that have to consider *her*¹ many roles; a memorial to her lost crew and the final resting place for most of her sailors and Marines, a symbolic reminder of the United State's entry into the Second World War and the ultimate victory of the Allies, and an archeological site, to name only a few. The USS Arizona Memorial means many things to many people. Although the memorial is owned by the United States Navy, and is in the middle of one of its bases, the National Park Service has the responsibility for managing the memorial, its shoreside visitor's center and museum, and providing interpretation to the thousands of visitors on a daily basis. The task of historic preservation of the shipwreck, along with the many museum objects and artifacts, has by default been assumed by the National Park Service, USS Arizona Memorial.

The shipwreck is unquestionably the most significant physical resource at the USS Arizona Memorial. Due to the submerged nature of Arizona, the actual condition of the ship is hard to determine. Over 90% of the exterior hull structure of the shipwreck has been surveyed (the bottom of the hull, 17' up from the keel remains buried in the harbor mud) while none of the interior spaces has been surveyed. A historic resource of high quality, the size of Arizona and her location help to ensure her preservation. In the 1980s, National Park Service underwater archeologists, with the assistance of Navy divers, formally mapped the shipwreck as an archeological site and collected baseline data that document the amount of biological growth on the surface of the ship's hull and structure, measured the thickness of exterior bulkheads at various locations, and measured the depth of sediments on horizontal levels.² By measuring these monitoring points over a period of time, a predictive model of change can be obtained that will provide necessary information for developing a long-term management plan for Arizona, and can also be used for preservation



Memorial exhibit. Photo courtesy STK photos. studies on other shipwreck sites. The leaking oil from *Arizona's* fuel bunkers also presents more challenges for the historic preservationist, as environmental concerns have to be weighed against the cultural and symbolic interpretations that are felt by many visitors who consider the oil to be the *tears* that the ship is shedding for her crew. The reality may be that there is no practical solution to the oil, and that the approximate one gallon per day (three to four drops per minute) leaked into the harbor is not of relative consequence.

Historic preservation within Pearl Harbor is an interesting challenge. Pearl Harbor is an active naval base. The base in its entirety was designated a National Historic Landmark (NHL) in 1964. It is listed on the National Register of Historic Places as a *historic site* without singling out any specific spot, facility, building, structure or object. The NHL designation of 1964 recognized the active nature of the naval base because of its success in its mission to support the fleet and its related role in the expansion of the United States as a Pacific power. The 1941 attack on Pearl Harbor was prompted by the effectiveness of its mission and

Historic ferry boat passes Battleship Row and the Arizona memorial on its way to Ford Island.Photo courtesy USS Arizona Memorial.



role. While highly significant as a single event the attack on December 7, 1941-this was not the only event that has contributed to the historical significance of Pearl Harbor. It was the all-encompassing history of Pearl Harbor that resulted in its designation as a NHL. The listing further provides that the base's continuing function outweighs its physical facilities for qualification as a National Historic Landmark. Change is a basic quality of Pearl Harbor's national significance. There is no one water or land use, building, or structure whose preservation for historic purposes per se takes precedence over the process of change necessary to maintain the support-of-the-fleet mission of Pearl Harbor. Navy-directed physical change is necessary, normal, and expected at Pearl Harbor to further that mission (extracted from the National Historic Landmark 1974 update). The Navy has published separately a Historic Preservation Plan³ that provides a survey of all facilities within the boundary of the Pearl Harbor NHL and outlines methods for achieving optimum preservation of the naval base. In 1989, USS Arizona, and USS Utah shipwrecks were given separate NHL designations. These extenuating circumstances have to be recognized by the historic preservation managers when considering management issues within the larger context of the Navy's management policy of the naval base both within its functioning mission and historic role.

Located within the boundaries of the Pearl Harbor NHL are three other World War II NHLs. These are the shipwrecks *Arizona* and *Utah*, as well as USS *Bowfin*, a World War II submarine. *Arizona* and *Utah* received separate NHL designations in 1989. Seldom visited, *Utah* now stands as one of the two reminders of the attack on Pearl Harbor as well as being the final resting place for over 50 of her crew. *Utah* was included in the archeological surveys conducted on *Arizona*. *Bowfin*, nicknamed the *Pearl Harbor Avenger* since she was launched one year to the day after the Pearl Harbor attack, is the centerpiece of the USS Bowfin Submarine Museum & Park, located within Pearl Harbor.

Pearl Harbor is rich in other historic resources related to the "Day of Infamy," as well as the World War II era. Harbor dredging during 1990 and 1991, in proximity to where the battleship *Oklahoma* was berthed and capsized on December 7, 1941, resulted in several findings to include the recovery of a portion of her tripod mast. The most surprising discovery was the retrieval of an unexploded Japanese aerial torpedo that had been fired at the battleship and had become embedded in the harbor bottom instead of reaching its intended target. The remains of the torpedo are now undergoing conservation treat-

University of Hawai`i Maritime Archeology Field School

This course provides a basic introduction to maritime history and the scientific methods and techniques employed in underwater archeological research.

The 1996 field school takes place on the island of O'ahu, based at the University of Hawai'i at Manoa campus. Classroom instruction is complemented by field trips and on-site field research including a scubaassisted archeological site survey. Participants are introduced to maritime history, including the history of underwater archeology, survey methodology, conservation of water-logged artifacts, technology used in underwater archeological surveys, field survey logistics, mapping, and report preparation.

This summer, students will survey ancient Hawaiian fishing artifacts found on the sea floor below ancient fishing sites in the waters off of world-renowned Waikiki Beach. Some of the classroom and field trip topics focus on traditional Polynesian fishing. While conducting the surveys, students become familiar with Hawai`i's diverse marine life.

Participants must possess a nationally-recognized scuba certification and make arrangements with the University of Hawai'i Diving Safety Officer to qualify for UH scientific diver status. Previous course work in archeology or anthropology is a prerequisite.

To request an application, or for more information about the field school, contact the Marine Option program, University of Hawai'i at Manoa, 1000 Pope Road, #229, Honolulu, Hawai'i 96822 USA; telephone: 808-956-8433; fax: 808-956-2417; Internet: sherwood@hawaii.edu; World Wide Web: http://www2.hawaii.edu/mop/mop_mast.html.



USS Arizona underwater survey assessment.

Submit applications directly to Marine Option Program. Deadline for receipt of applications is May 30, 1996.

Instructor:	Hans Van Tilburg, historical archeologist
Dates:	July 1–31, 1996
	MTuWThF, 8:00am-3:00pm
Location:	ТВА
Register for:	ANTH 668 or OEST 668 (cross-listed)
Ū.	Prerequisite: ANTH 210 or equivalent
Tuition:	\$570 Hawai`i residents
	\$900 non-residents
	Plus an Institute Fee of \$450, which cov-
	ers class-related ground transportation,
	airfills, use of textbook.

CO-SPONSORED BY UNIVERSITY OF HAWAI'I'S SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY, MARINE OPTION PROGRAM; SUM-MER SESSION; AND DEPARTMENT OF ANTHROPOL-OGY.

Newly constructed houses on Ford Island, 1936.

ment at the USS Arizona Memorial's museum. Previous investigations have located in deep water outside the harbor entrance one of the Japanese midget submarines that took part in the attack, where it still remains. Located in a remote part of the base are cut-away pieces of *Arizona's* super-

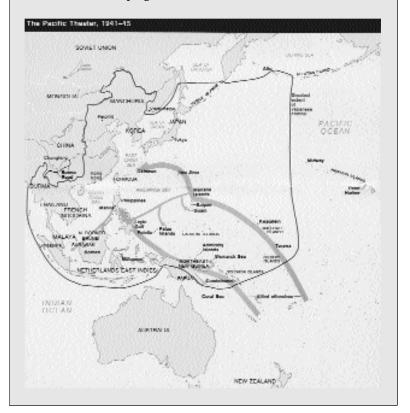


structure, pieces removed during the salvage attempt following the attack as well as pieces later removed for the construction of the memorial. Not yet located in Pearl Harbor, but her return is hoped for, is the yardtug Hoga, the last remaining U. S. naval vessel afloat that was present in Pearl Harbor during the attack. Efforts are being made to preserve this vessel and return her to Pearl Harbor as a museum. In West Loch, an ammunition depot located in an outlying area of Pearl Harbor, are the sunken remains of an amphibious landing ship. During April 1944, there was another famous, but not as well known explosion in Pearl Harbor that resulted in the sinking of several landing ships that were being prepared for the invasion of Saipan. These are just a sampling of the present and potential historic preservation issues that relate to World War II in Pearl Harbor

World War II Battlefields and National Parks in the Pacific

The USS Arizona Memorial is not the only national park related to the events of the Second World War. Not as accessible to the touring public are two other parks promoting preservation and the commemoration of battles fought across the Pacific Islands during World War II. War in the Pacific National Historic Park, located in Agana, Guam, interprets events in the Pacific theater of WWII. Major historic sites, aging gun emplacements, and other military equipment relics, have been preserved that are associated with the 1944 battle fought on Guam. This battlefield park provides an example of the islandhopping military campaign that was fought against the Japanese.

Located on the island of Saipan is American Memorial Park. This developing park will memorialize those who died in the Marianas Campaign of World War II.



and are being addressed by cultural resource managers within the Navy and National Park Service.

Pearl Harbor is rich in archeological sites for traditional Hawaiian history as well. A joint project between the U. S. Navy and the State of Hawai'i Historic Preservation Division, funded by a grant from the U. S. Department of Defense Legacy program, is currently investigating traditional stone walled fishponds that were characteristic of Hawaiian fishing strategies. Located on the shores of Pearl Harbor are 18 buried and 3 extant fishponds. One of these fishponds, '*Okiokiolepe*, is on the National Register of Historic Places. Current research is designed to extract cores of sediment from the fishponds to trace paleoenvironmental changes that have occurred in the 2,000-year history from pre-Polynesian times until present. Samples will also be processed for radiocarbon dating, and to trace the history of fishpond construction and use in the region.

Pearl Harbor provides an excellent example of a historic cultural landscape that remains from an era that no longer exists. Ford Island is located in the middle of the Pearl Harbor Naval Base. It is rectangular, with a length of approximately 1-1/4 miles long and about 1/2 mile wide and served historically as officer housing and as an airfield. It still serves in its former function. One gets to Ford Island by either boat or plane, with boat being the most common form of transportation. Ford Island has a unique history and maintains a distinctive life-style that has shaped its cultural landscape. In many aspects, Ford Island has retained its cultural character within the last half century while the surrounding mainland of O'ahu has evolved. You could say that Ford Island is a time capsule, that its vernacular cultural landscape has been frozen in time. Unfortunately though, it is about to defrost.

Ford Island has a long and rich traditional history, beginning with ancient Hawaiian uses, followed by changes after the arrival of Europeans and Americans. The landscape and vernacular architecture on Ford Island reflects the development of Western culture in Hawai'i during the first half of this century. The isolation of Ford Island has been the primary element to why its physical appearance has not undergone further changes. Within the 400 acres that encompass Ford Island, with only a few exceptions of post-war constructed buildings, the architecture is representative of prewar and wartime vernacular traditions. The integrity of these structures has a common history and tradition that has been maintained over the years. The few modern additions have not caused any significant intrusions on the cultural landscape of the island nor detracted from its character.

The best way to experience Ford Island is by a visit, a visit that can give one the appreciation of what time travel could be like. To get to Ford Island, visitors ride on one of two ferries that provide the connection from the mainland. In a sense, this is our gateway through time. One of the ferries was built in 1918; the other in 1940. Approaching the island, visitors come upon the first of the concrete mooring quays where the mighty battleships that ruled the seas earlier this century once berthed. Traditionally, this area has been known as Battleship Row. No longer used, they are an



Ford Island houses in 1995;virtually no changes since 1936. integral portion of the cultural landscape of Ford Island. Located in Battleship Row is the USS Arizona Memorial. Not only is this a solemn reminder to her lost crew, but it is a time marker signifying the ending of the era of battleships and the beginning of the reign of naval airpower. Just before arriving at the ferry landing, visitors will pass the boat house, still in operation today, that has been in use since 1935. The gray utility boats, although maybe not all original, are of the same style that traditionally have operated in the harbor. It is a utilitarian, vernacular style of harbor vessel.



Single-wall,woodframed,Hawaiian plantation style houses constructed in 1922.

Photos this page courtesy the author.

Ford Island is the residence for 39 military families who live in wood-framed, Hawaiian plantation style houses that were built in 1922 and 1936. These homes have retained their historic integrity. In addition to family quarters are the working buildings of the former naval air station, Ford Island's original naval mission. These structures have preserved the vernacular, non-styled institutional buildings that were commonly found on naval stations in the early half of this century. The combinations of these structures, the houses, service ramps for the seaplanes that once occupied the air station, hangers and other service buildings, not only provide reminders of the history of the island, but they also represent vernacular military service buildings that performed myriad functions. Their silhouettes all contribute to the cultural landscape of the island, especially as seen from the mainside areas of Pearl Harbor, Pearl City, and Aiea.

Ford Island represents the most intact cultural landscape within Pearl Harbor. Since its original development in the 1930s, it has escaped much of time's evolution for six decades, thus allowing us to experience some of the feelings from a past time. This is about to change as a bridge will be constructed in 1996, that will for the first time provide a physical linkage between Ford Island and the mainland of O`ahu. This bridge will interrupt the view from the shore to the island, altering its cultural landscape. The view from the USS Arizona Memorial will also be altered. The addition of the bridge will also cause changes to the lifestyle of those that live or work on Ford Island. No longer will the ferries be used and now the island will be accessible to more vehicular traffic. Noise and motion will increase; the sounds of the cultural environment will change. The building of the bridge is the forerunner of further construction on Ford Island for increased housing needs. Even though the plans provide for leaving the present historical buildings in place, the community as has existed, a community based on its own traditions and cultural landscape, will no longer exist. It is the environment and the non-tangible aspects of sounds and senses that will be drastically altered. It will be harder, if even possible, to feel the same historical sentiment. The alteration of Ford Island is the dilemma that the historic preservationist must weigh against the operating needs of the naval base.

Notes

- ¹ The customary naval tradition of referring to ships in the female gender is used here.
- ² Submerged Cultural Resources Study: USS Arizona Memorial and Pearl Harbor National Historic Landmark. Second Edition. Edited by Daniel J. Lenihan. Southwest Cultural Resource Center Professional Papers No. 23. Santa Fe, New Mexico (1990).
- ³ Historic Preservation Plan for National Historic Landmark, U.S. Naval Base, Pearl Harbor.
 Commander U. S. Naval Base, Pearl Harbor, Ser 184, April 18, 1978. This plan is being revised.

Jim Adams is the Cultural Resource Specialist, USS Arizona Memorial, National Park Service, and a doctoral student in the Historic Preservation Program, American Studies Department, University of Hawai'i at Manoa.