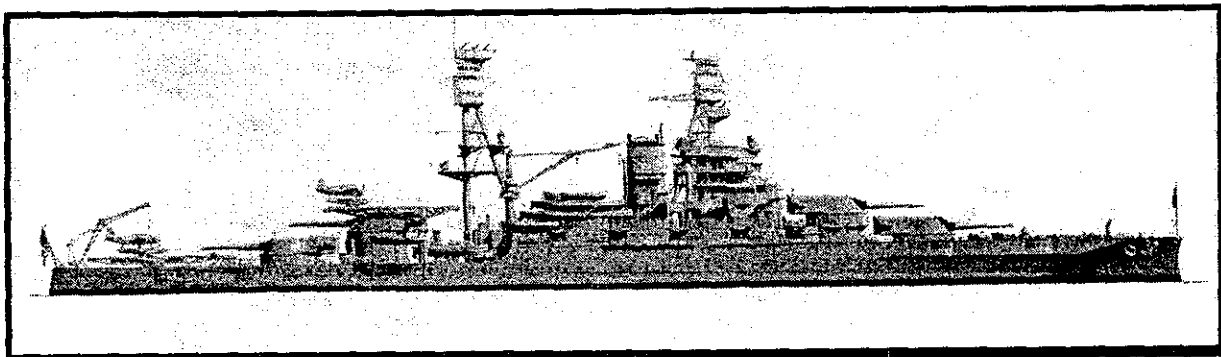


# Resources Management Plan



USS Arizona (BB-39)

## USS ARIZONA MEMORIAL

National Park Service

Honolulu, Hawai'i

February 1996

B&W Scans

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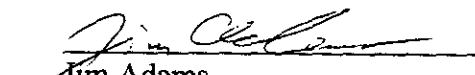
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**RESOURCES MANAGEMENT PLAN**

**USS ARIZONA MEMORIAL  
NATIONAL PARK SERVICE  
HONOLULU, HAWAII**


**1996**

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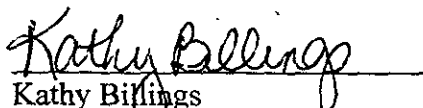
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## INTRODUCTION

### Legislation

The USS Arizona Memorial (USAR) is unique in the National Park System. In 1980 the National Park Service (NPS) gained stewardship of an existing facility with its program ideas already well established over the preceding nineteen years. The transfer from the US Navy (Navy) to the NPS was accomplished by a formal agreement between the Navy and the NPS. This arrangement distinguishes USAR from most other NPS areas as they were created by acts of congress or an executive order.

In the enabling legislation or proclamation that most NPS areas enjoy, there is a specific statement of mission for that area. The agreement that created USAR however, deals primarily with the nuts and bolts of stewardship and operation of the existing visitor center and Memorial facilities.

There is no enabling legislation for the USAR. While there are many statements on record by legislators that indicate the prevailing thought behind the establishment of the Memorial, the political climate at the time caused the public law that created what eventually became USAR to be simply piggy-backed on a much larger military construction package. Public Law 85-344, passed March 15, 1958, uses rather matter-of-fact language designed to be non-controversial. This originating law concentrates on the practicalities of construction and it appears there was an assumption that the *reason* for the facilities' existence was self-evident and had already been established.

The NPS has established themes that give USAR parameters, and try to define why the Memorial exists. While several of these themes will be mentioned, it is not the purpose of this document to explore them in any great detail. An understanding of the nature of USAR's existence is critical, however, to understanding the complexities of defining what constitutes USAR resources and in turn the intricacies of managing these resources that are in whole or part controlled by other entities.

### NPS / US Navy Use Agreement

Although the hulk of the USS Arizona, the memorial structure and the visitor facility is officially Navy property, the NPS/Navy Use Agreement gives USAR exclusive control of an approximately 6000 square feet visitor center, the immediate surrounding lawn area, three parking lots, and the memorial structure. USAR owns a small boat for maintenance operations, and the tour boats are owned and operated exclusively by the Navy. The surrounding Pearl Harbor area including Ford Island, as well as the harbor itself is also exclusively under the control of the Navy. Although not addressed in the Use Agreement, it is considered by most

interested parties that the NPS has, at the least, conservation/preservation responsibilities for the sunken shipwreck *Arizona* that lies directly below the Memorial. The Use Agreement assigns responsibility to the NPS for the Memorial, the boat floats (buoys) marking the ends of the sunken *Arizona*, and the landing. It would appear only logical that the area in between and below would be included. The remains of the Battleship *Arizona* are symbolically tied to her Memorial.

### **Resources Locations and Issues**

Considered to be one of the primary USAR resources is the submerged hulk USS *Arizona*. This is a 608 foot battleship heavily damaged and sunk by the Japanese during the Pearl Harbor attack, December 7, 1941. The ship was subsequently the object of an intensive salvage effort that considerably altered its appearance. The *Arizona* has since served as an emotive American symbol very much akin to the Alamo in San Antonio, Texas.

Although the *Arizona* is a USAR focus, as well as the focus of all the early memorialization legislation that eventually led to the creation of USAR, it is not specifically mentioned in the NPS/Navy agreement. Another set of considerations, similar in nature to those involved in the early legislation, are at work here. Based on precedent set on these considerations, USAR has undertaken the resource management of the *Arizona*.

In addition to the USS *Arizona*, USAR has established themes that include the whole of the attack on Pearl Harbor, subsequent salvage operations, and Hawaii's role in the Pacific theater of World War II. The history of Pearl Harbor is also considered, to include the ancient traditional Hawaiian period (prehistory) and the construction of the Pearl Harbor naval base.

Due to the complex and diverse nature, both in location and time, of USAR's resources, there are many problems inherent with the creation of a resources management strategy. The most obvious is the inaccessibility of the USS *Arizona* and its finite character. One of the primary questions addressed by this document is the desirability and feasibility of conservation and or preservation of the *Arizona*.

The strong emotional response generated by the USS *Arizona* also adds difficulty to resource management planning. Many individuals and organizations feel some responsibility for the caretaking of the ship and the Memorial. Any resource work done is very visible, and scuba operations arouse curiosity and comment, further evoking these responses.

The sheer volume of visitation also adds to the problems of resources management. With a continuous stream of nearly one and a half million visitors a year to the Memorial, simply working around the visitors without causing accidents or undue program delays in the very stringent interpretive schedule can be exacting. Additionally, visitors contribute one of the primary resource problems to the *Arizona* in the manner of debris inadvertently dropped or purposefully thrown over the side of the Memorial and onto the ship. Much of this material has been gathering on the ship's deck for nearly thirty years. The former galley deck area is the only location accessible for coin removal; there is an unmeasurable amount of coins and other litter

buried below the silt that covers the deck of the ship in the deeper areas adjacent to the Memorial.

The proximity of the *Arizona* to Ford Island is another area of concern. It is an easy snorkel from the island to the shipwreck. There has been some suspicion of looting and vandalism of the *Arizona's* deck, and potentially the interior as well. However, due to lack of documentation, it is presently difficult to determine if this is happening.

The conditions and naval operations within Pearl Harbor, as earlier noted, are generally beyond USAR control, but can have a profound affect on the status of the *Arizona*. An example of this are the occasional dredging operations in the Halawa stream adjacent to the visitor center. During these operations, a line of silt extends into the harbor, and due to natural currents, goes directly over the top of the *Arizona*. Visibility is impaired for both the visitor's experience, and for doing any resource management work.

Very similarly, when large ships pass or during other harbor dredging operations, silt is kicked up to settle eventually on the ship. Wave action initiated by the wakes of large ships, as well as by the continuous operation of the Ford Island ferry and the tour boats also accelerates the spalling of exposed ship sections, eventually causing those pieces to fail.

Potentially, a major concern for resource management is the scheduled construction of a bridge to Ford Island. This Navy project, which is now approved, has the potential for noise, silt, and pollution that may adversely impact upon the shipwreck *Arizona* and the Memorial.

Two other potential problems are related to resources management. First is the degradation of the visitor experience on the Memorial through noise pollution from boats and over-flights. Second is the critical shortage of space for the proper storage of artifacts in the museum collection.

The resource of quietness, is an often overlooked one, but is of high value considering the conceptual nature as well as the real situation of the Memorial residing over the resting place for nearly one thousand US servicemen. Overflights are common, and the noise from these, combined with boat noise can be overpowering. The noise level will undoubtedly increase on Ford Island from vehicle and pedestrian traffic after completion of the causeway and with the addition of base housing units.

The USAR museum collection, while primarily under the purview of the museum curator, is also a related concern of cultural resource management. Proper space for the storage of artifacts is limited, and nearly full. As the 50th anniversary of the attack on Pearl Harbor has just occurred, and especially with the ever increasing mortality of Pearl Harbor attack survivors, a dramatic increase in artifact donations is expected. Storage for these items has already become a problem.

Resource management concerns and objectives have recently been the focus of a lot of attention. Although the primary short-term goal is still the establishment of an aggressive resources management program, some other directions for the shipwreck *Arizona* have also been established as possibilities.



The unique and ground breaking nature of a resource management scheme that centers on a submerged cultural resource has dictated that more study is needed in almost all areas before more hard and fast decisions can be made on conservation and or preservation issues. So a status quo is currently being pursued as the management choice on the *Arizona* as opposed to a decision to either abandon management per se and let the ship return to the elements, or to devise a complete conservation and preservation strategy.

One of the resource management issues that tends to demand more immediate attention due to its obvious visual nature is the persistent fuel oil leak that has been emitting from the *Arizona* in the close proximity of the Memorial. Here again a decision to conduct a more in depth study of the situation has been made. It has been decided that at the completion of this study a more comprehensive determination can be made as to how to deal with this question.

Another recent decision critical to cultural resource management was the one to include a larger interpretive context in both time and area than just the USS *Arizona* and the events of the attack on Pearl Harbor. This view includes the salvage operation that extended beyond the attack, other sites and materials, such as deck material from the *Arizona* as well as other related war remains, the historical setting of Pearl Harbor prior to 1941, and the events after the Pearl Harbor attack leading up to the Battle of Midway.

Additional resources are mentioned in this document that are not within the tangible USAR area nor are they mentioned in the NPS/Navy agreement. They are mentioned for their relation to the interpretation of USAR resources and may have an impact on USAR resources. Some of these include equipment or installations on the Island of O`ahu, while others lie submerged in surrounding waters. The closest resource both in location and similarity is the shipwreck USS *Utah*. The *Utah* is located on the opposite side of Ford Island from *Arizona*. Even though not as noted as the *Arizona*, she shares similar attributes to include being a grave site and memorial to her crew. Although it is not feasible, nor desirable, for USAR to consider the accession of these resources it is deemed appropriate to acknowledge their existence when considering how to manage USAR resources. Further, some of these related historical resources do provide an opportunity for USAR to act as an advocate to assist local agencies in their conservation/preservation programs.

### **Management Objectives**

The cultural and, to some extent, natural resource management objectives related to these recent decisions and to this document that will predicate future decisions are listed below:

Establish a practical and functioning resource management plan that incorporates the wide ranging aspects of USAR resources, and also considers the political and real aspects of the USAR situation on the Pearl Harbor Naval Station.

Conduct studies on the physical condition of the USS *Arizona* and the USS *Utah*, and make predictions on their longevity.

Investigate the fuel oil leak in the *Arizona* and make a decision as to whether it will be allowed to continue.

Create a data base of objects and noteworthy structural points on the deck of the *Arizona* that can be used in research and security operations.

Create possible amendments to the NPS/Navy agreement with specific attention given to the status of the shipwrecks USS *Arizona* and USS *Utah*.

Establish a well organized and functioning scuba diving team to carry out resource management objectives.

## PRESENT RESOURCE STATUS

### Natural Resources

It has been determined that there are no natural resources within the purview of USAR. All the identified resources are cultural, and the bulk of these are not even organic. The very grounds that the USAR visitor center occupy are artificially constructed and have no resource or cultural significance at this time.

However there are abundant natural processes at work on the cultural resources. As the primary resource, the ship USS *Arizona*, is submerged in Pearl Harbor, the very nature of this location provides an ambience of natural processes that is intensely apparent. These natural qualities are important to the USAR resources management only for their processes and those interactions with the cultural resources.

The natural resources that these processes create do, however, require management attention and exist within the purview of the Navy. As these natural resources are interacting with USAR's cultural resources, USAR, by default, will need to consider the Navy's natural resources when establishing management strategies. The actual responsibility for management of the natural environment still falls to the Navy.

The natural conditions surrounding USAR's submerged resources have an inherent importance to USAR, thus these conditions require monitoring. The monitoring program is difficult and at times dangerous. This program is addressed later as a project statement.

As the visitor center grounds and complex potentially will be nominated to the national register upon reaching the 50 year eligibility standard, there exists the possibility that this cultural landscape will need to be addressed as USAR resources in the future. Although the current status of the complex leaves it entirely within the purview of the maintenance division, a dialogue between the resources management division and the maintenance divisions will continue to be maintained.

### Cultural Resources Overview

The NPS/USN Use Agreement for USAR does not directly address the identification and protection of anthropological and cultural resources. However, a hierarchy of laws, regulations, and directives guide the conservation/preservation and management of cultural resources found within the national park system. Examples of those that affect the USS Arizona Memorial include: the Antiquities Act of 1906, the Organic Act of 1916, the Archaeological and Historic Preservation Act of 1974, the Archaeological Resource Protection Act of 1979, and the

Abandoned Shipwreck Act of 1987. Appendix B of NPS-28 provides a more comprehensive listing of these documents.

USAR is exclusively a cultural site. The physical location of the park facilities and its resources are in areas owned and operated by the Department of Defense. The visitor center complex and the primary resource, the USS *Arizona*, are both within the confines of the Pearl Harbor Naval Station. This is especially important as the naval base in its entirety is listed as a National Historic Landmark (NHL).

As a NHL, U.S. Naval Base, Pearl Harbor, is listed on the National Register of Historic Places as a *historic site* and does not single 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 is one result of the effectiveness of its mission and role. It further provides that the base's continuing function outweighs its physical facilities for qualification as a National Historic Landmark. Change is basic quality of Pearl Harbor's national significance. There is no one water or land use, building or structure whose conservation/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 Plan* (USN:1978) that provides a survey of all facilities within the boundary of the Pearl Harbor NHL and outlines methods for achieving optimum conservation/preservation of the naval base. In 1989, USS *Arizona*, and USS *Utah* shipwrecks were given separate NHL designations. These extenuating circumstances are important to recognize when determining USAR resource management issues within the larger context of the Navy's management policy of the naval base both within its functioning mission and historic role.

USAR is unique to many other historic sites in the recency of the history it portrays. Many areas have been attenuated in the mind of the visiting public by the passage of time. USAR has an immediacy 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 1932, but the world wide scope of World War II has made this site important to people of almost every country and age group.

The immediacy of the attack on Pearl Harbor has also lent an unusual range of possible resources for USAR. Many survivors of this attack still remain as a living part of the event. Also the status of the more tangible resources is unusual in that the NHL documentation for the Pearl Harbor Naval Base states that one element of the area's significance is its continued change and operation.

Without congressional legislation delineating USAR's scope of resources, both in time and place, the areas of concern continue to be in a state of flux, and are spreading without clear direction. The primary resource, USS *Arizona*, has been surveyed. This survey included the

USS *Utah*, along with a bottom survey of Pearl Harbor for other potential related sites, as these resources are immediately related to the USAR resource base. Some work has been done to survey the living resource, and to document their accounts, but it is impossible to know how many people this area represents, as it is equally impossible to expect to reach them all.

Although subject to change, most of the tangible resources have a greater or lesser degree of longevity dependent mostly on their physical nature and location. The living resource (Pearl Harbor survivors) is, however, very finite and it is estimated that their life expectancy will be virtually finished by 2006.

### **Cultural Resources Managed by USAR**

As previously discussed, without legislation the NPS/USN Use Agreement has specified what properties are to be managed by USAR as part of the USS Arizona Memorial Complex. Based on existing agreements, discussed below are the cultural resources that are considered to be under the primary management responsibilities of USAR. These are the cultural resources that USAR treats as if it had the direct ownership over as if the enabling legislation was in place (refer to Introduction: Legislation and Use Agreement, for further discussion). A later section will outline other cultural resources that are related to the USAR theme but not under USAR's responsibility.

#### USAR Visitor Center, Memorial and Shuttle Boats

Although located on the Pearl Harbor Naval Base and therefore technically covered as a part of that NHL designation, there is no specific mention of these structures in that documentation. Additionally, the visitor center and the shuttle boats have virtually no significance historically or otherwise. However, the memorial structure, while only 30 years old, has acquired a considerable amount of historical significance, and is recorded on the park's List of Classified Structures (LCS).

#### USS Arizona (BB-39)

Due to the submerged nature of the remaining hulk of the *USS Arizona*, the actual condition of the ship is hard to determine. Approximately 90% of the exterior hull structure of the shipwreck *Arizona* has been surveyed, while none of the interior spaces have been surveyed. The *Arizona* is a resource of high quality. Its size and location help to ensure its conservation/preservation.

#### History / Present Condition

Construction of the *Arizona* began March 16, 1914, when her keel was laid. She was launched June 19, 1915. The *Arizona* was commissioned October 16, 1916.

A Pennsylvania class warship, the *Arizona* was 608 feet long by 97 feet, one inch wide at maximum beam. The *Arizona* displaced 31,400 tons, and drafted 28 feet, 10 inches. She had

four propeller shafts with four paired turbines and twelve boilers resulting in 33,375 horsepower with 21 knots of speed. The original compliment of men numbered 915.

Originally the *Arizona* carried 12, 14-inch, .45 caliber guns; 22, 5-inch, .51 caliber guns; 4, 3-inch, .50 caliber guns; and 2, 21-inch, submerged torpedo tubes. The plate armor was 18 inches thick at the maximum.

On April 3, 1917, the *Arizona* underwent a shakedown overhaul at the New York Naval Shipyard. Again in January of 1920, the *Arizona* spent eight months in the New York shipyard for maintenance. On April 27, 1920, the *Arizona* reported back to the New York shipyard for an overhaul.

September, 1921, saw the *Arizona* become a member of the Pacific fleet.

The *Arizona* spent three months in the Norfolk Naval Shipyard for a modernization. This work was completed on March 3, 1931. The *bird cage* masts were removed and exchanged for tripod masts. 5-inch anti-aircraft guns replaced the 3-inch guns. More armor was added to decks, and torpedo blisters were added to the ship sides. A new power plant was installed, replacing the twelve boilers with six, three barrel type. The fuel capacity was increased to 4,630 tons.

On January 23, 1941, the *Arizona* again went in for an overhaul, this time at the Puget Sound Naval Station. Two, 5-inch, .51 caliber guns were removed. As replacements for the removed 5 inch guns, newer quadruple barreled 1.1-inch machine guns were scheduled to be installed in early 1942. Eight, .25 caliber guns, and a variety of .50 caliber machine guns were added. The *Arizona* arrived again in Hawai'i in February of 1941, where it underwent adjustments and repairs on October 27, 1941.

The *Arizona* entered Pearl Harbor for the last time December 6, 1941 and tied up to the F-7 quays. The repair ship USS *Vestal* pulled along port side of the *Arizona* and tied up in preparation of repair work on the *Arizona* slated for December 8, 1941. The *Arizona* was painted in accordance with measure 14: dark gray on the hull and masses, with light gray on masts and yardarms.

The attack on Pearl Harbor began at 0755, December 7, 1941. The *Arizona* was strafed repeatedly and was struck by approximately four 1756 pound, armor piercing, high altitude bombs.

One of the four bombs is believed to have pierced the forward decks in the area of the Number 2 Turret. A chain reaction occurred that ended by exploding the forward magazines with as much as 1.25 million pounds of ordnance. The forward two-thirds of the *Arizona* were gutted, and the bow section nearly severed. The sides of the ship in the vicinity of the main explosions were folded out nearly horizontal, and the length of the ship increased slightly. The *Arizona* sank at approximately 0815. Even after sinking, much of the ship's superstructure remained above the waterline.

Though it seems unlikely now, the Navy's after action reports suggest an additional eight bombs struck the *Arizona* as it sank. It was also reported that the *Arizona* was struck by up to two torpedoes. No physical evidence to support the possible torpedo hits was discovered during the archeological surveys conducted in the 1980s (cf. Lenihan: 1989), and the salvage reports do not provide any such evidence either. This remains as a topic of research interest.

The order to abandon ship did not come until approximately 1032. The *Arizona*, and the oil slick on the water around it, continued to burn for nearly two and a half days. Of a ship's complement of 1510 men, 1177 perished, leaving 333 survivors.

### Post Attack History

Immediately afterwards, a salvage operation was initiated. Some of the .50 caliber machine guns, a few search lights, a catapult, and the number three and four, 14-inch guns and their turrets were removed. Within a week, divers penetrated the stern portion of the ship and removed safes and other sensitive materials.

The divers discovered that the decks had collapsed forward of frame number 76. Maximum penetration forward was only possible as far as frame number 66. Divers removed most of the remaining ordnance as well as a lot of machinery and some handguns.

Most of the superstructure had been removed by the end of 1942. The guns from turrets three and four were taken to *Mokapu* Head in *Kane`ohe* and *Kahe* Point (Electric Hill) near *Nanakuli*, then cut up for scrap after the war.

A coffer dam scheme was envisioned for awhile to try and raise the whole ship, but was abandoned as unworkable and not worthwhile. In June of 1942, the decision was made to abandon salvage efforts. The last salvage operation was completed in October of 1943. During the salvage operations, 105 bodies or parts of bodies were removed and identified, while another 124 remains were removed unidentified. Approximately 1000 (945) bodies remain unaccounted for, and presumed incinerated.

### Stricken from the Roles

On December 1, 1942, the USS *Arizona* was struck from the Official Register of Navy Vessels. She is no longer a commissioned vessel, in contrast to popular myth.

In the 1950's, a platform and flagpole were affixed to the roof/deck of the *Arizona*'s boat deck in an early memorialization effort. The bow and stern of the *Arizona* were also outlined by rope strung from poles affixed to the periphery of those ship sections. Those early efforts have left little impact, except that the poles and rope still lie about the forward and aft decks of the *Arizona*.

In 1961, the boat deck overhead was removed in preparation for the construction of the present memorial structure. This material has been stored at Waipio Point, on the Pearl Harbor Naval Base.

There are two concrete mooring platforms that have been added to the fabric of the *Arizona*, one just port of the galley section, and the other attached to the port side of the number three barrette. It is believed that these were added during the salvage operations.

Little change has occurred to the *Arizona* since the completion of the Memorial in 1962. The entire exterior of the ship is coated in a layer of marine biofouling. Little is known about the inside compartments, but it is likely that many are filled with sediments to one degree or another as silting is constant and heavy in Pearl Harbor.

Some sections of the ship protrude from the water and are subject to an accelerated rate of spalling and rust. There have been a couple of small funnel pieces collapse sometime in the last 30 years.

The ship's deck areas near the Memorial and especially on the forward side are being impacted by material deposited by the visitors to the Memorial.

Originally, the Memorial featured a length of symbolic anchor chain that connected the memorial's dock and the ship. It was later determined that this feature was deleterious, and it has been recently severed. There is a remaining section of chain still on the deck of the *Arizona*.

#### NHL Designation

Although the Pearl Harbor Naval Base was designated a NHL in 1964, the USS *Arizona* was not added specifically to the National Register until May 5, 1989, when she received a separate designation as a NHL.

#### Japanese Type-A Midget Submarines

In conjunction with the aerial attack on December 7, 1941, five Type-A midget submarines were launched against the American forces arrayed at Pearl Harbor. Although the nine out of ten submariners that lost their lives were hailed as *gods* in Japan, the submarines were considered to all have had unsuccessful attacks that resulted in no damage to the US fleet.

One of the five, Ha. 19, is a USAR resource. All five will be discussed in this section as their stories are inseparable.

Despite their poor showing, the submarines represent a significant element in the historical record. The first shots fired in the US war with Japan were fired by the USS *Ward* against one of these midget submarines. The first US prisoner of war was the only surviving submariner from the midget submarines.



The five midget submarines are named A-E by the Navy in the order of their being encountered. Submarine A is one of particular significance for USAR as it is the one fired upon and sunk by the USS *Ward*. After several intensive searches beginning in 1988 and running through June 1991, a side-scan sonar contact has been made that may eventually prove to be this submarine (refer to Lenihan:1989).

A separate 1992 discovery by a private researcher, utilizing a remote submersible and video camera, could also be the missing A submarine. Certainly the metallic object appears to be the rear, one-third section of a midget submarine. However, until the middle and/or forward sections are discovered, it will remain unclear whether the object is in fact a midget submarine section, or to which of the two midget submarines that are still unaccounted for the piece belongs. The location of this section of a possible midget submarine is also an area that was used as a dumping ground for surplus war materials after the end of World War II. It is hypothetically possible that a midget submarine was retrieved at the end of the war and brought to Hawai'i for intelligence study. Upon completion, it could have been deposited with other surplus material into the ocean. Further research would be necessary to determine the identity of this object.

Aside from the difficult and costly logistics of exploring the section which lies in approximately 1500 feet of water nearly 4 miles out from the Pearl Harbor entrance, the question of Japan's ownership and interest has been raised. As the object was not discovered by the NPS or agents of the NPS, USAR is currently unable to consider any further action.

Midget submarine B was rammed and sank by the USS *Monaghan* during the morning attack. Afterwards it was buried replete with crew in landfill at the Pearl Harbor Submarine Base in 1942. The submarine was later disinterred and again buried in coral and sand at the submarine base. The potential exists for the eventual uncovering of this submarine. Should this happen, the lack of particular significance and the availability of other midget submarines, suggests that this submarine not become a USAR resource, but remain the sarcophagus for its crew (it is alleged, but unverified, that one or both crew members may have been buried with the submarine).

Midget submarine C (Ha. 19) washed ashore near Bellows Air Field on December 8, 1941. This submarine became a symbolic war prize and toured the country on a war bond drive. Crewman Sakamaki became the first US prisoner of war. The submarine, though compromised with windows during the bond drive, is still an artifact of great quality and significance.

After having spent many years in Key West, Florida, the midget submarine, as a temporary loan from USAR, is on display at the Admiral Nimitz Museum in Texas. This midget submarine, on a permanent loan from the Navy, is accessioned as a USAR museum artifact. It is planned to be returned to Pearl Harbor (in 1996), where it will be displayed as a museum artifact in the visitor center. At present, negotiations are being conducted to facilitate shipment of the submarine to Hawai'i from Texas. Ha. 19 has considerable significance as a USAR artifact and was designated a NHL on June 30, 1989.

In 1960, midget submarine D was accidentally found by Navy divers. This submarine was returned to Japan, where it is now a memorial at the submarine base at *Eta Jima*. Although significant by its presence at the attack on Pearl Harbor, it has no other inherent significance.

Midget submarine E may be completely lost. There remains the possibility that the recent discovery off of Pearl Harbor by the private researcher may prove to be this submarine, but it is unlikely. If it is ever discovered, it should be noted that it has no particular significance as a USAR resource, and should be left as the war grave it almost assuredly is. This would be a U.S. State Department and U.S. Navy responsibility.

### Mooring Quays

The Mooring Quays are not USAR assets, although the two that were used by the USS *Arizona* and are adjacent to the Memorial have been included in the USAR's List of Classified Structures (LCS). Refer to *Mooring Quays* in the section on related resources.

### **Cultural Resources Related to USAR**

Many other cultural resources exist that relate to USAR's interpretive theme but are not USAR's responsibility. These resources are linked to USAR's resources and provide further references and amplification of USAR's interpretation. Many of these cultural resources, even though not owned by NPS, are suitable for NPS (USAR) to provide consultation and to work cooperatively with other federal and local agencies to ensure their continued conservation/preservation. These cultural resources are included within this section of the resource management plan for historical background only and to document related resources available to USAR for interpretive research.

### Waipio Point Material

Although this material is a Navy responsibility, USAR has a direct interest in it since it is original fabric from the battleship *Arizona*. This material was part of the *Arizona* at the time of sinking, the event which has given historical significance to the *Arizona* and lead to her memorialization.

In preparation for the 1961 building of the current memorial, a considerable amount of material was removed from the hulk of the *Arizona*. The material consists primarily of the upper bulkhead and overhead/deck sections of the boat deck. This left a galley area of the ship exposed.

All this material was stored with no particular care on the Pearl Harbor Naval Base at an area known as Waipio Point. While most of the material is rusted and mangled and could easily be called wreckage, a fair amount of it is recognizable as bulkheads, portholes, etc. Although a part of the Pearl Harbor Naval Base NHL status by virtue of location, this material has not been specifically cited as having historical significance.

The material does have some historical significance. This material is, however, seldom visited, and is protected only by its remoteness, both in location and in the policies of the Navy. Any environmental protection of the material would be difficult and expensive. Although this is Navy property (the wreckage and its location), it is an area that USAR can provide consultation.

The Navy has issued disposition instructions on this material that makes it available to qualifying museums and veterans' organizations.

### USS *Utah* (BB 31, AG 16)

#### History / Present Condition

Virtually forgotten, and not seen by most of the public or the NPS, the *Utah* is a reminder of the attack on Pearl Harbor that has great significance and potential. The *Utah* is a Navy responsibility as a historical resource. She is related to the theme of USAR's mission and USAR has a history of cooperation with the Navy for interpretation and research issues regarding the *Utah*.

Second of the *Florida* class, the *Utah's* keel was laid down on March 6, 1909 at Camden, New Jersey. The *Utah* was launched December 23, 1911. The ship displaced 21,825 tons and drew approximately 28 feet. The hull had a length of 521.6 feet and the ship boasted a beam of 88.3 feet. Her original complement was made up of 1001 men. *Utah* was armed with five main gun turrets sporting two 12-inch guns apiece. There were also 16, 5-inch, .51 caliber guns, and 2, 21-inch submerged torpedo tubes. The ship had 12 inches of armor at maximum.

After the London Naval Conference in the 1920's, the number of battleships that a country could maintain was curtailed. The USS *Utah* was one of those American ships condemned. Instead of demolition, however, the *Utah* was reclassified July 1, 1931, to AG-16. The new *Utah* took over a year to emerge, but was a technological marvel that could be remote controlled for up to four hours. This made it an excellent training and target vessel. The robot mechanisms were guided by a Sperry, *metal mike* gyro pilot. April 1, 1932, saw the *Utah* again in full commission.

The *Utah* laid remote control groundwork that would later be used in space exploration and guided missiles and would dramatically effect the manner in which war was to be waged. The *Utah* left the Atlantic Ocean and joined Squadron One, US Pacific Fleet on June 9, 1932.

In August 1935, the *Utah* changed over into an antiaircraft training ship.

In April 1940, the *Utah* checked into Puget Sound for the installation of a 5-inch, .25 caliber gun battery. Again on May 31, 1941 the *Utah* went to Puget Sound for nearly three months. The training armament was dramatically altered. Two, turreted, 5-inch, .38 caliber guns were placed on top of the original 12-inch gun turrets numbers 4 and 5. Two, 5-inch, .38 caliber guns were placed on the port side and two on the starboard side. Experimental, 20mm, automatic antiaircraft weapons were installed. Finally, the *Utah* received a measure 14 paint scheme.

The day of December 7, 1941, saw the *Utah* moored on the west side of Ford Island at the F-11 quay where the Japanese expected the aircraft carrier USS *Enterprise* to be located. Possibly the first ship attacked, a torpedo hit the *Utah's* port side at 0753. Some seconds later, a second torpedo hit the same area. At about 0801, the *Utah* capsized.

## Post Attack History

During the attack, a tapping sound was heard from the upturned bottom of the *Utah*. Machinist Mate S.S. Szymanski located a seaman in void space V-98 by tapping. Borrowing a cutting torch from the USS *Raleigh*, a hole was cut and F2C John Vaessen was rescued. Szymanski was awarded the Navy Cross. Fifty-eight of *Utah*'s crew were killed with most of them remaining entombed within the *Utah*.

During salvage operations in January of 1943, workers removed ordnance material. Access holes were drilled to remove fuel oil from bunkers.

By March 1944 work had stopped. The massive salvage effort that had tried to wench the *Utah* upright with cables strung from shore had failed, leaving the ship just off of Ford Island at a 38 degree angle.

In 1956, the commandant of the Fourteenth Naval District decided a new effort would be made to remove the *navigation hazard* posed by the *Utah*. Extreme cost coupled with the sanctity of the grave site represented by the *Utah* prevented any action on the commandant's plan.

In 1970, it was proposed that a memorial be built to honor the men entombed within the *Utah*. On May 27, 1972, a memorial consisting of a shore side plaque and a short viewing platform was dedicated.

## NHL Designation

Seldom visited, the *Utah* now stands as one of two reminders of the attack on Pearl Harbor as well as being the resting place of over 50 men. Unquestionably, it is also a valuable resource for USAR as well as the United States, and was designated as a separate NHL along with the *Arizona* on May 5, 1989.

Despite its prominent historical significance, the *Utah* has little significance in the eyes of the USAR visitors. Although more interpretation of the ship to the public would be in order, the ship is better utilized as a source for research and study that is beyond the impact of visitor operations that effect endeavors on the USS *Arizona*.

The difficulties of managing the *Utah* are all the same as with the *Arizona*, with an additional emphasis on the problems of ownership, control and access. Currently, in cooperation with the Navy, the NPS has been managing the *Utah* on an almost project level, surveying approximately 90 percent of the exterior, and establishing stations to use in an on-going monitoring program. In the future, USAR may want to propose assuming formal responsibility for the management of *Utah*.

### USS Oklahoma Material

Moored just outboard of the USS *Maryland* at berth F-5 on the morning of December 7, 1941, the *Oklahoma* suffered extensive damage to its port side from nine or more torpedoes, and capsized. Soundings made during subsequent salvage operations indicated that the port side of the ship and the superstructure were buried in mud to a possible depth of 20 to 25 feet. The masts were bent or broken, and were lying approximately horizontal near the surface of the mud.

An extreme effort at salvage was undertaken, and the ship was eventually raised. All usable machinery and ordnance was removed while the *Oklahoma* was in dry dock. The ship was judged incompetent for further use in the war and decommissioned September 1, 1944. In 1947, the *Oklahoma* was sold to a west coast salvage company and two tugs proceeded to tow the vessel there. Heavy seas caused the *Oklahoma* to quickly sink approximately 500 miles north of the Island of Hawai'i in very deep water.

In 1988, a magnetomic survey of the Pearl Harbor bottom was undertaken. Many large metallic contacts were made in the area where the *Oklahoma* had capsized. It was believed that this material was remnant from the *Oklahoma*, but the means to recover the material was not at hand.

In the spring of 1990, the Corps of Engineers dredge ship *Essayons* began operations in that area. The *Essayons* had a capability of removing 6000 cubic yards of material per hour. The material was sucked into a hold of the ship, then taken out into deep water off of the harbor entrance, and dumped. The ship was directed to encircle the major magnetomic contacts, as it was unable to handle solid material of that indicated size. There was no provision in the *Essayons*' equipment for archeological recovery, and although some material was recovered incident to the operation, none of it had recognizable significance, and many artifacts were undoubtedly lost.

In April of 1990, a large metallic structure was dislodged in the waters around quay F-5. A Navy crane was able to lift the structure and drag it around Ford Island, and deposit it near one of the now disused seaplane ramps. The material has been tentatively identified as a leg from the *Oklahoma*'s tripod main mast. Initial decisions were to not incorporate this material into the arena of USAR resources.

February of 1991 saw a renewed interest from the Navy in the dredging of F-5 waters. A dredging crane was introduced that had a capacity of 30 cubic yards of material per bite. The material was again dumped into a hopper and then taken out of the harbor and released. Although many artifacts were undoubtedly again lost, several large artifacts were recovered. Material brought up included the bulk of a seaplane (probably a Vought OS2U "Kingfisher", a type that was carried by the *Oklahoma*), an ordnance box of a type probably carried by the *Oklahoma* as well as by the *Arizona*, and two more tripod mast supports.

Representative parts of the Kingfisher, amazingly well preserved in the anaerobic environment of the harbor bottom mud, were deemed significant to USAR resources and saved for the museum collection. The ordnance box has also been saved for the museum collection. The three tripod mast leg sections have been left submerged.

The mast legs are too large for USAR to practically consider museum items. However, it is possible that one of the legs or a section could be utilized as an outdoor exhibit. Currently it is questionable as to their quality as a resource or their significance. If included within the sphere of USAR interest, then all the problems associated with managing USAR's other submerged resources will exist, with the exception of some of the questions of ownership.

In association with dredging operations on the F-5 waters, an unexploded Japanese torpedo was recovered. This was subsequently partially exploded by the Navy, and the tail and engine sections stabilized, then incorporated into the USAR museum collection. It is believed that possibly another three unexploded torpedoes are still buried in the mud of the harbor. If one of these could be located and recovered intact, it would be of interest as a USAR resource.

It is still possible that one 5-inch and one 3-inch gun, as well as five armor belt sections (16 feet by 10 feet each) are still unaccounted for. Theoretically these items could be buried in the harbor bottom ready to be found.

#### Mooring Quays

Along the Ford Island shore in the area traditionally known as *Battleship Row* are mooring quays that were used primarily by battleships and were occupied during the attack on Pearl Harbor. Designated F-2 through F-8, they remain visible with the exception of the F-5 quays that have been covered over with subsequent pier construction. Built in the late 1920's, the quays are part of the historic cultural landscape of Ford Island and makes up *Battleship Row*. They do not receive any special mentioning within the encompassing Pearl Harbor Naval Base's NHL documentation nor the Navy's Historic Preservation Plan (refer to USN:1978).

Although the quay structures are historically significant and are related to USAR resources, they are beyond USAR's ownership, and means to manage effectively. They should remain the Navy's responsibility to maintain the quays. If it was desired by the Navy to upgrade their historical significance, such as a separate NHL recommendation, USAR would be available for assistance.

The two mooring quays that the *Arizona* were tied up to on December 7th, 1941, have become associated with the Memorial and shipwreck. These quays have been included on the USAR's LCS.

#### Japanese Type-A Midget Submarines

Refer to USAR Cultural Resources for discussion of the midget submarines. Four of the five midget submarines not under the purview of USAR but are related interpretively. The fifth, Ha. 19, is part of the USAR's museum collection.

### Other Pearl Harbor Ships

Approximately 97 US Navy vessels of various kinds were present in or near the harbor during the attack. Of that number, only three are known to still be intact and afloat. Only one has any concern to USAR.

#### *Yard Tug Hoga*

The only vessel present during the attack on Pearl Harbor that is still a working ship and within the confines of the United States is the *City of Oakland*, formerly called the *Yard Tug Hoga* (YT-146). Soon to be retired as a fireboat for Oakland, California, it is an artifact of high quality and historical significance. This is reflected in its designation as a NHL on June 30, 1989.

Although currently beyond the financial means of USAR, the *Hoga (City of Oakland)* is not beyond the USAR scope of interpretive interest. In past years the National Park Service expressed an interest in acquiring the *Hoga* for display at USAR. This is no longer seen as a realistic option for USAR. Instead, NPS does support any efforts that can be made to assure *Hoga's* continued historical integrity and possibly even bring it to Hawai'i. This is an area that USAR can provide leadership to assist local preservation groups in establishing a non-profit organization dedicated to the preservation of the *Hoga*.

#### *Coast Guard Cutter Taney*

The USCGC *Taney* is now a museum piece in Baltimore, Maryland. The *Taney* was designated a NHL on January 27, 1988. Although of strong significance to the attack on Pearl Harbor, there is no potential for the *Taney* to fall within the purview of USAR and is mentioned for historical reference only.

#### *Net Tender Wapello*

The Net Tender *Wapello* (YN-56) is now called Island Tug No. 1, and is in service in the Panama Canal. Acting as a fireboat during the attack on Pearl Harbor, little is currently known about the *Wapello's* current condition. This vessel is also beyond the means of USAR and is mentioned for historical reference only.

### Battery Arizona

After the attack on Pearl Harbor, there was an extensive salvage program undertaken. The 14" guns from barbettes 3 and 4 on the USS *Arizona* were subsequently removed and emplacements were begun for shore batteries that were to utilize the guns. These batteries were to be called Battery Arizona and Battery Pennsylvania, respectively.

Battery Arizona was never finished. It is located on the leeward (western) side of O'ahu at Kahe Point (Electric Hill). Little is actually known about the current site condition. Access is difficult

and limited. It could be suggested to the present owners that they contract for a Historic American Building Survey (HABS) and/or an Historic American Engineering Record (HAER) report and that measures are taken to ensure its location is recorded with the State of Hawaii's Historic Preservation Office.

### Battery Pennsylvania

Unlike Battery Arizona, Battery Pennsylvania was completed by the end of the war. The guns were fired once in a test that coincided with the surrender of Japan. Eventually the site was dismantled, and the guns were cut up as scrap metal.

Located on the windward (eastern) side of O'ahu at what is now Marine Corps Base Hawai'i, Kane'one, at Mokapu Point, the site is quite extensive. Most of the structure is contained within a hill that looks dramatically out over a high cliff facing the sea. There is a considerable amount of original material from the USS *Arizona* still in place and in fairly good condition. In addition to being a part of a secured military base, the site is also the location of a protected, Red Footed Boobie bird colony. Access is difficult and potentially dangerous.

As in the case of Battery Arizona, little work has been done to preserve either the site itself or knowledge of the site. A Historic American Building Survey (HABS) and/or an Historic American Engineering Record (HAER) report could be a consideration and would prove to be more beneficial than formally documenting Battery Arizona. This site is not a USAR resource and is the responsibility of the Navy (US Marine Corps). Because it does contain material that was part of the historical fabric of the battleship *Arizona* at the time she sank, USAR does have an interest in the matter and would provide consultation regarding preservation concerns.

### Airplane Splash Down Sites

Twenty-nine Japanese aircraft were lost during the attack on Pearl Harbor. An assessment of possible crash sites was made in 1986 from the historical record (cf. Lenihan:1989). Thirty-five sites were identified as possible locations where material might still be found. Fourteen of these sites were located on land, while the remaining sites were identified as being in various parts of Pearl Harbor.

Thirteen of the marine locations were indicated as high probability areas, and prioritized for searching. Nothing significant was found. Still the potential exists for future discoveries.

In the advent of an identifiable artifact from a Japanese airplane surfacing, USAR may want to obtain the object for display. Although currently a low priority, efforts by USAR resources management to more completely search these areas would be in order.



## BASELINE INFORMATION

As a cultural site, USAR depends heavily on artifacts as resources. This creates a strong interdependence between the historian's role in identifying the significance of artifacts and tying them into the themes of the park, and the curator's endeavors to conserve and safeguard artifacts.

The resource manager has the responsibility of dealing with issues that affect the resources as a whole, as well as providing strategies and actual management for the primary resources that are too large to be properly considered part of the museum collection.

The baseline information listed here is derived from all three of these areas.

### Natural Resources Survey

Although the natural resources at USAR are only incidental to the cultural resources management and are properly the concern of the Navy, a survey of the flora and fauna surrounding the *Arizona* was conducted in 1986 as an adjunct to the archeological work being done by the NPS Submerged Cultural Resources Unit (SCRU). This survey focused on organisms related to the processes of biofouling, and was limited to the grosser and more prolific organisms of the area.

The Navy did a comprehensive survey in 1971-74 of the Pearl Harbor ecosystems, and came to the conclusion that, excepting West Loch, the harbor is one, homogeneous system. The survey was flawed by a lack of time in its initial phases, but is still an excellent source for baseline information. However, follow-up surveys need to be done on a regular basis. These surveys would concentrate on a few indicator systems and focus on the organisms commonly found in the area as well as ones that migrate through with the tides, seasons, etc.

### Historical and Archeological Sources

A multitude of books have been researched and written on subjects pertaining to the attack on Pearl Harbor and the early Pacific Theater of World War II. A comprehensive historic resource study was completed in October 1984 by Michael Slackman (1984a; A published version is available as Slackman 1990). This well researched study is the best overall source for information on the Pearl Harbor attack.

The Submerged Cultural Resources Unit, NPS (SCRU) conducted extensive archeological research beginning in 1983 and culminating in 1989 with the publication of the *Submerged Cultural Resources Study USS Arizona Memorial and Pearl Harbor National Historic Landmark* (Lenihan:1989). This is an excellent source of baseline information for the management of USAR resources. The study also delves into issues affecting the park, and outlines some approaches to protect and effectively manage the resources.

A compilation of Navy log reports from the post attack salvage operation dating from March 1, 1942 through October 14, 1943, also exists in the USAR library. This provides information as to the state of the *Arizona* at the point when it was abandoned to the elements.

### **Museum Collection**

Currently, there are approximately 3000 catalogued items in the museum collection with an additional 30,000 items (the 14th Naval District Photo Collection, which is presently being worked) remaining to be catalogued. Although most of these are not readily accessible, they represent a considerable fund of original materials that can be used for research and baseline information.

Space restrictions at USAR demand that most of the museum items remain packed in crates where they are not able to truly function as resources. Additionally, the storage facilities are environmentally inadequate (see Project Statement USAR-C-012.000). This situation will have to be rectified in the near future as all available, suitable space is currently in use, and an increase in artifact donations is expected as the mortality rate for the survivors of the attack on Pearl Harbor increases (see Project Statement USAR-C-015.000).

### **Oral Histories**

Approximately 325 oral histories have been recorded on video tape. These contain a considerable amount of baseline information on pre-attack ship configurations, etc., and are an irreplaceable resource.

Recently a combined oral history program with the University of Hawai'i was completed. It is anticipated that the numbers of new oral histories will decline sharply as the people that are able to remember events surrounding the attack on Pearl Harbor die. An attempt will be made to collect as many of these interviews as possible in the time remaining.

Even after the Pearl Harbor Attack generation is gone, a smaller oral history program will still be needed. It will focus on garnering living resources related to other, ongoing aspects of the Pearl Harbor Naval Base and USAR, as well as maintaining the collection of past interviews.

Current needs of the program include not only the continued gathering of interviews, but also the means to transcribe them so that they are available as a resource.

### **Audiovisual Collections**

There are three distinct audiovisual collections. One collection consists of approximately 1000 black and white, 8x10 photographs and 4x5 negatives. This is considered the library collection. Although it is an excellent baseline source, only about 200 of the images have been catalogued and are accessible for research. Further materials available are over 7,000 photographic slides and 32 micro film reels.

A video tape library also exists. This collection contains 423 tapes. Although there is some baseline value in the collection, it is most notable for its use in training and interpretation.

The 14th Naval District Photo Collection represents a sizable and untapped baseline resource. There are 30,000 black and white, historic images of Pearl Harbor from 1890 through World War II only a fraction of which have been catalogued. An ongoing project to conserve and catalogue the collection is currently underway. This effort is a result of the Department of Defense Legacy Program along with considerable financial contributions and assistance from the Arizona Memorial Museum Association.

### **Library**

While there is no resource management library, the USAR library is a good source for baseline research information. There are approximately 2000 volumes with about four books per month being added. The library also contains some 22,000 different paper documents of various reference materials. Mainly magazine articles, copies, etc. they provide a vast reference collection of myriad topics related to USAR themes. An ongoing project is to catalog and scan these documents onto computer disks for ease of access.

## THEMES AND CULTURAL CONTEXT

The Interpretive Prospectus was approved in 1982. Three primary themes and six secondary themes for USAR have been identified in the Statement for Interpretation (1993) as stated below.

The USS Arizona Memorial commemorates:

- a. The USS *Arizona* and its 1,177 casualties.
- b. The U.S. servicemen and civilians who gave their lives on December 7, 1941, as a result of the attack on Pearl Harbor.

Park's Primary Interpretive Themes:

- a. Causes and events leading up to and through the attack on Pearl Harbor.
- b. The entry of the U.S. in World War II via the December 7th attack on U.S. military installations on O`ahu, Hawai`i.
- c. The role of the USS *Arizona* in that attack and its role as a catalyst and symbol for the battle cry "Remember Pearl Harbor" and the entry of the US into World War II.

Park's Secondary Interpretive Themes:

- a. Salvage and recovery of military facilities, ships, personnel and equipment.
- b. Effects on other bases and O`ahu attack sites.
- c. Effects on Hawai`i and its citizens.
- d. The start of the Pacific War through the Battle of Midway.
- e. Pearl Harbor, its pre-history, history and its role in the Pacific Theater.
- f. Hawaii's role in World War II.

## CURRENT RESOURCE MANAGEMENT FUNDING AND PERSONNEL

### Resource Management Program Overview

Although efforts at memorialization of the USS *Arizona* date to the 1950's, and the USAR facilities originated in the early 1960's, USAR is a relatively young park. Nonetheless, since it was added to the NPS system in 1980, great strides have been made towards strengthening our understanding of the park's mission and in uncovering basic resource information.

However, as our information has increased, it has become obvious that there is an immediate need to establish a clear and strong resources management program. Some inherent difficulties have also been made clear. It is difficult to manage a resource that can only be seen with diving equipment, and then only in small areas at a time. It is also difficult and occasionally frustrating to try and describe management schemes for resources that the park does not own.

These difficulties have historically been compounded by a lack of management goals as defined by legislation, and the void created by the absence of a General Management Plan. A resources management program has only truly existed since 1989, and then only with a minimal budget and 0.5 FTE.

This is changing. Although the budget has remained small at about 35,000 dollars a year, there will undoubtedly be an increase as this plan comes on line. There is now 1 full FTE devoted entirely to cultural resources management (park ranger, 025 series), and the complementary history and curatorial programs each have 1 FTE (museum specialist, series 1016 and historian, 170 series) and a combined budget of 122,500 dollars (administrative/salary costs only).

With the help of SCRU and CPSU-UH, considerable advances have been made in surveying the primary resources of the *Arizona* and the *Utah*. The survey results appear in a publication that is available to the general public. Both ships have been added to the National Register, and a monitoring program has been instigated.

Still there are many more programs that need to be initiated. In addition to region based and service wide project funds, a park base increase of 170 thousand dollars per year in resources management project support funds would enable the park to carry out the important baseline research and management activities identified in this plan within a reasonable amount of time.

As more resources related projects become viable, there will also become a need for additional staff support. Currently there are 8 maintenance, 3 resources related, 4 administrative, and 19 interpretive positions filled at USAR. Only 1 is designated as cultural resources management.

A fully staffed scuba diving team is necessary for the efficient operation of proposed management strategies. With the exception of the resource management position, the other three

diver slots are filled from the general staff as collateral duties. This severely hampers coordination and availability of divers. An additional 0.5 FTE devoted to resources management and diving would rectify many of the staffing problems currently experienced.

As the USAR resources management program has developed, a number of resource issues have been identified. Below is a list of these issues and the strategies currently being employed.

**Table 1 NPS Resources Personnel**

The Personnel Table, as printed from the RMP software, is inserted after this page. Page number is omitted to allow for updating.

Active Filter: (No filter)

Output Selections:  
Years: All years

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PERSONNEL TABLE  
(current year only)

FY: 1996  
Park: USAR  
Cluster: PISO

TYPE OF NPS EMPLOYEE	FTEs OF RESOURCES WORK		
	Natural	Cultural	Total
Research Scientists	0.0	0.0	0.0
Resources Specialists	0.0	2.0	2.0
025 Park Rangers Res Mgmt	0.0	1.0	1.0
025 Park Rangers Res Prot	0.0	0.0	0.0
025 Park Rangers Res Interp	0.0	0.0	0.0
Maintenance Personnel	0.0	0.0	0.0
Total of RES Personnel	0.0	3.0	3.0
TOTAL PARK FTE: 34.0 PERCENT	0.0%	8.8%	8.8%

End of data



## **Table 2 Natural and Cultural Resources Funding**

The following tables, as printed from the RMP software, are inserted after this page. Page numbering is omitted to allow for updating.

- Funded Table
- Unfunded Table
- Funded Summary Report
- Unfunded Summary Report

Active Filter: (No filter)

Output Selections:

Resource types included: CULTURAL/INTEGRATED/NATURAL

Initial fiscal year: 1996

02/08/96

13:38:05

FUNDED TABLE  
CULTURAL/INTEGRATED/NATURAL  
FUNDED AMOUNTS  
(\$ in thousands - by activity type)

Page: 0001

FY: 1996

Park: USAR

Cluster: PISO

FUNDING SOURCE	TOTAL	RES	MIT	MON	PRO	INT	ADM
NPRF	4.00	4.00	0.00	0.00	0.00	0.00	0.00
PCR1	178.10	0.00	0.00	0.00	0.00	0.00	178.10
TOTAL	182.10	4.00	0.00	0.00	0.00	0.00	178.10

End of data

Active Filter: (No filter)

Output Selections:

Resource types included: CULTURAL/INTEGRATED/NATURAL

Initial fiscal year: 1996-1999

02/08/96

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UNFUNDED TABLE  
CULTURAL/INTEGRATED/NATURAL  
UNFUNDED AMOUNTS  
(\$ in thousands - by funding type)

Page: 0001  
FY: 1996-1999  
Park: USAR  
Cluster: PISO

FUNDING TYPE	TOTAL	RES	MIT	MON	PRO	INT	ADM
Cyclic	40.00	40.00	0.00	0.00	0.00	0.00	0.00
Onetime	3650.50	132.00	3430.00	1.00	0.00	18.00	69.50
Recur.	635.00	63.00	40.00	80.00	0.00	0.00	452.00
TOTAL	4325.50	235.00	3470.00	81.00	0.00	18.00	521.50

End of data

Active Filter: (No filter)

Output Selections:

Funded data only

Initial fiscal year: 1996

Summary Report: Funded \$ by Activity

02/08/96

13:46:14

RMP Summary Report  
Funded \$ by Activity

Page: 0001  
FY: 1996-1999  
Park: USAR  
Cluster: PISO

ACTIVITY	1996	1997	1998	1999	TOTAL
Research	4,000	0	0	0	4,000
Mitigation	0	0	0	0	0
Monitoring	0	0	0	0	0
Protection	0	0	0	0	0
Interpretation	0	0	0	0	0
Administration	178,100	41,500	41,500	81,000	342,100
--<<TOTALS>>--	182,100	41,500	41,500	81,000	346,100

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End of data

Active Filter: (No filter)

Output Selections:

Unfunded data only

Initial fiscal year: 1996

Summary Report: Unfunded \$ by Activity

02/08/96

13:46:36

RMP Summary Report  
Unfunded \$ by Activity

Page: 0001  
FY: 1-4  
Park: USAR  
Cluster: PISO

ACTIVITY	1	2	3	4	TOTAL
Research	190,000	15,000	15,000	15,000	235,000
Mitigation	3,415,000	35,000	10,000	10,000	3,470,000
Monitoring	21,000	20,000	20,000	20,000	81,000
Protection	0	0	0	0	0
Interpretation	18,000	0	0	0	18,000
Administration	189,500	124,000	104,000	104,000	521,500
--<<TOTALS>>--	3,833,500	194,000	149,000	149,000	4,325,500

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End of data

## Issues Being Addressed

### USAR Legislation

USAR became a unit of the NPS through a memorandum of agreement with the Navy. Although USAR has nominal control over the visitor center, Memorial, and parking facilities, the park still exists as a tenant on Navy property. The primary resource, the shipwreck USS *Arizona*, as well as most other USAR resources are not mentioned in the agreement. Additionally, no legislation exists for USAR as it does for most other park areas. The vagueness in the agreement, and lack of a formal mission statement, allows for conflict over access and control of resources. An example is the recurring situation in which naval commands attempt to dictate operating hours and use the Memorial without consult or approval from USAR.

It is impractical for USAR to continue trying to manage its resources without a clear mission direction and without the final word on its resources disposition. It is the intention of the NPS to have USAR established as a Congressionally legislated area. Although this issue has been addressed, there is no strategy currently being employed to generate legislation.

### Mapping and Documentation

Approximately 90% of the exteriors of both ships have been surveyed to date. More complete mapping and documentation exists for the *Arizona* than the *Utah*, but neither ship is complete.

There have been indications of recent degradation due to environment, as well as evidence of "pot hunting" on both ships; but this has been hard to prove due to a lack of concrete, baseline documentation. The following are the necessary steps that need to be undertaken to establish conclusive evidence of changes in the ships' structures and looting:

1. Conduct periodic and cyclical visual evaluations at constant locations using photography. (see project statement USAR-C-007.000)
2. Produce a "blab-over" video record referencing ship frame numbers suitable for baseline information, research, and interpretive functions. (see project statement USAR-C-007.000)

### Monitoring Program

A cyclical monitoring system was developed for the USS *Arizona* and the USS *Utah* by SCRUI and CPSU-UH to be implemented by USAR staff. This system consists of established photo stations on vertical elements of the ships' structures and sample locations on horizontal surfaces. The monitoring program has the dual functions of establishing changes in biofouling and sedimentation levels on the ships.

The program has experienced a hiatus. During this interval, many of the vertical stations have dislodged and become lost in bottom silts. Many of the horizontal stations have also become lost.

This program is imperative to establishing the rate of change that is occurring on the resources, not only in the growth of biofouling and the rates of sedimentation, but also in structural settling and failure. The strategies that will be employed to reestablish this program are:

1. Develop the USAR scuba diving program (see project statement USAR-C-014.000 & 030.000)
2. Establish a monitoring and reporting schedule (see project statements USAR-C-008.000 & 009.000).
3. Employ the assistance of CPSU-UH to analyze data.

#### Security for Submerged Resources

The USS *Arizona* and the USS *Utah* wrecks are both within easy snorkeling distance from Ford Island. The *Utah*, in particular, is not only very close to shore, but is in a quiet and relatively secluded area of Pearl Harbor. There has been some visual evidence of "pot hunting" on the *Arizona*, and there are unverified stories about illicit night dives conducted by former residents of Ford Island.

It is difficult to determine the extent of this problem as fully detailed drawings or photographs covering the entire ships do not exist as baseline information. Additionally, it is difficult to consistently monitor the resource as it is underwater and not readily accessible to USAR personnel outside of normal hours of park operations. The park is further hampered by the lack of clear jurisdiction over the artifacts.

With the future development of Ford Island and ease of access to be created upon completion of the causeway, these problems are expected to increase. USAR will consult with the Navy to develop a security program for these two sites. This would be a Navy responsibility but an area that is of concern to USAR.

There are currently no plans to install any remote security systems on the *Arizona* or the *Utah*. However, the strategies listed below are designed to help detect and diminish these suspected depredations.

1. Establish a fully operational scuba diving team. (see project statements USAR-C-014.000 & 030.000)
2. Fully document the *Arizona* and the *Utah* with photographic and "blab-over" video records. (see project statement USAR-C-007.000)
3. Improve lines of communication and the exchange of security information with the Naval Harbor Police.

4. Seek the Navy's cooperation in having the two wrecks declared off-limits. Due to the high turn-over rate of Navy personnel, this will have to be done at regular intervals.

#### Deterioration Model

Although the *Arizona* is an artifact of high quality and immense size, it has a decidedly finite nature. The saltwater environment will continue to erode the ship's structure until eventually all the iron and steel are virtually gone. For the present, a decision has been made to maintain the status quo of the ship, neither contributing to the natural oxidation processes, nor interfering or attempting to arrest them. A longer term management policy will have to be decided upon completion of this research.

In order to ensure the safety and structural integrity of the memorial structure, it is imperative that there be a predictive model of the *Arizona's* rate of decay. Park decision makers need to be reasonably informed when a section of the *Arizona* is nearing collapse.

During the SCRU survey work, a baseline corrosion study was instigated. The following strategies are designed to build on the prior study and give the park a greater understanding of the rate of deterioration on the *Arizona*. All conclusions from this work can also be applied to the USS *Utah*.

1. Establish a fully operational scuba diving team. (see project statement USAR-C-014.000 & 030.000)
2. Conduct a follow-up metals analysis and corrosion study. (see project statement USAR-C-005.000 & 006.000)
3. Coordinate data with biofouling monitoring data. (see project statement USAR-C-008.000 & 009.000)
4. Enlist the aid of CPSU-UH to help analyze data.

#### Japanese Midget Submarine Research and Disposition

During the attack on Pearl Harbor, five, Type-A, Midget Submarines were used by the Japanese. Until recently, two of these submarines were lost. After several intensive, but fruitless, searches by the NPS in conjunction with the Navy and the National Geographic Society, a private group apparently stumbled across one of them in July of 1992, while conducting unrelated research.

This may be the submarine which received the first shots fired in the war between the United States and Japan and is potentially an artifact of high quality and significance. Its presence and inherent knowledge would be a valuable adjunct to the resources available to the park.

Several problems are associated with the submarine as a resource. The immediate problem is its undisclosed location in 1500 feet of water approximately four miles off the entrance to Pearl Harbor. Even with the logistics of its whereabouts solved, there are the even more difficult and delicate problems of ownership and control.



The agency that made the discovery is currently disavowing ownership, but claiming rights of control. There is some discussion as to the submarine's ownership, but it is generally acknowledged that it still belongs to Japan.

Finally, there is the possibility that it is a war grave.

USAR's primary interest is in historical research and documentation only of this midget submarine. There are currently no USAR strategies involving acquisition and or maintenance of the submarine. The strategies listed below are concerned only with maintaining a preparedness in the event an opportunity does arise for study.

1. Assemble historic documents pertaining to this model of midget submarines at Pearl Harbor.
2. Devise a plan to acquire *in situ* photographs and documentation on the submarine in the event that it is to remain on the ocean floor.
3. Monitor any plans if other agencies attempt to excavate or salvage the submarine.

The plans for the relocation of Ha. 19, the midget submarine that is on permanent loan to USAR, are addressed in Project Statement USAR-C-001.000. Once Ha. 19 is located in USAR's museum, this will allow further research on midget submarines (project statement USAR-C-010.000 is an example of one type of research).

#### USS Arizona Oil Leak Evaluation and Monitoring

The USS *Arizona* carried approximately 1.5 millions gallons of fuel oil. As a result of the attack, the ship continues to leak oil into the harbor in erratic patterns of release. The average total amount is unknown, but is apparently small.

The leak causes several issues to arise. To many of the visiting public, the leak is seen as ongoing, dynamic evidence of the attack. In this respect, it is a resource of the park. Though small, the dribbling oil is perceived by some to be a blatant degradation of the water quality of Pearl Harbor. As a resource agency, this is a concern for the NPS. Finally there is the possibility that as the ship continues to corrode, there could be a structural collapse, allowing an unknown, and possibly large quantity of oil to suddenly escape into the harbor.

More information is needed by park decision makers on the quantity, integrity of surroundings, and exact location of the oil leak. The strategies outlined below are designed to facilitate the gathering of this information so that a policy of either status quo, containment, or removal can be defined.

1. Develop a fully staffed scuba diving team. (see project statement USAR-C-014.000 & 030.000)
2. Establish a permanent monitoring system. (see project statement USAR-C-004.000)

3. Organize an exploration research project with SCRU. (see project statement USAR-C-004.000)
4. Analyze data, formulate and execute strategy.

#### Disposition of USS *Arizona* Material Stored at Waipio Point

Just prior to the construction of the Memorial over the *Arizona*, a section of the ship was removed and stored at Waipio Point on the Pearl Harbor Naval Base. This material was taken from the Boat Deck, and comprised the overhead of a galley and a few bulkheads.

The materials could be considered to be of high historical significance as they came from the *Arizona*, but low quality. Very little of the material is recognizable as ship sections, and all of it is deteriorating rapidly. Nonetheless, there is a considerable amount of material, both in volume and weight, and it will be in evidence for quite some time to come.

Several problems with the material as a USAR resource are present. The material originated from the *Arizona*, which is still Navy property. Additionally, the material rests on Navy land in an area that is not easily accessed. Even with these problems solved, stabilizing such a large quantity of material that is in sizable pieces is beyond the current means of the park.

Although the material is technically a part of the NHL documentation associated with the Pearl Harbor Naval Base, it is not specifically protected. This item is a Navy responsibility but is of concern to USAR as it does directly relate to our theme. The Navy Historical Center has taken action and has declared this material to be surplus material and is in the process of disposing of it. Veterans groups and museums will be allowed to request pieces for their use. Remaining pieces will be available for the National Park Service. It may be desirable to recover a sample piece, preferably a recognizable section, for museum display. USAR should only pursue obtaining small pieces and only if a clearly defined conservation and interpretation plan is first developed for these objects.

#### *Hoga* (YT-146) Disposition

During the attack on Pearl Harbor the tug boat *Hoga* fought fires in the harbor and on the USS *Arizona*. There is photographic evidence of the *Hoga's* actions in the USAR photo collection. The boat eventually was leased from the Navy by the city of Oakland, California to be used as a fireboat.

The *Hoga* underwent some alterations, but it is still an artifact of high historical significance and quality. Although the boat is beyond the current means of USAR to upkeep, it would be a valuable asset to be located in Pearl Harbor or Honolulu. It was designated a NHL in 1989.

The *Hoga* has been returned to the Navy and is presently moored at Treasure Island Naval Air Station and is awaiting disposition instructions. The Navy is studying to scrap *Hoga* if a suitable home for her can not be found. In the past, NPS had considered taking over *Hoga* and

transferring her to USAR. Although USAR would like to see the *Hoga* returned to Pearl Harbor, it is not a currently practical consideration for the NPS (USAR) to acquire her. What USAR proposes to do is to assist local preservation groups to acquire *Hoga* from the Navy and to establish her as a museum vessel in Pearl Harbor or Honolulu. This is an area that USAR can provide leadership to the local community to ensure that such a historically significant vessel is preserved.

#### Removal of Foreign Objects and Debris from the Deck of the USS *Arizona*

A variety of objects foreign to the historical integrity of the *Arizona* are constantly deposited on the horizontal surfaces of the ship by visitors and water current action. While much of the debris brought in on currents (in particular the current generated by the Halawa stream) is benign to the structural integrity of the ship, it represents a type of resource pollution. The bulk of the debris however is generated by visitors and maintenance activities on the Memorial such as repainting.

Visitors feel an urge to toss coins on the ship, particularly on the exposed, ship's galley side of the Memorial. Additionally they inadvertently drop personal articles over the sides of the Memorial when they bend over the rails to look. This debris has been accumulating for thirty years as it is not possible to clear it away from all areas; in these locations (such as the deeper stern side of shipwreck) it is possibly several inches thick in many places. This potentially represents a considerable weight burden.

The older deposits have become welded to the ship with marine incrustations. Removing them would likely cause more harm in the long run than it would save. The newer deposits, however, are unsightly and relatively easily removed. The strategies listed below are designed to mitigate the problems caused by this issue.

1. Develop a fully functioning scuba diving team with a back-up of scuba trained and snorkel trained volunteers. (see project statement USAR-C-014.000 & 030.000)
2. Establish a regular resource maintenance, debris removal program. (see project statement USAR-C-003.000)

#### The Continued Use of the USS *Arizona* as a Military Burial Site

The *Arizona* is an emotive national symbol, and the final resting place of approximately 1000 sailors and marines that were killed there during the attack on Pearl Harbor. As a result, it has been an established policy to allow the surviving ship's complement burial there if they so desire. The burials require the remains to be cremated and secured in an urn. Traditionally these urns have then been placed in the bottom of the hollow of the number 4 barbette. This is done by park service divers.

It is USAR policy to continue with these burials as long as there are eligible participants. There exists an onus of responsibility on the park to keep track of the whereabouts and condition of the

urns. Listed below are strategies that will enable the park to continue with the burial policy and fulfill its obligation to the stewardship of the burial site.

1. Develop a fully staffed scuba diving team (see project statement USAR-C-014.000 & 030.000).
2. Establish a regular inspection and report program for the area of barrette number 4.

Disposition of Salvage Pontoon (YSP-15) Museum Object

During the salvage operation that took place after the attack on Pearl Harbor, a number of salvage pontoons were utilized. One of these has survived, and been added to the USAR museum collection (accession number 00239, catalog number 713). Due to its large size (9.76m x 3.81m and 35-40 tons), the pontoon is stored on an out-of-the-way lot on the Pearl Harbor Naval Base.

A disposition review needs to be conducted regarding the future of this artifact. No formal plan of action has ever been developed. It is questionable whether USAR has the potential resources to preserve this artifact. The review needs to consider if this artifact is needed for the park's interpretive mission and determine if there is a realistic approach to curate and display the artifact.

**Programming Sheet 1 Funded Activities**

Programming Sheet 1, Funded Activities, as printed from the RMP software is inserted after this page.

Active Filter: (No filter)

Output Selections:

Resource types included: CULTURAL/INTEGRATED/NATURAL

Initial fiscal year: 1996

Include projects only if funding data entered

02/08/96  
13:52:15

PROGRAMMING SHEET 1  
CULTURAL/INTEGRATED/NATURAL  
FUNDED ACTIVITIES  
(\$ in thousands)

Page: 0001  
FY: 1996  
Park: USAR  
Cluster: PISO

PROJECT NUMBER	PROJECT TITLE	PKG NUM	CULT RES TYPE	SYSTEM- WIDE ISSUE	FUNDING SOURCE	ACT TYP P	CURRENT YEAR		OUTYEAR 1		OUTYEAR 2		OUTYEAR 3		TOTAL	
							1996	1997	1997	1998	1999	1999	1999	1999	1999	1999
							\$\$	FTE	\$\$	FTE	\$\$	FTE	\$\$	FTE	\$\$	FTE
011.000 C	CULTURAL RESOURCES MANAGEMENT ADMINISTRATION		COMB	C83 C80	PKBASE-CR	ADM R	39.50	1.00	39.50	1.00	39.50	1.00	39.50	1.00	158.00	4.00
016.000 C	CURATORIAL PROGRAM ADMINISTRATION		COMB	C81	PKBASE-CR	ADM R	94.00	1.00	.00	.00	.00	.00	.00	.00	94.00	1.00
019.000 C	PARK HISTORIAN MANAGEMENT		COMB	C86	PKBASE-CR	ADM R	39.50	1.00	.00	.00	.00	.00	39.50	1.00	79.00	2.00
020.000 C	USS ARIZONA MEMORIAL DOCK MOORING INSPECTION		STRC	C55	PKBASE-CR	ADM R	2.00	0.05	2.00	0.05	2.00	0.05	2.00	0.05	8.00	0.20
030.000 C	DIVE PROGRAM			N24 C08	PKBASE-CR	ADM R	0.60	0.10	.00	.00	.00	.00	.00	.00	0.60	0.10
					NON-PROFI	RES R	4.00	.00	.00	.00	.00	.00	.00	.00	4.00	0.00
					Subtotal		4.60	0.10	.00	.00	.00	.00	.00	.00	4.60	0.10
000	SECTION 106/NEPA COMPLIANCE FOR PARK PROJECTS		SITE	C08 C72	PKBASE-CR	ADM R	2.50	0.10	.00	.00	.00	.00	.00	.00	2.50	0.10
6 projects printed																
Grand Total \$\$							182.10		41.50		41.50		81.00		346.10	
Grand Total FTE							3.25		1.05		1.05		2.05		7.40	

End of data

**Programming Sheet 2 Unfunded Activities**

Programming Sheet 2, Unfunded Activities, as printed from the RMP software is inserted after this page.

Active Filter: (No filter)

Output Selections:

Resource types included: CULTURAL/INTEGRATED/NATURAL

Initial fiscal year: 1996

Sort by PRIORITY within each park and type  
 Include projects only if funding data entered

02/08/96  
 16:26:52

PROGRAMMING SHEET 2  
 CULTURAL/INTEGRATED/NATURAL  
 UNFUNDED ACTIVITIES  
 (\$ in thousands)

Page: 0001  
 FY: 1996  
 Park: USAR  
 Cluster: PISO

PK PRI	PROJECT NUMBER	PROJECT TITLE	PKG NUM	CULT RES TYPE	SYSTEM- WIDE ISSUE	ACT TYP P	T Y	CURRENT YEAR		OUTYEAR 1		OUTYEAR 2		OUTYEAR 3		TOTAL	
								1996 \$\$	FTE	1997 \$\$	FTE	1998 \$\$	FTE	1999 \$\$	FTE	\$\$	FTE
1	016.000 C	CURATORIAL PROGRAM ADMINISTRATION		COMB	C81	ADM	R	35.00	1.00	35.00	1.00	35.00	1.00	35.00	1.00	140.00	4.00
2	011.000 C	CULTURAL RESOURCES MANAGEMENT ADMINISTRATION		COMB	C83 C80	ADM	R	10.00	0.50	10.00	0.50	10.00	0.50	10.00	0.50	40.00	2.00
3	014.000 C	DIVE PROGRAM MANAGEMENT \ CRM ASSISTANT		COMB	C83 C08	ADM	R	30.00	0.50	30.00	0.50	30.00	0.50	30.00	0.50	120.00	2.00
4	019.000 C	PARK HISTORIAN MANAGEMENT		COMB	C86	ADM	R	25.00	0.50	25.00	0.50	25.00	0.50	25.00	0.50	100.00	2.00
5	001.000 C	JAPANESE MIDGET SUBMARINE (HA.19) EXHIBIT	117	OBJC	C48 C47	MIT	O	400.00	.00	.00	.00	.00	.00	.00	.00	400.00	0.00
6	012.000 C	DESIGN NEW MUSEUM	131	STRC	C49 C47	MIT	O	3000.00	.00	.00	.00	.00	.00	.00	.00	3000.00	0.00
7	015.000 C	ENVIRONMENTAL MONITORING OF MUSEUM AND STORAGE	201	OBJC	C49 C47	MON	O	1.00	.00	.00	.00	.00	.00	.00	.00	1.00	0.00
8	010.000 C	HABS/HAER DOCUMENTATION; MIDGET SUBMARINE HA.19	171		C08 C01	RES	O	45.00	.00	.00	.00	.00	.00	.00	.00	45.00	0.00
9	025.000 C	MUSEUM COLLECTIONS MANAGEMENT	165	CULL	C43 C48	RES	C	20.00	.00	.00	.00	.00	.00	.00	.00	20.00	0.00
10	021.000 C	LIBRARY & HISTORICAL DATABASE ESTABLISHMENT	202	ETHN	C42 C86	ADM	O	39.50	1.00	.00	.00	.00	.00	.00	.00	39.50	1.00
						ADM	R	.00	.00	20.00	0.50	.00	.00	.00	.00	20.00	0.50
				Subtotal				39.50	1.00	20.00	0.50	.00	.00	.00	.00	59.50	1.50
11	022.000 C	ORAL HISTORIES TRANSCRIPTION AND PUBLICATION	203	ETHN	C27	ADM	O	30.00	0.50	.00	.00	.00	.00	.00	.00	30.00	0.50
12	023.000 C	TORPEDO CONSERVATION AND EXHIBIT CASE MODIFICATIONS	204	OBJC	C48 C49	MIT	O	5.00	.00	.00	.00	.00	.00	.00	.00	5.00	0.00
13	002.000 C	VOICE-OVER VIDEO ON USS ARIZONA AND USS UTAH	200	SITE	C03 C72	RES	O	6.00	.00	.00	.00	.00	.00	.00	.00	6.00	0.00
14	007.000 C	PHOTOGRAPHIC GRID ON USS ARIZONA AND USS UTAH	166	SITE	C03 C06	RES	O	1.00	.00	.00	.00	.00	.00	.00	.00	1.00	0.00
15	006.000 E	CORROSION STUDY FOLLOW-UP	166	SITE	C05 C06	MIT	R	10.00	.00	10.00	.00	10.00	.00	10.00	.00	40.00	0.00

continued...



Last Update: 02/08/96  
Initial Proposal: 1995

Priority: 5  
Page Num: 0001

Title : JAPANESE MIDGET SUBMARINE (HA.19) EXHIBIT

Funding Status: Funded: 0.00 Unfunded: 400.00

Servicewide Issues : C48 (TREATMENT)  
C47 (STORAGE)

Cultural Resource Type: OBJC (Object)  
N-RMAP Program codes :

10-238 Package Number : 117

### Problem Statement

In August, 1990, the Secretary of the Navy offered the NPS the Japanese midget submarine Haramaki (Ha. 19.). This submarine, which participated in the attack on Pearl Harbor, is an artifact of high significance and quality and has been designated a National Historic Landmark. In a letter to the Navy, the Director of the NPS committed to "undertaking a comprehensive management plan for the Memorial". This plan, to be completed within two years, was to include arraignments for transporting, caretaking, and displaying the midget submarine at USAR.

The years 1991 AND 1992 were seen as an apparent lack of commitment and direction on this project by the NPS. This situation has left the final disposition of the submarine in doubt. In September, 1990, the midget submarine was placed on temporary display at the Admiral Nimitz Museum in Fredricksburg, Texas. To date, the submarine has been in a "temporary" loan status for nearly three years.

Due to a previous uncertainty of the NPS commitment to obtaining the submarine, an extension of eighteen months was given to the Admiral Nimitz Museum in January of 1993. This situation reflects poorly on the NPS. It is USAR's intention to finalize the NPS commitment to the submarine, and obtain the artifact for display at the visitor center complex.

USAR is now aggressively pursueing this matter with WASO (Maritime History Division) to arrange the final transfer to Hawaii. A management plan encompassing the maintenance and display of the submarine upon its arrival at USAR is being developed. Arrangements for temporary storage of the midget submarine and space for conservation treatment have been made with Pearl Harbor Shipyard.

PROGRAMMING SHEET 2  
CULTURAL/INTEGRATED/NATURAL  
UNFUNDED ACTIVITIES  
(\$ in thousands)

PROJECT NUMBER	PROJECT TITLE	PKG NUM	CULT RES TYPE	SYSTEM WIDE ISSUE	ACT TYP	TYP	CURRENT YEAR		OUTYEAR 1		OUTYEAR 2		OUTYEAR 3		TOTAL		
							1996 \$\$	FTE	1997 \$\$	FTE	1998 \$\$	FTE	1999 \$\$	FTE	\$\$	FTE	
16 009.000 C	MONITORING HORIZONTAL SEDIMENT STATIONS	166	SITE	C08	C06	MON	R	10.00	.00	10.00	.00	10.00	.00	10.00	.00	40.00	0.00
17 008.000 C	VERTICAL BIOFOULING STATIONS MONITORING	166	SITE	C08	C05	MON	R	10.00	.00	10.00	.00	10.00	.00	10.00	.00	40.00	0.00
18 005.000 C	DETERMINATION OF HULL STEEL THICKNESS	166	SITE	C01	C06	RES	R	10.00	.00	10.00	.00	10.00	.00	10.00	.00	40.00	0.00
19 004.000 C	OIL LEAK MONITORING AND EVALUATION	166	SITE	C08	C01	RES	C	20.00	.00	.00	.00	.00	.00	.00	.00	20.00	0.00
20 026.000 C	CONSTRUCT AND INSTALL AIRPOWER EXHIBIT	205	OBJC			RES	O	20.00	.00	.00	.00	.00	.00	.00	.00	20.00	0.00
027.000 C	WAYSIDE EXHIBIT #1 DEC 7, 1941 VESSELS UNDER ATTACK	101	OBJC	C48	C38	INT	O	5.00	.00	.00	.00	.00	.00	.00	.00	5.00	0.00
22 028.000 C	FABRICATION OF MUSEUM EXHIBIT CASE	167	OBJC	C47		INT	O	10.00	.00	.00	.00	.00	.00	.00	.00	10.00	0.00
23 029.000 C	BATTLESHIP MODEL EXHIBIT REHABILITATION	156		C48		INT	O	3.00	.00	.00	.00	.00	.00	.00	.00	3.00	0.00
24 013.000 C	CONSERVATION WORK STATION FOR SUBMERGED ARTIFACTS		OBJC	C48		RES	O	10.00	.00	.00	.00	.00	.00	.00	.00	10.00	0.00
						RES	R	.00	.00	5.00	.00	5.00	.00	5.00	.00	15.00	0.00
			Subtotal					10.00	.00	5.00	.00	5.00	.00	5.00	.00	25.00	0.00
25 024.000 C	PRESERVATION OF THE MEMORIAL'S HISTORIC SETTING		CULL	C10	C11	RES	O	50.00	.00	.00	.00	.00	.00	.00	.00	50.00	0.00
						ADM	R	4.00	0.10	4.00	0.10	4.00	0.10	4.00	0.10	16.00	0.40
						MIT	O	.00	.00	25.00	.00	.00	.00	.00	.00	25.00	0.00
			Subtotal					54.00	0.10	29.00	0.10	4.00	0.10	4.00	0.10	91.00	0.40
030.000 C	DIVE PROGRAM		N24	C08	ADM	R	16.00	0.40	.00	.00	.00	.00	.00	.00	16.00	0.40	
						RES	R	8.00	.00	.00	.00	.00	.00	.00	.00	8.00	0.00
			Subtotal					24.00	0.40	.00	.00	.00	.00	.00	.00	24.00	0.40
26 projects printed																	
Grand Total \$\$							3833.50		194.00		149.00		149.00		4325.50		
Grand Total FTE							4.50		3.10		2.60		2.60		12.80		

End of data

## **Project Statements**

Inserted after this page are the project statements for USAR resource management activities. These pages are as printed from the RMP software.

- Project Listing in project number sequence.
- Project Listing in priority sequence.
- Individual project statements.

The inserts are not page numbered to the basic document in order to allow the continual updating, insertion, deletion of project statements as necessary.

Active Filter: (No filter)

Output Selections:

Sorted by: Project Number

Years: All years

subtotals Show grand total

02/08/96  
16:29:01

PROJECT LIST

Page: 0001

PRIORITY	PROJECT NUMBER	PROJECT TITLE	SUB-TITLE	FUNDED	UNFUNDED	PROP YEAR	LAST UPDATE
5	USAR-C-001.000	JAPANESE MIDGET SUBMARINE (HA.19) EXHIBIT		0.00	400.00	1995	02/08/96
13	USAR-C-002.000	VOICE-OVER VIDEO ON USS ARIZONA AND USS UTAH		0.00	6.00	1995	12/02/95
0	USAR-C-003.000	FOREIGN OBJECT REMOVAL ON THE USS ARIZONA		0.00	0.00	1995	03/22/95
19	USAR-C-004.000	OIL LEAK MONITORING AND EVALUATION		0.00	20.00	1995	12/02/95
18	USAR-C-005.000	DETERMINATION OF HULL STEEL THICKNESS		0.00	40.00	1995	12/02/95
15	USAR-C-006.000	CORROSION STUDY FOLLOW-UP		0.00	40.00	1995	12/02/95
14	USAR-C-007.000	PHOTOGRAPHIC GRID ON USS ARIZONA AND USS UTAH		0.00	1.00	1995	12/02/95
17	USAR-C-008.000	VERTICAL BIOFOULING STATIONS MONITORING		0.00	40.00	1995	12/02/95
16	USAR-C-009.000	MONITORING HORIZONTAL SEDIMENT STATIONS		0.00	40.00	1995	12/02/95
8	USAR-C-010.000	HABS/HAER DOCUMENTATION; MIDGET SUBMARINE HA.19		0.00	45.00	1995	12/02/95
2	USAR-C-011.000	CULTURAL RESOURCES MANAGEMENT ADMINISTRATION		197.50	40.00	1995	12/02/95
6	USAR-C-012.000	DESIGN NEW MUSEUM		0.00	3000.00	1993	12/02/95
24	USAR-C-013.000	CONSERVATION WORK STATION FOR SUBMERGED ARTIFAC		0.00	25.00	1993	12/02/95
3	USAR-C-014.000	DIVE PROGRAM MANAGEMENT \ CRM ASSISTANT		0.00	120.00	1995	12/02/95
7	USAR-C-015.000	ENVIRONMENTAL MONITORING OF MUSEUM AND STORAGE		0.00	1.00	1995	12/02/95
1	USAR-C-016.000	CURATORIAL PROGRAM ADMINISTRATION		133.50	140.00	1995	03/28/95
0	USAR-C-017.000	PREPARE A MUSEUM - PREVENTIVE CONSERVATION GUID		0.00	0.00	1995	03/27/95
0	USAR-C-018.000	14TH NAVAL DISTRICT PHOTO COLLECTION MANAGEMENT		393.00	0.00	1993	03/27/95
4	USAR-C-019.000	PARK HISTORIAN MANAGEMENT		118.50	100.00	1995	03/28/95
0	USAR-C-020.000	USS ARIZONA MEMORIAL DOCK MOORING INSPECTION		10.00	0.00	1995	02/08/96
10	USAR-C-021.000	LIBRARY & HISTORICAL DATABASE ESTABLISHMENT		10.00	59.50	1993	12/02/95
11	USAR-C-022.000	ORAL HISTORIES TRANSCRIPTION AND PUBLICATION		6.00	30.00	1993	12/02/95
12	USAR-C-023.000	TORPEDO CONSERVATION AND EXHIBIT CASE MODIFICAT		0.00	5.00	1995	12/02/95
25	USAR-C-024.000	PRESERVATION OF THE MEMORIAL'S HISTORIC SETTING		0.00	91.00	1995	12/02/95
9	USAR-C-025.000	MUSEUM COLLECTIONS MANAGEMENT		0.00	20.00	1995	02/08/96
20	USAR-C-026.000	CONSTRUCT AND INSTALL AIRPOWER EXHIBIT		0.00	20.00	1995	02/08/96
21	USAR-C-027.000	WAYSIDE EXHIBIT #1 DEC 7, 1941 VESSELS UNDER AT		0.00	5.00	1994	02/08/96
22	USAR-C-028.000	FABRICATION OF MUSEUM EXHIBIT CASE		0.00	10.00	1994	02/08/96
23	USAR-C-029.000	BATTLESHIP MODEL EXHIBIT REHABILITATION		0.00	3.00	1993	02/08/96
26	USAR-C-030.000	DIVE PROGRAM		4.60	24.00	1996	02/08/96
0	USAR-C-031.000	SECTION 106/NEPA COMPLIANCE FOR PARK PROJECTS		2.50	0.00	1996	02/08/96
Grand Total=====				875.60	4325.50		

31 projects printed

End of data

Active Filter: (No filter)

Output Selections:

Sorted by: Priority

Years: All years

subtotals Show grand total

02/08/96  
16:29:28

PROJECT LIST

Page: 0001

PRIORITY	PROJECT NUMBER	PROJECT TITLE	SUB-TITLE	FUNDED	UNFUNDED	PROP YEAR	LAST UPDATE
0	USAR-C-003.000	FOREIGN OBJECT REMOVAL ON THE USS ARIZONA		0.00	0.00	1995	03/22/95
0	USAR-C-017.000	PREPARE A MUSEUM - PREVENTIVE CONSERVATION GUID		0.00	0.00	1995	03/27/95
0	USAR-C-018.000	14TH NAVAL DISTRICT PHOTO COLLECTION MANAGEMENT		393.00	0.00	1993	03/27/95
0	USAR-C-020.000	USS ARIZONA MEMORIAL DOCK MOORING INSPECTION		10.00	0.00	1995	02/08/96
0	USAR-C-031.000	SECTION 106/NEPA COMPLIANCE FOR PARK PROJECTS		2.50	0.00	1996	02/08/96
1	USAR-C-016.000	CURATORIAL PROGRAM ADMINISTRATION		133.50	140.00	1995	03/28/95
2	USAR-C-011.000	CULTURAL RESOURCES MANAGEMENT ADMINISTRATION		197.50	40.00	1995	12/02/95
3	USAR-C-014.000	DIVE PROGRAM MANAGEMENT \ CRM ASSISTANT		0.00	120.00	1995	12/02/95
4	USAR-C-019.000	PARK HISTORIAN MANAGEMENT		118.50	100.00	1995	03/28/95
5	USAR-C-001.000	JAPANESE MIDGET SUBMARINE (HA.19) EXHIBIT		0.00	400.00	1995	02/08/96
6	USAR-C-012.000	DESIGN NEW MUSEUM		0.00	3000.00	1993	12/02/95
7	USAR-C-015.000	ENVIRONMENTAL MONITORING OF MUSEUM AND STORAGE		0.00	1.00	1995	12/02/95
8	USAR-C-010.000	HABS/HAER DOCUMENTATION; MIDGET SUBMARINE HA.19		0.00	45.00	1995	12/02/95
9	USAR-C-025.000	MUSEUM COLLECTIONS MANAGEMENT		0.00	20.00	1995	02/08/96
10	USAR-C-021.000	LIBRARY & HISTORICAL DATABASE ESTABLISHMENT		10.00	59.50	1993	12/02/95
11	USAR-C-022.000	ORAL HISTORIES TRANSCRIPTION AND PUBLICATION		6.00	30.00	1993	12/02/95
12	USAR-C-023.000	TORPEDO CONSERVATION AND EXHIBIT CASE MODIFICAT		0.00	5.00	1995	12/02/95
13	USAR-C-002.000	VOICE-OVER VIDEO ON USS ARIZONA AND USS UTAH		0.00	6.00	1995	12/02/95
14	USAR-C-007.000	PHOTOGRAPHIC GRID ON USS ARIZONA AND USS UTAH		0.00	1.00	1995	12/02/95
15	USAR-C-006.000	CORROSION STUDY FOLLOW-UP		0.00	40.00	1995	12/02/95
16	USAR-C-009.000	MONITORING HORIZONTAL SEDIMENT STATIONS		0.00	40.00	1995	12/02/95
17	USAR-C-008.000	VERTICAL BIOFOULING STATIONS MONITORING		0.00	40.00	1995	12/02/95
18	USAR-C-005.000	DETERMINATION OF HULL STEEL THICKNESS		0.00	40.00	1995	12/02/95
19	USAR-C-004.000	OIL LEAK MONITORING AND EVALUATION		0.00	20.00	1995	12/02/95
20	USAR-C-026.000	CONSTRUCT AND INSTALL AIRPOWER EXHIBIT		0.00	20.00	1995	02/08/96
21	USAR-C-027.000	WAYSIDE EXHIBIT #1 DEC 7, 1941 VESSELS UNDER AT		0.00	5.00	1994	02/08/96
22	USAR-C-028.000	FABRICATION OF MUSEUM EXHIBIT CASE		0.00	10.00	1994	02/08/96
23	USAR-C-029.000	BATTLESHIP MODEL EXHIBIT REHABILITATION		0.00	3.00	1993	02/08/96
24	USAR-C-013.000	CONSERVATION WORK STATION FOR SUBMERGED ARTIFAC		0.00	25.00	1993	12/02/95
25	USAR-C-024.000	PRESERVATON OF THE MEMORIAL'S HISTORIC SETTING		0.00	91.00	1995	12/02/95
26	USAR-C-030.000	DIVE PROGRAM		4.60	24.00	1996	02/08/96
Grand Total=====				875.60	4325.50		

31 projects printed

End of data

Description of Recommended Project or Activity

- 1) A timetable for moving the submarine to Hawaii will be developed. It is anticipated that the arrival will be in 1996.
  - a. Formalize the agreement with the Pearl Harbor Shipyard for storage of the submarine during its conservation phase.
- 2) Request assistance from Harpers Ferry Center to develop a conservation plan.
- 3) Contract with local specialists to restore the submarine.
- 4) Coordinate the development of an exhibit plan for the submarine with the park's DCP that is being written.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	MIT	One-time	400.00	0.00
		Total:	400.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. Choosing this option will leave the final disposition of the submarine in question. The Nimitz Museum will likely become the owners of the artifact by default. This option will leave USAR without a valuable resource and exhibit that is called for in the draft DCP. Finally, choosing this alternative will not fulfill a commitment made by the NPS Director.

Compliance codes : NHPA ((106) NAT. HIST. PRES.)

Explanation:

Project Statement

USAR-C-002.000

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 13  
Page Num: 0003

Title : VOICE-OVER VIDEO ON USS ARIZONA AND USS UTAH

Funding Status: Funded: 0.00 Unfunded: 6.00

Servicewide Issues : C03 (SITE DOC)  
C72 (PROTECTION)  
Cultural Resource Type: SITE (Archeological Site)  
N-RMAP Program codes :

10-238 Package Number : 200

Problem Statement

The USS ARIZONA and the USS UTAH were surveyed and mapped by the NPS SCRUB team in 1984. During this project, as well as subsequently, there has been a lot of still photography as well as video photography done on the two ships. Unfortunately, most of the images are not anchored to any particular spot, and it is impossible to take another picture at a later date of the same area. This reduces our knowledge of the actual appearance of the resources to artist's sketches and maps. If small changes take place due to natural processes, corrosion, or deprivation by trespassers, there is no baseline of complete coverage by exact images available for comparison, and it is impossible to document these occurrences. Resource management strategies concerning security of the resources, as well as those based on the rate of deterioration of the resources is difficult, if not impossible to formulate.

Additionally, there exists little imagery that is suitable for resources interpretation, as it is often impossible to confidently state where an image is from on the ship, or in some cases, even from which ship the image came.

A "blab-over" video done by resource management scuba divers will satisfy these needs. In conjunction with the video, a set of still pictures taken of the horizontal deck surfaces in a grid pattern will also be done (see project statement C-002.001). These will make concentrated study and comparisons against later photos possible.

Description of Recommended Project or Activity

This project will require 2 teams of 2 divers each. One team will employ a Hi8mm video camera and voice capable communication scuba diving mask. One team will operate the camera. The other team will employ a measured line of 10 feet.

Starting at the bow of each ship, the camera and sound team will

Last Update: 12/02/95

Priority: 13

Initial Proposal: 1995

Page Num: 0004

video the vertical surfaces of the ship starting at the top and making a straight descent, maintaining a constant distance from the surface being taped. At the bottom, the measuring team will mark off a line ten feet from the one just filmed, and the video team will make a straight ascent to the top. Another line ten feet sternward will be marked, and the video team will begin another descent. This process will continue until the entire vertical circumference of the ship has been taped.

For video taping the horizontal surfaces of the ships, the measuring team will also use 2 long lines of 200 feet. Using the 10 feet measuring line and starting 120 feet from the bow (the forward edge of the number 1 barbette) and running to a line 120 feet from the stern of the ship (the aft edge of the number 4 barbette), the measuring team will lay out the 2 long lines parallel to a side of the ship and to each other, ten feet apart. When the video team begins to film down the line of the second 200 feet line, the measuring team will pick up the first line and lay it down again ten feet from the second line in the direction of the center of the ship. Leapfrogging the long lines in this manner, a 200 feet length of the ship will be systematically videotaped. The next 200 feet section will also be done in the same manner. The two 120 feet sections at the bow and stern of the ships will be done in the same way, only with the video lines laid out 90 degrees to the center line of the ship.

## BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			0.00	0.00
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	RES	One-time	6.00	0.00
		Total:	6.00	0.00

## (Optional) Alternative Actions/Solutions and Impacts

No action. This option will not increase the baseline information necessary to document small changes taking place on the resources due to natural processes or trespass deprivations. Additionally, the secondary use of the video tape as a valuable interpretive tool will not be available.



Project Statement

USAR-C-002.000

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 13  
Page Num: 0005

Compliance codes : EXCL (CATEGORICAL EXCLUSION)  
ARPA (ARCH. RES. PROT. ACT.)

Explanation: 516 DM2 APP. 2, 1.6

Last Update: 03/22/95  
Initial Proposal: 1995

Priority: 0  
Page Num: 0006

Title : FOREIGN OBJECT REMOVAL ON THE USS ARIZONA

Funding Status: Funded: 0.00 Unfunded: 0.00

Servicewide Issues : C05 (TREATMENTS)  
C71 (VISIT IMPCT)  
Cultural Resource Type: SITE (Archeological Site)  
N-RMAP Program codes :

10-238 Package Number :

### Problem Statement

The memorial structure is an open air construction that spans the USS ARIZONA over what was its boat deck. Built in 1962, the memorial is visited annually by approximately 1.5 million people.

For some reason, people feel a need to throw coins onto the deck of the ARIZONA. Although the visitors are verbally instructed not to do this, it is not in keeping with the atmosphere of the memorial to put up signage directing them not to toss coins.

In addition to the purposefully tossed coins, shell necklaces, etc., there is a considerable amount of other personal belongings such as cameras, sunglasses, watches, earrings, hats, etc. that are inadvertently lost over the side of the memorial when visitors lean over the rails. This material has been collecting on the deck of the ship for over thirty years. Many of the foreign objects remain visible for a long time, degrading the historical viewshed from the memorial. The material also represents a considerable weight burden. There is a need for this material to be removed periodically.

### Description of Recommended Project or Activity

Park staff and volunteers are screened for snorkeling ability. A team of 5 snorkelers and one snorkeling resource management supervisor swim over the deck of the USS ARIZONA and pick up the loose foreign material. All older deposits that have become cemented to the ship's deck are left in place as breaking them loose has potential for resource destruction. The snorkelers wear full environmental protection suits and gloves. The material is initially gathered in collection bags, then placed in a bucket suspended from the memorial. The material is sorted, with the salvageable coins treated with dilute muriatic acid for eventual sale to a bank. This is done at least every six months, and preferably every quarter.

Last Update: 03/22/95  
Initial Proposal: 1995

Priority: .0  
Page Num: 0007

BUDGET AND FTEs:

-----FUNDED-----				
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			=====	=====
Total:			0.00	0.00

-----UNFUNDED-----				
	Activity	Fund Type	Budget (\$1000s)	FTEs
			=====	=====
Total:			0.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. If this alternative is chosen, material will continue to build up on the deck of the USS ARIZONA. The historic viewshed associated with the ship will be diminished. The presence of coins tends to encourage people to throw even more coins. Eventually, as the fabric of the ARIZONA weakens, there will be the possibility of the deck collapsing under the additional strain.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM6 APP. 7.4 C(4)

Project Statement

Last Update: 12/02/95  
Initial Proposal: 1995

USAR-C-004.000  
Priority: 19  
Page Num: 0008

Title : OIL LEAK MONITORING AND EVALUATION

Funding Status: Funded: 0.00 Unfunded: 20.00

Servicewide Issues : C08 (SPEC STUDY)  
C01 (OVERVIEW)  
Cultural Resource Type: SITE (Archeological Site)  
N-RMAP Program codes :

10-238 Package Number : 166

Problem Statement

The USS ARIZONA, having undergone several renovations during its operational history, had its fuel oil carrying capacity altered from its original design. During the attack on Pearl Harbor, the Arizona was ruptured and leaked a large quantity of the oil, most of which was burned. As a result of these two factors, it is unknown how much oil is still aboard the ship.

Today a discernable oil leak (or leaks) is still emanating from the ship. Although the exit location of the primary leak has been identified, the rate of flow has never been accurately determined.

The oil slick that appears just below the viewing area of the memorial is very observable and generates visitor concern. Several issues arise. As a preservation agency, many visitors feel it is inexcusable for the NPS to allow the ARIZONA to continue polluting the harbor.

However, another consideration is the aesthetic quality of immediacy that the leak lends to the interpretation of the ARIZONA. It can be argued that the leak itself is a resource of the park.

At present, there is not enough information for USAR to devise an appropriate strategy. To remove or capture the remaining oil would be a logistically difficult operation. Such a procedure might eventually cause damage to the primary resource, and could conceivably create a larger environmental problem in the form of a large spill than presently exists. As the operation would be submerged and possibly involve penetration of the ARIZONA, there is also a human safety concern.

USAR policies are often questioned by the public on this issue. Without more information on the remaining quantities of oil; the exact location from within the ship the leak emanates; and the rate of leakage; this issue cannot be properly addressed. Long range management strategies also cannot be formulated without knowing how long the leak is likely to persist.

## Description of Recommended Project or Activity

The implementation of this project is very complicated and involves several steps. In addition to project logistics, there is the issue of penetration, either by personnel or technological means, into the stern sections of the ARIZONA. Safety, social conscience, and ownership issues will all need to be considered before such an action can be attempted.

The steps of the project are:

## Phase I: Literature Search and Flow Monitoring.

1) A search of the documents pertaining to the refitting of the ARIZONA will be made to determine the ship's fuel oil capacity and how the holding areas (bunkers) were arranged. A further document search will be made to try and determine how much oil was loaded into the ship the night before the attack, and to which tanks it was shunted. By discovering the physical layout of the holding areas and how much oil was in each, a hypothesis can be made on the amount of oil spilled and burned. This theory would be possible by comparing a map of the damaged areas with one of the holding areas.

Although much of this information already exists in park files, it has never been compiled into one report. It is imperative that this step be attempted in the near future as eye witness accounts are becoming harder to obtain with time.

2) A mechanical system will be devised to capture the oil at its source for the purpose of determining the rate of flow for the oil leak. This step would involve scuba diving operations, and would require nearly constant monitoring while in progress. It would run for 24 hour periods and need to be repeated at regular intervals throughout the year as the flow appears to fluctuate. This may be a function of seasonal temperature variations of the harbor water. The tides likely have some effect on the rate of leakage as well, and need to be considered in the monitoring schedule. A determination needs to be made whether or not the diurnal cycle has any effect. If not, all monitoring could take place during daylight hours.

The flow data will become part of the general resources management baseline information and will be stored in the resources management files.

## Phase II: Determination of remaining oil quantities.

This is the most difficult and controversial phase. This step would require diving operations, and would involve penetration into the stern sections of the ARIZONA, either by diving personnel or technological means.

This phase will be coordinated with the Navy and SCRU.

Last Update: 12/02/95  
 Initial Proposal: 1995

Priority: 19  
 Page Num: 0010

Issues of social conscience, safety, and ownership sensibilities will need to be considered. If possible, it would be better for a remote sensing device to be utilized for this project; but it is unlikely that one could be found that would not get hung up or made useless by silt clouds stirred up by its propulsion motors.

Phase III: Data interpretation and management decisions.

Upon completion of Phase II, the project information gained will be compiled in a report to the superintendent. Suggestions as to possible long range management strategies will be made. The data will be stored in the resources management files.

BUDGET AND FTEs:

-----FUNDED-----						
Source	Activity	Fund Type	Budget (\$1000s)	FTEs		
			=====			
Total:			0.00	0.00		
-----UNFUNDED-----						
		Activity	Fund Type	Budget (\$1000s)	FTEs	
Year 1:		RES	Cyclic	20.00	0.00	
Total:			20.00	0.00		

(Optional) Alternative Actions/Solutions and Impacts

a. No action. There is unquestionably a finite quantity of oil left in the ARIZONA. Eventually--be it two weeks, ten years, or longer--the oil will run out and the leak will stop. This could be manifested by a sudden absence, or it might just slow down and taper off.

There is always the possibility that before the oil ran out, the bunker containing it would fail, resulting in a large, final spill.

Without accurate information as to remaining quantities and rates of flow, it will be impossible to speculate on when the oil will stop; and the issue will continue to be a matter for public concern.

b. Containment action only. The oil leaking from the ARIZONA could be contained to stop pollution. Standard oil containment practices involve the use of floating booms. Such a measure would have the benefits of allowing the oil leak to continue, furthering interpretive opportunities, while also taking steps

Project Statement

USAR-C-004.000

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 19  
Page Num: 0011

towards mitigating the fouling of the harbor.

However, such a practice would be only partially effective against the normal flow of the leak, and would be wholly inadequate protection in the event of a major spill. The boom would also detract from the historical viewshed of the memorial. Additionally, the information gained in the above outlined project would be unavailable if this option is chosen.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM2 APP. 2, 1.6

Project Statement

USAR-C-005.000  
 Priority: 18  
 Page Num: 0012

Last Update: 12/02/95  
 Initial Proposal: 1995

Title : DETERMINATION OF HULL STEEL THICKNESS

Funding Status: Funded: 0.00 Unfunded: 40.00

Servicewide Issues : C01 (OVERVIEW)  
 C06 (SITE MONIT)  
 Cultural Resource Type: SITE (Archeological Site)  
 N-RMAP Program codes :

10-238 Package Number : 166

Problem Statement

The USS ARIZONA and the USS UTAH are both finite resources. As metallic objects in a saltwater environment, they are steadily corroding. Unfortunately, it is unknown how fast this corrosion process is taking place. One of the methods to help discover this information is to determine the thickness of the ships' hulls at various locations. This information can then be compared against the original hull thicknesses, and a rate of corrosion can be established. This would make long range resource management strategies feasible.

Description of Recommended Project or Activity

Research the original hull thicknesses in specific areas. These will be areas that are not too near an edge, but are still accessible to scuba divers. Areas at different depths will be chosen.

Using nondestructive means such as ultrasonic sound equipment, determine the thickness of the hull at the chosen locations. Repeat this process every year and establish a rate of deterioration. It is estimated that after seven years of measurement, a predictive model can be determined.

BUDGET AND FTEs:

-----FUNDED-----				
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			=====	=====
Total:			0.00	0.00
-----UNFUNDED-----				
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	RES	Recurring	10.00	0.00



Project Statement

USAR-C-005.000  
Priority: 18  
Page Num: 0013

Last Update: 12/02/95  
Initial Proposal: 1995

Year 2:	RES	Recurring	10.00	0.00
Year 3:	RES	Recurring	10.00	0.00
Year 4:	RES	Recurring	10.00	0.00
			=====	
Total:			40.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. If this alternative is chosen, no information on the current condition and stability of the USS ARIZONA and the USS UTAH's hull will be forthcoming. Without the extension of this project for at least 10 years, an accurate description of the rate of deterioration for these ships will not be possible, hampering efforts at establishing long range resource management strategies.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM2 APP. 2, 1.6

Project Statement

USAR-C-006.000

Last Update: 12/02/95  
 Initial Proposal: 1995

Priority: 15  
 Page Num: 0014

Title : CORROSION STUDY FOLLOW-UP

Funding Status: Funded: 0.00 Unfunded: 40.00

Servicewide Issues : C05 (TREATMENTS)  
 C06 (SITE MONIT)  
 Cultural Resource Type: SITE (Archeological Site)  
 N-RMAP Program codes :

10-238 Package Number : 166

Problem Statement

During the resource work done by the NPS SCRUC team in 1986, a hull integrity corrosion study was done. The study involved scraping pieces of the hull down to shiny metal at points where both sides were accessible, and then measuring the thickness of the hull at those locations. It was known then that such action would result in an accelerated rate of corrosion on those areas that were scraped. The team recommended that a plastic cover be epoxied to those bare surfaces. It is unlikely that this was ever done. Those sites now need to be located and documented. If it is found that covers are still desirable, they will be devised and installed. (related project statements are USAR-C-005.000, C-008.000, C-009.000)

Description of Recommended Project or Activity

Conduct scuba dives to locate the 12 places that were used in the 1986 corrosion study. Document the study sites with still photography. If the sites were not treated with plastic covers, determine if they are still needed. If so, place covers over all the sites.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			=====	=====
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	MIT	Recurring	10.00	0.00
Year 2:	MIT	Recurring	10.00	0.00

Project Statement

USAR-C-006.000  
Priority: 15  
Page Num: 0015

Last Update: 12/02/95  
Initial Proposal: 1995

Year 3:	MIT	Recurring	10.00	0.00
Year 4:	MIT	Recurring	10.00	0.00
Total:			40.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. If this option is chosen, no information on the sites chosen for the 1986 corrosion study will be gained. Any information obtainable from these sites on how fast the biofouling organisms colonize a bared area will be lost. If the sites did not receive plastic covers and need them, resource damage will continue to occur at an accelerated rate.

Compliance codes : NHPA ((106) NAT. HIST. PRES.)

Explanation:

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 14  
Page Num: 0016

Title : PHOTOGRAPHIC GRID ON USS ARIZONA AND USS UTAH

Funding Status: Funded: 0.00 Unfunded: 1.00

Servicewide Issues : C03 (SITE DOC)  
C06 (SITE MONIT)  
Cultural Resource Type: SITE (Archeological Site)  
N-RMAP Program codes :

10-238 Package Number : 166

#### Problem Statement

The USS ARIZONA and the USS UTAH were surveyed and mapped by the NPS SCRUI team in 1984. During this project, as well as subsequently, there has been a lot of still photography done on the two ships. Unfortunately, most of the images are not anchored to any particular spot, and it is impossible to take another picture at a later date of the same area. This reduces our knowledge of the actual appearance of the resources to artist's sketches and maps. If small changes take place due to natural processes, corrosion, or deprivation by trespassers, it is impossible without a baseline of prior, exact images to document these occurrences. Resource management strategies concerning security of the resources, as well as those based on the rate of deterioration of the resources is difficult, if not impossible to formulate.

A series of photographs that offer complete, exact coverage of the ships' decks that can be repeated when necessary, either as a whole series or as individual shots, is needed. These would allow a close scrutiny and provide a baseline for comparison when a second photographic array or individual photograph is made.

#### Description of Recommended Project or Activity

This project will be accomplished using a team of 4 scuba divers. First a baseline with measured increments will be established down the center line of the ship. A transect line, also with marked increments, will be stretched out 90 degrees to the baseline. While 2 divers maintain the integrity of the baseline and the transect line, the other two will be making side by side, black and white photographs of the horizontal deck along the transect line until the side of the ship is reached. The pictures will be made at a constant elevation over the surface being photographed. The diver not taking pictures will be making note of the coordinates of each shot.

Project Statement

USAR-C-007.000

Last Update: 12/02/95  
 Initial Proposal: 1995

Priority: 14  
 Page Num: 0017

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			=====	=====
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	RES	One-time	1.00	0.00
			=====	=====
		Total:	1.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. This option will leave the park without clear and exact documentation of its primary resources. The ships are easily within snorkeling range of Ford Island, and any resource depredation from trespassing will remain undocumented. Subtle, as well as many gross, changes due to natural processes will also go undocumented.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM2 APP. 2, 1.6

Project Statement

USAR-C-008.000

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 17  
Page Num: 0018

Title : VERTICAL BIOFOULING STATIONS MONITORING

Funding Status: Funded: 0.00 Unfunded: 40.00

Servicewide Issues : C08 (SPEC STUDY)  
C05 (TREATMENTS)  
Cultural Resource Type: SITE (Archeological Site)  
N-RMAP Program codes :

10-238 Package Number : 166

Problem Statement

As a metallic structure in a salt water environment, the USS ARIZONA is subject to corrosion and biofouling, and is therefore a finite resource. However, the rate of corrosion is currently unknown, so predictions on the longevity of the ARIZONA are impossible to make. It is impractical to develop long range management strategies without this information.

One method for garnering information on the rate of deterioration is to document and analyze the coverage of biofouling organisms living on the vertical surfaces of the ARIZONA and make comparisons against baseline documentation. These organisms significantly slow the corrosion process. A system for doing this was instigated in 1986 by the NPS SCRUI team and CPSU-UH with 61 monitoring stations established on vertical portions of the ARIZONA's hull. Twelve of these stations were further developed with fixed studs that served as braces for registration markers and cameras. Slide photos were then taken. The images were projected and percent coverage and types of organisms were determined. This established a baseline for future, systematic surveys. The program then experienced a hiatus.

Many of the fixed studs located at the 12, main sampling stations have since dropped off and become lost in bottom sediments. The stations need to be repaired (see related project statements USAR-C-009.000 and C-005.000, C-006.000) and the monitoring of them needs to be reintroduced as a cyclic resource management function. With the aid of CPSU-UH, the data then needs to be compared against the baseline information gathered in 1986.

Description of Recommended Project or Activity

Contact CPSU-UH and establish a schedule for annual scuba diving operations to service the vertical monitoring stations. Conduct scuba diving operations at the scheduled times on the 12 vertical stations that have the fixed studs for photo registration. Measure the depth of living biofouling organisms and the depth of

Last Update: 12/02/95  
 Initial Proposal: 1995

Priority: 17  
 Page Num: 0019

hard, dead encrustation that typically underlies the living material with a pointed, 5/16-inch steel rod. At the same time, use the PVC/wire photo registration alignment tool to make slide images of the biofouling cover.

Project the slide images and ascertain the percent cover of the organisms, and the identity of the macro-organisms present. Then compare this information against the baseline data attained in the 1986 survey.

Record findings in resource management files, as well as in report form to the Superintendent as a part of an annual resources summary.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		=====		
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	MON	Recurring	10.00	0.00
Year 2:	MON	Recurring	10.00	0.00
Year 3:	MON	Recurring	10.00	0.00
Year 4:	MON	Recurring	10.00	0.00
		=====		
		Total:	40.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

Continue the status quo. This option would involve continuing the sporadic scuba diving operations that gather only limited, essentially useless, visual data. This information cannot be used in determining the rate of biofouling growth nor the changes in percentage cover of the protective living and dead organic material. No long range resource management strategies can be evolved with this option.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Project Statement

Last Update: 12/02/95  
Initial Proposal: 1995

USAR-C-008.000  
Priority: 17  
Page Num: 0020

Explanation: 516 DM2 APP. 2, 1.6



Last Update: 12/02/95

Priority: 16

Initial Proposal: 1995

Page Num: 0021

Title : MONITORING HORIZONTAL SEDIMENT STATIONS

Funding Status: Funded: 0.00 Unfunded: 40.00

Servicewide Issues : C08 (SPEC STUDY)

C06 (SITE MONIT)

Cultural Resource Type: SITE (Archeological Site)

N-RMAP Program codes :

10-238 Package Number : 166

## Problem Statement

Pearl Harbor was formed by approximately eight streams coming together and is a natural silt trap. The settlement patterns of the silt have been considerably altered in historic times by dredging operations, construction, and the constant churning of large boats and ships moving in and out of the harbor and are little understood.

The silt does not settle evenly onto the horizontal surfaces of the USS ARIZONA. It is currently unknown what long range effects the silting has on the ARIZONA. While the silt may actually help preserve the structure of the ARIZONA by retarding oxidation, this protection undoubtedly varies as the silt depths range considerably and are completely non-existent in some areas. Additionally, the silt creates habitat for marine organisms. This may offset some of the beneficial properties of the silt as some of these organisms may be deleterious to the ship's material.

Stations were developed to monitor sediment levels on and around the ARIZONA. Long range management policy is dependent on knowledge of silting trends and how they effect the stability of the ship's structure. Silting information is also imperative as a basis for determining policy on issues concerning construction and development in Pearl Harbor. The monitoring program needs to be reinstated on an annual basis. (see related project statement USAR-C-005.000, USAR-C-008.000, USAR-C-006.000)

## Description of Recommended Project or Activity

Using the locations established by the NPS SCRUI team, horizontal monitoring stations will be restored. USAR, or other NPS accredited scuba divers will service the stations on an annual basis.

Silt depth and visual observations will be recorded and compiled for comparison with baseline data gathered in 1986. Records will

Last Update: 12/02/95

Priority: 16

Initial Proposal: 1995

Page Num: 0022

be kept in resource management files, and a report to the Superintendent will be made as a part of a annual resources summary.

BUDGET AND FTEs:

-----FUNDED-----					
Source	Activity	Fund Type	Budget (\$1000s)	FTEs	
			=====		
Total:			0.00	0.00	
-----UNFUNDED-----					
	Activity	Fund Type	Budget (\$1000s)	FTEs	
Year 1:	MON	Recurring	10.00	0.00	
Year 2:	MON	Recurring	10.00	0.00	
Year 3:	MON	Recurring	10.00	0.00	
Year 4:	MON	Recurring	10.00	0.00	
Total:			40.00	0.00	
			=====		

(Optional) Alternative Actions/Solutions and Impacts

No action. The infrequent and non-systematic collection of silting data can continue to be accomplished from the occasional resource management dive operation. However, this method would provide only enough information to make crude guesses as to what the silting trends in Pearl Harbor are, and what the long range effects on the ARIZONA will be. This situation would not offer grounds for sound management policy.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM2 App. 2, 1.6

Project Statement

USAR-C-010.000

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 8  
Page Num: 0023

Title : HABS/HAER DOCUMENTATION; MIDGET SUBMARINE HA.19

Funding Status: Funded: 0.00 Unfunded: 45.00

Servicewide Issues : C08 (SPEC STUDY)  
C01 (OVERVIEW)

Cultural Resource Type:  
N-RMAP Program codes :

10-238 Package Number : 171

Problem Statement

A survey and assesment of the Japanese Midget Submarine, Ha.19 was made for the USS Arizona Memorial in 1988 by Tri-Coastal Marine, Inc. This report documented the condition of the artifact at that time, when it was located in Key West, Florida and presented recommended actions for conservation treatment. since that time, the midget submarine has been on temporary loan to the Admiral Nimitz Museum and will soon be relocated to the USS Arizona Memorial, Hawaii (see project statement USAR-C-001.000). Further documentation of the midget submarine will be required upon its arrival, for both historical interpretation, research, and to devolpe a longterm preservation, management and interpretive plan.

Description of Recommended Project or Activity

Historic American Buildings Survey / Historic American Engineering Record (HABS/HAER) would sponsor a HAER recording project to document this artifact with a set of measured drawings, written data pages, and large-format photographs. This project would run for twelve weeks.

A written history will be executed to documentation standards as outlined in the HAER "Guidelines for Recording Historic Ships." The paper will focus on the the history of the vessel and its significance as a prize of war. Also included in the report will be detailed descriptions of all interior, exterior and mechanical features of the vessel. A brief account of similar vessels may also be included, if time allows. An annotated bibliography of both primary and secondary source material identified during the research process will also be included.

Project Statement

USAR-C-010.000  
 Priority: 8  
 Page Num: 0024

Last Update: 12/02/95  
 Initial Proposal: 1995

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		Total:	0.00	0.00

		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	RES	One-time	45.00	0.00
		Total:	45.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. Choosing this option will leave this National Historic Landmark undocumented. We will be left without thorough historical knowledge of the midget submarine and will not have complete documentation to develop required conservation plans, interpretive plans, and management plans.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM2 APP. 2, 1.6

Last Update: 12/02/95

Priority: 2

Initial Proposal: 1995

Page Num: 0025

Title : CULTURAL RESOURCES MANAGEMENT ADMINISTRATION

Funding Status: Funded: 197.50 Unfunded: 40.00

Servicewide Issues : C83 (GEN CR MNGT)

C80 (ARCHEOLOGY)

Cultural Resource Type: COMB (Combination)

N-RMAP Program codes :

10-238 Package Number :

## Problem Statement

This project consists of the planning and supervisory activities of park staff in conducting ongoing natural and cultural resources management activities in the area. The major artifact and cultural resource of this park is a complex archeological site, the shipwreck USS Arizona. Considering the small portion of the staff available to perform resource related duties--especially required archeological research and monitoring of the site, of which all has to be conducted as scuba diving operations--administrative functions consume a large percentage of the allotted time.

Maintaining and training staff for archeological research, scuba operations, establishing the skills of volunteers, supervising projects teams, preparing funding justifications, preparing activity plans, purchasing supplies, maintaining communications with the rest of the staff through memos, newsletters, etc. are all examples of some of the administrative functions performed.

The shipwreck Arizona (as well as the related USS Utah) is a complex archeological site that requires continued research and a monitoring program of the biofouling growth. A research design that will consider preservation issues was proposed after completion of the archeological surveys of the site during the 1980s by the Submerged Cultural Resources Unit. This project was not able to be formalized due to a lack of adequate staff (both in qualifications and FTE).

This position has the collateral position of being the park's dive officer (see USAR-C-030.000) and section 106 coordinator (see USAR-C-031.000).

Additionally, this position works with the museum curator on conservation of artifacts and related projects.

## Description of Recommended Project or Activity

Using the draft Cultural Resources Management Allocation Program (C-RMAP) shows that this position is not staffed adequately. Formalize the current level of 1 FTE devoted to Resources Management activities (at present this position is still considered to be .5 FTE interpretive ranger and .5 FTE resource management). This position should be classified into a professional series in the same way as the museum curator and park historian positions are. Request an additional .5 FTE to be devoted to resources management program support. This position would require scuba diving skills, and be supervised by the resources management specialist.

Develop a position description for the 50% portion of the resources management/scuba diving position. This position would be wedded with a 50% historian assistant position to be supervised by the park historian (see project statements USAR-C-014.000 and USAR-C-019.000).

Specific cultural resource management projects that would directly involve the additional .5 FTE position include, but are not limited to are USAR-C-002.000, C-003.000, C-004.000, C-005.000, C-006.000, C-007.000, C-008.000, C-009.000.

Base funding for this position should include funding for annual professional conference and training sessions.

## BUDGET AND FTES:

		-----FUNDED-----			
	Source	Activity	Fund Type	Budget (\$1000s)	FTES
1995:	PKBASE-CR	ADM	Recurring	39.50	1.00
1996:	PKBASE-CR	ADM	Recurring	39.50	1.00
1997:	PKBASE-CR	ADM	Recurring	39.50	1.00
1998:	PKBASE-CR	ADM	Recurring	39.50	1.00
1999:	PKBASE-CR	ADM	Recurring	39.50	1.00
			Total:	197.50	5.00
		-----UNFUNDED-----			
		Activity	Fund Type	Budget (\$1000s)	FTES
Year 1:		ADM	Recurring	10.00	0.50
Year 2:		ADM	Recurring	10.00	0.50

Last Update: 12/02/95  
Initial Proposal: 1995

Project Statement

USAR-C-011.000  
Priority: 2  
Page Num: 0027

Year 3:	ADM	Recurring	10.00	0.50
Year 4:	ADM	Recurring	10.00	0.50
			=====	
Total:			40.00	2.00

(Optional) Alternative Actions/Solutions and Impacts

Continue status quo. This alternative will leave the staffing level the same, with the same level of accomplishment as at present. This option maintains the status quo, but has been shown to be inadequate to properly manage both the cultural resources and the interrelated scuba diving program.

Compliance codes : OTHER ( )

Explanation: 516 DM6 APP. 7.4 E(2)

Last Update: 12/02/95  
Initial Proposal: 1993

Priority: 6  
Page Num: 0028

Title : DESIGN NEW MUSEUM

Funding Status: Funded: 0.00 Unfunded: 3000.00

Servicewide Issues : C49 (ENVIRONMNT)  
C47 (STORAGE)

Cultural Resource Type: STRC (Structure)  
N-RMAP Program codes :

10-238 Package Number : 131

### Problem Statement

The USAR visitor center was originally rushed to completion in 1980. After it was built, the museum was also rushed into existence in order to meet the 40th anniversary of the attack on Pearl Harbor. This first museum was meant as a temporary measure, and covered only a portion of the interpretive story mandated for USAR by the interpretive prospectus (approved 1982).

No provisions were made for maintaining a proper, environmentally controlled environment. Additionally, the temporary museum design only considered a visitation of 900,000 visitors per year.

USAR visitation now exceeds 1.4 million visitors per year. The original park concept called for a Phase II development for the museum. Due to the press of environmental factors and increased visitation, there is a severe need for the design and implementation of this next step in the development of the museum.

The completion of a new museum will require additional space to either be added to the existing museum arraignment or to rebuild the museum in a different location of the visitor's center. This will allow a larger area for exhibits, as well as providing a safer and more comfortable viewing experience for the visitors. There will also be a need for the installation of environmental controls in the museum area to safeguard the exhibits from the extremes of temperature and humidity they are currently experiencing.

Finally, new exhibits concerning USAR themes not presently explored in the museum need to be developed in conjunction with the structural planning. The completion of Phase II will also demand additional curatorial staff and operating funds.



Last Update: 12/02/95  
Initial Proposal: 1993

Priority: 6  
Page Num: 0029

## Description of Recommended Project or Activity

Complete a new museum design, incorporating existing exhibit materials, as well as utilizing new artifacts and exhibit designs. This will involve enlarging the current amount of space devoted to the museum by removing the glass wall and constructing an addition to the building. Additionally, doors will be installed along with environmental controls for the entire museum area.

This project is assigned to 10-238 package number 131. An alternative to only environmentally control the existing museum is 10-238 package number 142.

## BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	MIT	One-time	3000.00	0.00
		Total:	3000.00	0.00

## (Optional) Alternative Actions/Solutions and Impacts

a. Continue the status quo. Choosing this option will leave the museum at its current size, staffing and funding levels. This would mean that USAR will continue to offer to visitors only a portion of the interpretive message that is mandated by the interpretive prospectus. The exhibits will continue to decline due to environmental stress, and visitors will be forced to crowd in discomfort with potential safety concerns due to the heat and humidity.

b. Enclose the present facility with doors and install environmental controls. While choosing this option will save money and offer protection for the exhibits, it will be a short term solution only. Visitors will continue to be crowded into an insufficient space, and the thorough execution of the park's interpretive message will still not be realized. Eventually, a larger facility will still have to be built.

c. Make museum improvements, but leave staffing and funding levels the same. This option will give the museum space to tell

Project Statement

USAR-C-012.000

Last Update: 12/02/95  
Initial Proposal: 1993

Priority: 6  
Page Num: 0030

the whole USAR story in an environment that is safe for exhibits and visitors while comfortable to visit. However, this option still remains as a short term solution. Eventually the quality of the exhibits, their maintenance, and the potential for the creation of new exhibits will be adversely impacted due to a lack in staffing and funding. Additionally, environmental controls will be hampered due to the inability to provide electricity.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM6 APP. 7.4 C(17)

Project Statement

Last Update: 12/02/95  
Initial Proposal: 1993

USAR-C-013.000  
Priority: 24  
Page Num: 0031

Title : CONSERVATION WORK STATION FOR SUBMERGED ARTIFACTS

Funding Status: Funded: 0.00 Unfunded: 25.00

Servicewide Issues : C48 (TREATMENT)  
Cultural Resource Type: OBJC (Object)  
N-RMAP Program codes :

10-238 Package Number :

Problem Statement

Artifacts are continually being recovered from Pearl Harbor. Many of these artifacts are related to the December 7, 1941 attack and have significance for both diagnostic (research) and cultural value. Underwater artifacts that have been retrieved, and that will continue to be retrieved, provide a significant tool for the interpretation of the cultural pathways and historical documentation that surround the events of December 7, 1941. Discovery of other artifacts related to the history of Pearl Harbor and the sub themes of the park are also anticipated. However, these artifacts can only contribute to the USAR museum collection if they are properly conserved.

Artifacts recovered from a salt water environment are often well preserved but unstable. Artifacts not properly conserved in a timely manner are apt to deteriorate at a very rapid rate. As soon as they are removed from the marine environment, various forces of deterioration begin immediately. If proper treatment is not undertaken without delay, their loss is imminent.

In USAR's situation, most artifacts are recovered by accident due to harbor operations such as dredging, etc., rather than by design. This situation will continue. Even if conservation for an artifact is to be eventually conducted at some other facility, it is imperative that initial conservation measures be taken prior to an artifact's transportation. These measures require that initial conservation be implemented immediately and without the preferred method of a pre-conservation preparation. The means to properly conserve these artifacts are not available at USAR or other local facilities. This is especially true for the large artifacts that are frequently associated with the attack on Pearl Harbor. A work space needs to be developed at USAR suitable for the conservation of both large and small artifacts that have been recovered from a marine environment.

Description of Recommended Project or Activity

Create a suitable work area for the conservation of previously submerged artifacts. This space will be plumbed with a fresh water source and a drainage system capable of handling aqueous chemical wastes. There will be room to let tanks stand for a year or more.

Electricity will be provided for tools needed in mechanical cleaning operations and electrolyses of metallic artifacts. The work space design will incorporate both an enclosed, secure area in addition to an equally secure, outdoor, well ventilated area. This combination will offer a dust free working and storage environment as well as provide for resource protection and safety to others in the area.

The curation work space will be accessible to trucks and forklifts to facilitate the transfer of large artifacts. The space will be provided with three large tanks and two small tanks (one 55-gal. drum cut lengthwise). There will be a Direct Current (DC) variable power supply unit and chemical supplies.

The construction of the facility is funded by 10-238 Package Number 155 (\$70,000). This project statement relates to the funding of the internal equipment and supplies that would be needed to outfit the conservation work area.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		=====		
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	RES	One-time	10.00	0.00
Year 2:	RES	Recurring	5.00	0.00
Year 3:	RES	Recurring	5.00	0.00
Year 4:	RES	Recurring	5.00	0.00
		Total:	25.00	0.00

Last Update: 12/02/95

Priority: 24

Initial Proposal: 1993

Page Num: 0033

## (Optional) Alternative Actions/Solutions and Impacts

No action. If this alternative is chosen, artifacts recovered from Pearl Harbor and other marine environments will be put at risk. Without conservation facilities, these artifacts will certainly be damaged, and will likely be destroyed by the accelerated deterioration processes that occur when they are brought into an air environment. This deterioration would render the artifacts unsuitable for the USAR museum collection and would remove them as possibilities for future museum exhibits.

Documentation only. Choosing this alternative would allow for the deterioration of the artifacts after they had been thoroughly researched and documented. While more inexpensive than conserving artifacts, this option would still require additional, trained staff to carry out the documentation. This alternative would not allow future research into the artifact. Additionally, this option would also deprive the museum the opportunity to possibly use the artifact in future exhibits.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM6 APP. 7.4 C(17)

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 3  
Page Num: 0034

Title : DIVE PROGRAM MANAGEMENT \ CRM ASSISTANT

Funding Status: Funded: 0.00 Unfunded: 120.00

Servicewide Issues : C83 (GEN CR MNGT)  
C08 (SPEC STUDY)

Cultural Resource Type: COMB (Combination)  
N-RMAP Program codes :

10-238 Package Number :

### Problem Statement

The bulk of USAR resources are submerged in Pearl Harbor. Most of the resources management operations therefore are possible only with the use of scuba diving. This project consists of the planning, supervisory, and functional activities of park staff in conducting ongoing natural and cultural resources management activities in the area using scuba diving techniques.

Although there is currently 1 FTE position designated for resource management activities including scuba diving, much of this position's time is taken up with administrative duties including supervision, arranging training and physical examinations for other park divers, purchasing equipment, writing reports, etc. Another .5 FTE devoted entirely to scuba diving is needed (see project statement USAR-C-011.000). Two more positions within the park need to have scuba diving added to their position descriptions as a collateral duties.

At a minimum, this position would be directly involved in project statements USAR-C-002.000, C-003.000, C-004.000, C-005.000, C-006.000, C-007.000, C-008.000, C-009.000, C-020.000.

Additionally, funds for equipment purchases, equipment maintenance, and training need to be allocated. Finally, a memorandum of agreement between the Navy and USAR specifically concerning the continuance of Navy provided scuba diving physical examinations needs to be written.

### Description of Recommended Project or Activity

Request an additional .5 FTE be devoted to resources management program support (see project statement USAR-C-011.000 and C-019.000). Rewrite 2 other park position descriptions so that they include scuba diving as an established collateral duty. The collateral duty time would be supervised by the resource management specialist.

Establish a separate budget for scuba diving activities. A minimum of 2000 dollars a year are needed per diver to support an active scuba diving program.

Establish a formal scuba diving training program to train park rangers in accordance with NPS-4.

BUDGET AND FTEs:

-----FUNDED-----				
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			=====	=====
Total:			0.00	0.00
-----UNFUNDED-----				
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	ADM	Recurring	20.00	0.50
	ADM	Recurring	10.00	0.00
Subtotal:			30.00	0.50
Year 2:	ADM	Recurring	20.00	0.50
	ADM	Recurring	10.00	0.00
Subtotal:			30.00	0.50
Year 3:	ADM	Recurring	20.00	0.50
	ADM	Recurring	10.00	0.00
Subtotal:			30.00	0.50
Year 4:	ADM	Recurring	20.00	0.50
	ADM	Recurring	10.00	0.00
Subtotal:			30.00	0.50
Total:			120.00	2.00

(Optional) Alternative Actions/Solutions and Impacts

a. Continue the status quo. If this option is taken, most resource management schemes will be impossible to implement. While there is a certain amount of scuba diving activity possible with current staffing and funding levels, resource management responses are limited to occasional visual monitoring. No full scale projects are possible.

b. Scuba diving administration only. One alternative would be

Project Statement

USAR-C-014.000

Last Update: 12/02/95

Priority: 3

Initial Proposal: 1995

Page Num: 0036

for USAR to abandon its own scuba diving program, and contract all diving projects out to other agencies in and related to the NPS such as the SCRU team and CPSU-UH. These efforts would then be merely programmed by the park resources management specialist.

While this option does offer potential cost savings, they would be small. There is a potential for the contract divers to cost more than maintaining a park diving program. Additionally, if this option were taken, the park would lose the ability to properly monitor its primary resources itself. This would hamper the resources management program and limit the knowledge base needed for the proper interpretation of the resources. The park would also lose the ability to respond quickly and consistently to resource issues.

Compliance codes : OTHER ()

Explanation: 516 DM6 APP. 7.4 E(2)



Project Statement

USAR-C-015.000

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: .7  
Page Num: 0037

Title : ENVIRONMENTAL MONITORING OF MUSEUM AND STORAGE

Funding Status: Funded: 0.00 Unfunded: 1.00

Servicewide Issues : C49 (ENVIRONMNT)  
C47 (STORAGE)

Cultural Resource Type: OBJC (Object)

N-RMAP Program codes :

10-238 Package Number : 201

Problem Statement

No consistent plan for environmental monitoring of exhibit and curatorial storage spaces exists. The exhibit space is open and exposed to environmental effects of temperature, humidity, occasional precipitation, excessive light and airborne pollutants. Monitoring of these spaces has been performed on an inconsistent and infrequent basis, and exact conditions are therefore unquantified. While the curatorial storage area is air conditioned, it is still subject to unmeasured fluctuations of temperature and humidity.

A system for the routine monitoring of these areas needs to be developed. Short and long range environmental effects need to be accurately determined so schemes can be devised to mitigate these effects.

Description of Recommended Project or Activity

Develop and implement a consistent, routine plan for environmental monitoring of exhibit and curatorial storage spaces.

Utilize the park's existing three hygrothermographs to monitor temperature and humidity using seven-day graph charts. Two of these will be installed in the museum, and one in the curatorial storage area. Analyze completed charts, noting known weather extremes represented on the graph (storms, unseasonable heat, etc.).

Routinely monitor light levels in exhibit spaces with a CRAWFORD uv meter. Schedule regular, periodic analysis of air content in exhibit spaces for type and levels of airborne pollutants.

Annually summarize the collected data and observed effects of the environmental conditions on collections and exhibit materials. Submit this in a report to the chief ranger.

Project Statement

USAR-C-015.000

Last Update: 12/02/95

Priority: 7

Initial Proposal: 1995

Page Num: 0038

BUDGET AND FTEs:

-----FUNDED-----				
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			Total:	0.00
-----UNFUNDED-----				
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	MON	One-time	1.00	0.00
			Total:	1.00

(Optional) Alternative Actions/Solutions and Impacts

No action. If this option is chosen, no information will be gathered on environmental conditions affecting collections and exhibit materials. NPS Special Directive 80-1 specifies allowable environmental conditions for collections material. Park compliance with SD 80-1 requires accurate, consistent knowledge of these conditions. Choosing this alternative will leave the park without the background information necessary for planning future improvements to these spaces.

Compliance codes : OTHER ( )

Explanation: NPS Special Directive (SD) 80-1

Project Statement

USAR-C-016.000

Last Update: 03/28/95  
Initial Proposal: 1995

Priority: 1  
Page Num: 0039

Title : CURATORIAL PROGRAM ADMINISTRATION

Funding Status: Funded: 133.50 Unfunded: 140.00

Servicewide Issues : C81 (COLLECTIONS)  
Cultural Resource Type: COMB (Combination)  
N-RMAP Program codes :

10-238 Package Number :

Problem Statement

This project consists of the planning and supervisory activities of park staff in conducting ongoing museum and curatorial resources management operations in the area. Considering the small portion of the staff available to perform curatorial related duties, administrative functions consume a large percentage of the allotted time.

Maintaining and updating accessions files; performing light, exhibit maintenance; servicing monitoring functions; establishing the skills of volunteers; supervising project teams; preparing funding justifications; preparing activity plans; purchasing supplies; maintaining communications with the rest of the staff through memos, newsletters, etc. are all examples of some of the administrative functions performed.

Description of Recommended Project or Activity

Utilizing the draft Cultural Resources Management Allocation Program (C-RMAP) format, the current level of 1 FTE devoted to museum and curatorial activities is drastically inadequate. Request an additional 1 FTE to fund the museum technician position that was approved but not ever funded. This position will service incoming accessions and monitoring stations, thus satisfying many of the administrative duties associated with museum operations. This position will be supervised by the park museum curator.

Increase base funding to include funding for annual professional conferences and training sessions.

Project Statement

USAR-C-016.000

Last Update: 03/28/95  
Initial Proposal: 1995

Priority: 1  
Page Num: 0040

BUDGET AND FTEs:

		-----FUNDED-----			
Source	Activity	Fund Type	Budget (\$1000s)	FTEs	
1995:	PKBASE-CR ADM	Recurring	39.50	1.00	
1996:	PKBASE-CR ADM	Recurring	94.00	1.00	
Total:			133.50	2.00	

		-----UNFUNDED-----			
	Activity	Fund Type	Budget (\$1000s)	FTEs	
Year 1:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	30.00	1.00	
Subtotal:			35.00	1.00	
Year 2:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	30.00	1.00	
Subtotal:			35.00	1.00	
Year 3:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	30.00	1.00	
Subtotal:			35.00	1.00	
Year 4:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	30.00	1.00	
Subtotal:			35.00	1.00	
Total:			140.00	4.00	

(Optional) Alternative Actions/Solutions and Impacts

Continue status quo. This alternative will leave the same staffing and level, and with the same level of accomplishment as at present. This option maintains the status quo, but has been shown to be inadequate to properly manage both the museum and the interrelated collections and curatorial programs.

Compliance codes : OTHER ( )

Explanation: 516 DM2 App. 2, 1.7

Project Statement

USAR-C-017.000

Last Update: 03/27/95  
 Initial Proposal: 1995

Priority: 0  
 Page Num: 0041

Title : PREPARE A MUSEUM - PREVENTIVE CONSERVATION GUIDE

Funding Status: Funded: 0.00 Unfunded: 0.00

Servicewide Issues : C45 (HOUSKP PLN)  
 Cultural Resource Type: COMB (Combination)  
 N-RMAP Program codes :

10-238 Package Number :

Problem Statement

The USS Arizona Memorial has been given management responsibility for the 14th US Naval District photo archive collection. This collection has more than 30,000 photographic images relating to Pearl Harbor and covers a time span from 1902 through 1945. These images are a combination of photographic prints, film negatives, and 8x10 glass plate negatives. The images require accessioning, cataloging and storage to properly protect them and make them available for research. Additionally, all the photographs need to be copied, and all the negatives need to be copied and printed.

After the initial setup, the collection will require continued management and curation. There is currently no personnel or space to manage this collection available at the USAR visitor center.

Description of Recommended Project or Activity

Inventory all features requiring maintenance care.

The museum curator will prepare a detailed inspection and maintenance strategy in the form of a Preventive Conservation Guide to effect the proper care of the museum collection. Upon approval, the program will be instigated on a routine basis.

BUDGET AND FTEs:

-----FUNDED-----				
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
			=====	=====
Total:			0.00	0.00

Project Statement

USAR-C-017.000

Last Update: 03/27/95

Priority: 0

Initial Proposal: 1995

Page Num: 0042

-----UNFUNDED-----

Activity	Fund Type	Budget (\$1000s)	FTEs
		=====	=====
	Total:	0.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. Choosing this option will leave the park with no comprehensive plan for the preservation and maintenance of the museum and exhibits. Routine preservation and maintenance issues will continue to be only haphazardly addressed, possibly resulting in the loss of resources and/or expensive repairs to the museum or exhibits.

Compliance codes : OTHER ( )

Explanation: 516 DM6 APP. 7.4 B(2)

Project Statement

USAR-C-018.000  
Priority: .0  
Page Num: 0043

Last Update: 03/27/95  
Initial Proposal: 1993

Title : 14TH NAVAL DISTRICT PHOTO COLLECTION MANAGEMENT

Funding Status: Funded: 393.00 Unfunded: 0.00

Servicewide Issues : C48 (TREATMENT)  
C46 (ACCOUNTBLY)

Cultural Resource Type: OBJC (Object)  
N-RMAP Program codes :

10-238 Package Number :

Problem Statement

The USS Arizona Memorial has been given management responsibility for the 14th US Naval District photo collection. This rare organic collection has more than 30,000 photographic images relating to Pearl Harbor and covers a time span from circa 1880 through 1942. These images are a combination of photographic prints, film negatives, and 8x10 glass plate negatives. The images require accessioning, cataloging and storage to properly protect them and make them available for research. Additionally, all the photographic images (prints and negatives) need to be copied, and all the negatives need to be printed.

After the initial setup, the collection will require continued management and curation. There is currently no personnel or space to manage this collection available at the USAR visitor center. The project has been contracted out to the Arizona Memorial Museum Association. Temporary curatorial space has been loaned to USAR on Pearl Harbor Naval Base by USN.

Description of Recommended Project or Activity

This project has been contracted to AMMA to uncrate, accession, sort, catalog, copy, and properly store this collection. Space has been obtained from the US Navy for the initial curation and management of this collection on the Pearl Harbor Naval Station. After five years, the collection will have to be moved to another location. Initial funding was provided from the DOD Legacy Resource Management Program in the amount of \$48,000. This amount established the basic inventory of the collection and provided the development of a follow on plan.

Follow on budgets provided an additional \$65,000 from AMMA, 30,000 from NPS, and 250,000 from Legacy to continue the project.

In the fourth year of the project, provisions will be made for the continueing curation of the collection either on USAR grounds or again on the US Naval Station. This portion of the project is

Last Update: 03/27/95  
 Initial Proposal: 1993

Priority: 0  
 Page Num: 0044

currently unfunded.

BUDGET AND FTEs:

-----FUNDED-----					
Source	Activity	Fund Type	Budget (\$1000s)	FTEs	
1993:	FED-OTHER MIT	One-time	48.00	2.00	
1994:	NON-PROFI MIT	One-time	65.00	0.00	
	RG-CR-MTN MIT	One-time	30.00	0.00	
Subtotal:			95.00	0.00	
1995:	FED-OTHER MIT	One-time	250.00	0.00	
Total:			393.00	2.00	
-----UNFUNDED-----					
Activity		Fund Type	Budget (\$1000s)	FTEs	
Total:			0.00	0.00	

(Optional) Alternative Actions/Solutions and Impacts

Continue status quo. This project is fully funded and on going. Future action will be necessary though for the long term management of this collection to ensure its preservation and accesibility for use.

Compliance codes : OTHER ()

Explanation: 516 DM2 APP. 2, 1.1



Project Statement

USAR-C-019.000

Last Update: 03/28/95  
Initial Proposal: 1995

Priority: 4  
Page Num: 0045

Title : PARK HISTORIAN MANAGEMENT

Funding Status: Funded: 118.50 Unfunded: 100.00

Servicewide Issues : C86 (HISTORY)  
Cultural Resource Type: COMB (Combination)  
N-RMAP Program codes :

10-238 Package Number :

Problem Statement

This project consists of the planning and supervisory activities of park staff in conducting ongoing historical research, evaluation, and interpretation of the cultural resources concerning USAR in the area. Considering the small portion of the staff available to perform historian related duties, administrative functions consume a large percentage of the allotted time.

Conducting research, offering staff direction and maintaining historical accuracy within park interpretive programs, managing a database and specialized research library, establishing the skills of volunteers, supervising project teams, preparing funding justifications, preparing activity plans, purchasing supplies, maintaining communications with the rest of the staff through memos, newsletters, etc. are all examples of some of the administrative functions performed.

Two major projects being undertaken by the historian are described in project statements USAR-C-021.000 and C-022.000.

Using the draft Cultural Resources Management Allocation Program (C-RMAP) format, this position is understaffed.

Description of Recommended Project or Activity

A review using C-RMAP documents that the current level of 1 FTE devoted to historian activities is inadequate to accomplish assigned tasks. Minimally, request an additional .5 FTE to be devoted to management of the historical program. This position will service day to day library functions as well as participate in the ordering of the park's database of photographs, video tapes, and oral histories, thus satisfying many of the administrative duties associated with historian operations, and providing opportunities for baseline research (see project statements USAR-C-021.000 and C-022.000). This position will be supervised by the park historian.

Project Statement

USAR-C-019.000

Last Update: 03/28/95  
 Initial Proposal: 1995

Priority: 4  
 Page Num: 0046

Develop a position description for a .5 FTE historian assistant position with the other .5 FTE of the position's time to be shared with the resources management division as an assistant cultural resource specialist/scuba diving position (see USAR-C-011.000 and C-014.000).

Include in base funding an allowance for annual professional conferences and training sessions.

BUDGET AND FTES:

			-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs	
1995:	PKBASE-CR ADM	Recurring	39.50	1.00	
1996:	PKBASE-CR ADM	Recurring	39.50	1.00	
1999:	PKBASE-CR ADM	Recurring	39.50	1.00	
Total:			118.50	3.00	

			-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs	
Year 1:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	20.00	0.50	
Subtotal:			25.00	0.50	
Year 2:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	20.00	0.50	
Subtotal:			25.00	0.50	
Year 3:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	20.00	0.50	
Subtotal:			25.00	0.50	
Year 4:	ADM	Recurring	5.00	0.00	
	ADM	Recurring	20.00	0.50	
Subtotal:			25.00	0.50	
Total:			100.00	2.00	

Last Update: 03/28/95  
Initial Proposal: 1995

Priority: 4  
Page Num: 0047

(Optional) Alternative Actions/Solutions and Impacts

Continue status quo. This alternative will leave the same staffing and level, and with the same level of accomplishment as at present. This option maintains the status quo, but has been shown to be inadequate to properly manage both administrative and research functions related to the park historian.

Compliance codes : OTHER ( )

Explanation: 516 DM2 App. 2, 1.7

Project Statement

USAR-C-020.000

Last Update: 02/08/96  
 Initial Proposal: 1995

Priority: 0  
 Page Num: 0048

Title : USS ARIZONA MEMORIAL DOCK MOORING INSPECTION

Funding Status: Funded: 10.00 Unfunded: 0.00

Servicewide Issues : C55 (MAINTENANCE)  
 Cultural Resource Type: STRC (Structure)  
 N-RMAP Program codes :

10-238 Package Number :

Problem Statement

The dock for the USS Arizona Memorial is a floating structure that is connected to the memorial, a listed structure, with a metal ramp. It is anchored to the bottom of the harbor with a system of chains going down approximately 45' to concrete anchor blocks. In July, 1990, the anchoring system was reconditioned by a Naval engineering division on contract to USAR.

The mooring system incorporates Chain Link Stud Anodes intended to stay galvanic deterioration of the anchor chains. Additionally, the system includes BRUCE TENSIONER devices to reduce chain slack.

The chains, anodes and BRUCE TENSIONERS must be inspected by divers at least every three years, or more often if necessary.

Description of Recommended Project or Activity

An inspection schedule will be established allowing for triannual inspections. Divers will be prepared to replace the six anodes at the time of the inspection. An evaluation will be made as to whether a more rigorous inspection schedule is needed.

During an inspection, the BRUCE TENSIONERS will also be inspected. This involves a team of divers descending to the anchor block, and counting the number of individual chain links ascending to the tensioner.

BUDGET AND FTEs:

		-----FUNDED-----			
	Source	Activity	Fund Type	Budget (\$1000s)	FTEs
1995:	PKBASE-CR	ADM	Recurring	2.00	0.05
1996:	PKBASE-CR	ADM	Recurring	2.00	0.05

Last Update: 02/08/96  
Initial Proposal: 1995

Project Statement

USAR-C-020.000  
Priority: 0  
Page Num: 0049

1997:	PKBASE-CR ADM	Recurring	2.00	0.05
1998:	PKBASE-CR ADM	Recurring	2.00	0.05
1999:	PKBASE-CR ADM	Recurring	2.00	0.05
			=====	
Total:			10.00	0.25

-----UNFUNDED-----

Activity	Fund Type	Budget (\$1000s)	FTEs	
			=====	
Total:			0.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action. Choosing this option will put the USS Arizona Memorial, a listed structure, in jeopardy. The anodes are designed to fail. Without their replacement, the floating dock structure will become free from its moorings, and will pull away from the memorial structure, likely damaging that structure.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM2 APP. 2, 1.7

Last Update: 12/02/95  
Initial Proposal: 1993

Priority: 10  
Page Num: 0050

Title : LIBRARY & HISTORICAL DATABASE ESTABLISHMENT

Funding Status: Funded: 10.00 Unfunded: 59.50

Servicewide Issues : C42 (CSP)  
C86 (HISTORY)

Cultural Resource Type: ETHN (Ethnographic Resources)  
N-RMAP Program codes :

10-238 Package Number : 202

### Problem Statement

A prodigious amount of historical information and documentation has been gathered at USAR library. Inventory of this myriad material includes 2000 book volumes, over 400 videos, 32 micro film reels, over 8,000 photographs and slides, 300+ oral history tapes and approximately 22,000 paper documents. Material is also constantly being added to park files. The material is currently stored as conventional files in a variety of locations. There is no comprehensive system being utilized to catalogue and store the material so that it may be easily retrieved for use by researchers, the general public, USAR staff, and media requests.

This material needs to be formally established as a research library. What constitutes as a library presently is housed in its own unsecured room with some volumes locked in cabinets, while others are merely stacked on open shelves. Documents and photographs, etc. are kept, mainly unsystematically in several different locations.

In a recent evaluation of USAR operations (see Operations Evaluation, WRO, Dec. 14, 1992) it was recommended that all books acquired by government, gift or donation, be accessioned into the museum collection.

A computerized system for accountability is needed. The system needs to offer full library services such as inventory, cross referencing, and material check in and out.

A data base utilizing computerized storage of all other materials, and retrieval techniques needs to be established. The goal of this data base is to create a standard organizational system for collecting and storing historically related materials.

This material would include a cross-reference of library resources, photo archives, oral histories and miscellaneous printed documents, such as letters, articles and reports. The scanning of paper documents and elimination of paper would greatly enhance storage capabilities.

The basic system needs include a computer system, applicable data base software, and a centralized storage system for conventional

Last Update: 12/02/95  
 Initial Proposal: 1993

Priority: 10  
 Page Num: 0051

files.

Description of Recommended Project or Activity

Inventory all printed materials currently in files for historically related documents, letters, maps, charts, articles and reports.

Consult with computer professionals and librarians to determine the best strategy for establishing a functional, user friendly, data base computer system. Prepare a suitable location within the USAR library, and install the system.

Install three, four drawer, legal style, file cabinets to store processed, printed materials.

A computer and scanner has been purchased that will allow the inventory (data basing) and scanning of reference materials. What is needed is personnel support to accomplish this task after a systematic program is developed.

Two courses of action can remedy the personnel situation. This can be accomplished by either receiving an additional .5 FTE to fill a Museum Technician position to assist the Historian in the sorting, processing and storage of data, or to contract required the services (see project statement USAR-C-019.000).

BUDGET AND FTEs:

		-----FUNDED-----			
Source	Activity	Fund Type	Budget (\$1000s)	FTEs	
1993:	NON-PROFI	ADM	One-time	10.00	0.00
			Total:	10.00	0.00
		-----UNFUNDED-----			
	Activity	Fund Type	Budget (\$1000s)	FTEs	
Year 1:	ADM	One-time	39.50	1.00	
Year 2:	ADM	Recurring	20.00	0.50	
			Total:	59.50	1.50

Last Update: 12/02/95  
Initial Proposal: 1993

Priority: 10  
Page Num: 0052

(Optional) Alternative Actions/Solutions and Impacts

Continue status quo. Choosing this alternative will not solve the problems of inefficiency and referencing that currently plague the historical information files. Information requests will continue to receive slow responses from park staff.

Use of an outside contractor. The data base could be set up using a professional contractor. While this option will likely result in a quality product, close supervision will be needed to assure the proper selection of materials from park files. Additionally, choosing this option will likely be more expensive than the plan outlined in the recommended activity.

Compliance codes : EXCL (CATEGORICAL EXCLUSION)

Explanation: 516 DM6 APP. 7.4 E(2)



Last Update: 12/02/95  
Initial Proposal: 1993

Priority: 11  
Page Num: 0053

Title : ORAL HISTORIES TRANSCRIPTION AND PUBLICATION

Funding Status: Funded: 6.00 Unfunded: 30.00

Servicewide Issues : C27 (ORAL HIST)  
Cultural Resource Type: ETHN (Ethnographic Resources)  
N-RMAP Program codes :

10-238 Package Number : 203

#### Problem Statement

One of the most valuable historical resources related to the attack on Pearl Harbor are the eyewitnesses to the event, both Japanese and American. The USAR Historian has been given the responsibility of collecting, accessioning, transcribing and maintaining an Oral History collection on the events surrounding the Pearl Harbor Attack. This collection currently consists of 100 audio tapes and over 200 video tapes.

Approximately one third of the oral history tapes in the collection have been transcribed, but the program has experienced a hiatus. Additional management and curation are currently needed to maintain the safety and viability of the collection. The final two thirds of the collection needs to be transcribed.

In its current state, the existing collection is safe, but inaccessible for research and public information uses. All interviews, once transcribed, need to be edited and assembled for publication.

Finally, there is an immediate need for an expansion of the collection. This resource is finite. By 2010, almost all the men and women and their eyewitness accounts of the events surrounding the attack on Pearl Harbor will be gone.

#### Description of Recommended Project or Activity

Contract with private sources for the continued transcription of collected interviews. Contract with a publishing firm to edit and publish the transcribed interviews.

Request an additional .5 FTE to be devoted to assist the park historian with management of the park's historical program. This would allow the park historian the freedom to pursue additional interviews both within the United States and abroad (see project statement USAR-C-019.000).

Provide funds for extensive travel to gather as many interviews

Last Update: 12/02/95  
 Initial Proposal: 1993

Priority: 11  
 Page Num: 0054

as possible while the resource is at hand.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
1993:	NON-PROFI RES	One-time	6.00	0.00
			=====	
Total:			6.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	ADM	One-time	30.00	0.50
			=====	
Total:			30.00	0.50

(Optional) Alternative Actions/Solutions and Impacts

Continue the status quo. Choosing this option will leave the collection safe, but inaccessible to the public or researchers. Eventually, this option will lead to the destruction of collection materials that have not been transcribed and are only electronically stored. This alternative will not allow for the gathering of additional interviews in the limited time left before this resource disappears, causing the loss of valuable historical insights.

Compliance codes : OTHER ()

Explanation: 516 DM6 APP. 7.4 E(2)

Project Statement

USAR-C-023.000

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 12  
Page Num: 0055

Title : TORPEDO CONSERVATION AND EXHIBIT CASE MODIFICATIONS

Funding Status: Funded: 0.00 Unfunded: 5.00

Servicewide Issues : C48 (TREATMENT)  
C49 (ENVIRONMNT)

Cultural Resource Type: OBJC (Object)  
N-RMAP Program codes :

10-238 Package Number : 204

Problem Statement

In 1991, USAR received a Japanese aerial torpedo that was dropped in Pearl Harbor on December 7, 1941. The Model 91, Type Two torpedo had been submerged in salt water for almost 50 years. Before delivery to USAR, the torpedo was exploded underwater for safety reasons. This is the only ordnance dropped during the attack on Pearl Harbor of this type to be recovered. The torpedo represents a resource of high quality and significance.

Due to the then upcoming 50th Anniversary Commemoration event, the torpedo was hastily stabilized and placed on exhibit in the USAR museum. Afterwards the torpedo began to show increasing signs of deterioration. The torpedo was removed from display and additional conservation treatment has begun and is still on going.

The exhibit case that the torpedo resided in has also suffered due to oil that was leaking from the exploded end of the torpedo. The design of the case needs to be reevaluated with a special emphasis on environmental controls and modified as needed.

Description of Recommended Project or Activity

Professional conservations were contracted for initial treatment of the torpedo. They provided a recommended treatment program which is currently being conducted inhouse that will stabilize the fabric of the torpedo, and ready it for display.

Evaluate the exhibit case, and perform modifications as needed.

Develope a new interpretive plan for exhibit of the torpedo.

Last Update: 12/02/95

Priority: 12

Initial Proposal: 1995

Page Num: 0056

## BUDGET AND FTEs:

-----FUNDED-----				
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
Total:			0.00	0.00
-----UNFUNDED-----				
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	MIT	One-time	5.00	0.00
Total:			5.00	0.00

## (Optional) Alternative Actions/Solutions and Impacts

No action. Choosing this option will allow continued deterioration of the torpedo. This alternative will leave the torpedo in an unsuitable exhibit case that contributes to the destruction of the torpedo fabric due to environmental stress, and offers an unsightly and unprofessional museum appearance to the public. This option is not in keeping with NPS Special Directive (SD)80-1.

Compliance codes : OTHER ( )

Explanation: NPS Special Directive (SD)80-1

Last Update: 12/02/95  
Initial Proposal: 1995

Priority: 25  
Page Num: 0057

Title : PRESERVATION OF THE MEMORIAL'S HISTORIC SETTING

Funding Status: Funded: 0.00 Unfunded: 91.00

Servicewide Issues : C10 (INVENTORY)  
C11 (REPORT)  
Cultural Resource Type: CULL (Cultural Landscape)  
N-RMAP Program codes :  
10-238 Package Number :

#### Problem Statement

For many visitors, the most meaningful portion of the USS Arizona Memorial experience is traveling by boat to the actual site of Battleship Row and the final remains of the fallen ship, USS ARIZONA. As visitors move over the hallowed waters of Pearl Harbor, they are almost completely surrounded by the historical landscape of December 7, 1941.

The most significant area of historic landscape is the eastern coastline of Ford Island that serves as a backdrop for the memorial. Most of the structures still visible on this portion of Ford Island are original and were present on December 7, 1941. Although there has been little change to this area since 1941, the vegetational growth along the shoreline has gone unchecked and is prolific.

An effort needs to be made to both restore the historic viewshed of Ford Island as seen from the memorial and ensure that this view remains protected. Restoring the cultural landscape will preserve a moment of history that has enormous interpretive potential. Further, done as a cooperative effort between the NPS and the Navy, such a project provides the Navy with an excellent opportunity for fulfilling the Legacy Resource Management Program that has been mandated for the Department of Defense.

#### Description of Recommended Project or Activity

Research photographs and documents to determine the desired, historical appearance of the approximately .125 mile section of Ford Island Shoreline that fronts the USS Arizona Memorial.

Set up a cooperative work agreement with the US Navy through the Navy Archaeologists that are resident on the Pearl Harbor Naval Station.

Complete the 106 compliance procedure for proposed actions, as the intended work area is part of a listed historical site.

Last Update: 12/02/95

Priority: 25

Initial Proposal: 1995

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Clear the shoreline of encroaching vegetation. Perform landscaping as needed.

Support the addition of the Ford Island shoreline that is integral to the historic viewshed for inclusion in any legislation and/or management agreements that establish USAR's mission and purview.

## BUDGET AND FTEs:

Source		Activity	FUND Type	Budget (\$1000s)	FTEs
-----FUNDED-----					
				Total:	0.00
-----UNFUNDED-----					
		Activity	FUND Type	Budget (\$1000s)	FTEs
Year 1:	RES		One-time	50.00	0.00
	ADM		Recurring	4.00	0.10
				Subtotal:	0.10
Year 2:	MIT		One-time	25.00	0.00
	ADM		Recurring	4.00	0.10
				Subtotal:	0.10
Year 3:	ADM		Recurring	4.00	0.10
Year 4:	ADM		Recurring	4.00	0.10
				Total:	0.40

## (Optional) Alternative Actions/Solutions and Impacts

Continue status quo. Choosing this option means that the NPS will continue to remain uninvolved with planing and development that directly--and likely--adversely affects the visual environment that surrounds the USAR visitors and the USAR resources. With the advent of a proposed causeway bridge to Ford Island, a structure that already will begin to encroach on the historical viewshed, there is an expectation for increased development and urbanization of the island. This alternative will leave the NPS with little input into this development.

Restore the viewshed only. This option restores the historical viewshed, but does not allow for its continued protection. While perhaps the most immediately, politically feasible option, it is

Project Statement

USAR-C-024.000

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Priority: 25

Initial Proposal: 1995

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not the recommended one. Once the historic shoreline is modernly developed, future opportunities for restoring the historic viewshed will cease to exist. Not only will this option be as costly as the recommended action, the moneys devoted to this project will eventually be lost when island development occurs.

Compliance codes : NHPA ((106) NAT. HIST. PRES.)  
OTHER ()

Explanation: EO 11593; EIS prepared 8/90 by USN

Project Statement

Last Update: 02/08/96  
 Initial Proposal: 1995

USAR-C-025.000  
 Priority: 9  
 Page Num: 0060

Title : MUSEUM COLLECTIONS MANAGEMENT

Funding Status: Funded: 0.00 Unfunded: 20.00

Servicewide Issues : C43 (CONDIT SVY)  
 C48 (TREATMENT)  
 Cultural Resource Type: CULL (Cultural Landscape)  
 N-RMAP Program codes :

10-238 Package Number : 165

Problem Statement

The park's museum collection consists of over 5,000 artifacts as well as approximately 30,000 images. The majority of objects in the collection have never been examined by a conservator, and the park is in need of a Collection Condition Survey (CCS). The park needs to schedule a CCS as well as address other collections needs including preservation treatments, preventive conservation methods, and proper storage techniques.

Description of Recommended Project or Activity

Complete a Collection Condition Survey. Implement needed preservation treatments on artifacts, conduct preventive conservation methods, and proper storage techniques.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	RES	Cyclic	20.00	0.00
		Total:	20.00	0.00



Last Update: 02/08/96

Priority: 9

Initial Proposal: 1995

Page Num: 0061

(Optional) Alternative Actions/Solutions and Impacts

No action will result in continued degradation of artifacts and there will be a continued insufficient documentation of present collection.

Compliance codes :

Explanation:

Project Statement

USAR-C-026.000

Last Update: 02/08/96

Priority: 20

Initial Proposal: 1995

Page Num: 0062

Title : CONSTRUCT AND INSTALL AIRPOWER EXHIBIT

Funding Status: Funded: 0.00 Unfunded: 20.00

Servicewide Issues :  
 Cultural Resource Type: OBJC (Object)  
 N-RMAP Program codes :

10-238 Package Number : 205

Problem Statement

At present there are only a few disjointed exhibits in the museum that deal with the aviation story of the Pearl Harbor attack. Airpower was the major thrust of the Japanese attack against the battlefleet, as well as the entire island's military installations. The successful air attack was a contributing factor in the changing role that airpower played in naval strategy. This vital role that airpower played in the Pearl Harbor attack needs to be formally interpreted in the park's museum.

Description of Recommended Project or Activity

The park plans to construct and install a new museum exhibit concerning the role of airpower during the December 7, 1941, attack on Pearl Harbor. This exhibit will utilize a number of aviation related artifacts from the collection (Japanese and American, historic and archeological objects) as well as a companion video system to be donated to the park. Funding will allow for contracted construction and installation costs.

BUDGET AND FTEs:

-----FUNDED-----					
Source	Activity	Fund Type	Budget (\$1000s)	FTEs	
			=====	=====	
Total:			0.00	0.00	
-----UNFUNDED-----					
		Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	RES	One-time	20.00	0.00	
Total:			20.00	0.00	
			=====	=====	

Last Update: 02/08/96  
Initial Proposal: 1995

Priority: 20  
Page Num: 0063

(Optional) Alternative Actions/Solutions and Impacts

Not taking action on this project will leave a gap in an important interpretive display that is needed within the museum.

Compliance codes :

Explanation:

Project Statement

USAR-C-027.000  
Priority: 21  
Page Num: 0064

Last Update: 02/08/96  
Initial Proposal: 1994

Title : WAYSIDE EXHIBIT #1 DEC 7, 1941 VESSELS UNDER ATTACK

Funding Status: Funded: 0.00 Unfunded: 5.00

Servicewide Issues : C48 (TREATMENT)  
C38 (SPEC STUDY)

Cultural Resource Type: OBJC (Object)

N-RMAP Program codes :

10-238 Package Number : 101

Problem Statement

Current Wayside Exhibit #1 needs to have historical information updated and corrected.

Description of Recommended Project or Activity

Wayside exhibit #1 is positioned near the shoreline of Pearl Harbor. It has been in place since 1991. New historical evidence has provided us with new ship positions that need to be added to the map. Recent research has produced new information. Present text needs to be updated. A new panel is needed to replace the outdated and inaccurate data.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	INT	One-time	5.00	0.00
		Total:	5.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action will result in the continued use of a interpretive exhibit that has incorrect information.

Project Statement

Last Update: 02/08/96  
Initial Proposal: 1994

USAR-C-027.000  
Priority: 21  
Page Num: 0065

Compliance codes :

Explanation:

Project Statement

USAR-C-028.000

Last Update: 02/08/96  
Initial Proposal: 1994

Priority: 22  
Page Num: 0066

Title : FABRICATION OF MUSEUM EXHIBIT CASE

Funding Status: Funded: 0.00 Unfunded: 10.00

Servicewide Issues : C47 (STORAGE)  
Cultural Resource Type: OBJC (Object)  
N-RMAP Program codes :

10-238 Package Number : 167

Problem Statement

The park's museum lacks proper environmental controls. Most of the objects cannot be safely exhibited and are subject to environmental degradation when displayed.

Description of Recommended Project or Activity

The park needs to construct a new museum case that can be properly sealed to create a microenvironment suitable for museum objects. This would allow the public greater access to the collection without endangering those objects.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	INT	One-time	10.00	0.00
		Total:	10.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

No action will result in the continued degradation of historically important objects when put on public view.

Project Statement

Last Update: 02/08/96  
Initial Proposal: 1994

USAR-C-028.000  
Priority: 22  
Page Num: 0067

Compliance codes :

Explanation:

Project Statement

USAR-C-029.000  
 Priority: 23  
 Page Num: 0068

Last Update: 02/08/96  
 Initial Proposal: 1993

Title : BATTLESHIP MODEL EXHIBIT REHABILITATION

Funding Status: Funded: 0.00 Unfunded: 3.00

Servicewide Issues : C48 (TREATMENT)  
 Cultural Resource Type:  
 N-RMAP Program codes :

10-238 Package Number : 156

Problem Statement

The USS Arizona 1/8th scale model is in need of repair and rehabilitation.

Description of Recommended Project or Activity

The park's museum currently has on display a 1/8th scale model of the USS Arizona depicting what the ship looked like prior to being sunk on December 7, 1941. The model was constructed for the Navy during the 1960s. The exhibit is in need of repair and rehabilitation.

A professional model builder would be contracted to perform the necessary rehabilitation.

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
		Total:	0.00	0.00
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	INT	One-time	3.00	0.00
		Total:	3.00	0.00



Last Update: 02/08/96  
Initial Proposal: 1993

Priority: 23  
Page Num: 0069

(Optional) Alternative Actions/Solutions and Impacts

No action will result in the continued display of a interpretive model that has some details that are not accurate. With out the preventive maintenance, future degradation of the model will occur.

Compliance codes :

Explanation:

Project Statement

USAR-C-030.000  
Priority: 26  
Page Num: 0070

Last Update: 02/08/96  
Initial Proposal: 1996

Title : DIVE PROGRAM

Funding Status: Funded: 4.60 Unfunded: 24.00

Servicewide Issues : N24 (OTHER (NATURAL))  
C08 (SPEC STUDY)

Cultural Resource Type:  
N-RMAP Program codes :

10-238 Package Number :

Problem Statement

In accordance with NPS-4, the park manages a dive program. All diving activities performed by park staff as part of their daily routine assignments must adhere to the policies and guidelines of this program. The dive program insures that all dive operations are carried out safely by qualified personnel, and it protects individuals and the government from lawsuits, tort claims, and other actions. At present, only one member of the staff is fully qualified in accordance with NPS-4. Base funding has not been budgeted for the required hazardous duty pay for dive team members. Base funding does not reflect costs of purchasing required equipment, annual maintenance, and training of new team members and required refresher training of current members.

Description of Recommended Project or Activity

This project will enhance the operation of the park's dive program. The program will ensure that all diving continues to be performed in accordance with NPS-4. Only personnel on the park dive team will be allowed to use SCUBA for carrying out assigned tasks. Personnel will be certified divers in accordance with park service guidelines and will satisfy all requirements of NPS-4 (medical examination, written test, swim test, "check out" dives by the park dive officer). As part of the dive program funding is needed for providing personnel with proper dive equipment, providing physicals, administering qualifying tests, hazardous duty pay, training materials and instruction, and overseeing the program. A minimum of two divers are needed in the park.

Project Statement

USAR-C-030.000

Last Update: 02/08/96  
 Initial Proposal: 1996

Priority: 26  
 Page Num: 0071

BUDGET AND FTEs:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
1996:	PKBASE-CR ADM	Recurring	0.60	0.10
	NON-PROFI RES	Recurring	4.00	0.00
Subtotal:			4.60	0.10
Total:			4.60	0.10
		-----UNFUNDED-----		
	Activity	Fund Type	Budget (\$1000s)	FTEs
Year 1:	ADM	Recurring	16.00	0.40
	RES	Recurring	8.00	0.00
Subtotal:			24.00	0.40
Total:			24.00	0.40

(Optional) Alternative Actions/Solutions and Impacts

Maintaining status quo will allow the program to operate at a bare minimal requirement. Having only one diver in the park restricts access to the resource (shipwreck) for research, monitoring, etc. Requests for volunteer assistance are necessary. The use of volunteers still requires budget support of equipment and supplies. Without an increase in funding or formalization of costs within park base, the reliability of the dive program, with its associated research and monitoring responsibilities for the shipwreck resource, can not guaranteed.

Compliance codes : ARPA (ARCH. RES. PROT. ACT.)  
 OTHER ( )

Explanation: 516 DM6 APP. 7.4 E(2)

Project Statement

USAR-C-031.000

Last Update: 02/08/96

Priority: 0

Initial Proposal: 1996

Page Num: 0072

Title : SECTION 106/NEPA COMPLIANCE FOR PARK PROJECTS

Funding Status: Funded: 2.50 Unfunded: 0.00

Servicewide Issues : C08 (SPEC STUDY)  
C72 (PROTECTION)

Cultural Resource Type: SITE (Archeological Site)

N-RMAP Program codes :

10-238 Package Number :

Problem Statement

The National Historic Preservation Act of 1966 (NHPA) and the National Environmental Protection Act of 1969 (NEPA) complement and enhance the fundamental resource protection mandates of the National Park Service. Section 106 of NHPA and NEPA mandates federal agencies to consider the effects of their actions on the natural and cultural resources. All activities and projects undertaken by the park need to be reviewed for compliance with Section 106 and NEPA. This includes development and maintenance of park buildings and grounds, as well as cultural resource projects.

Description of Recommended Project or Activity

All projects undertaken by the park will be reviewed for Section 106 and NEPA compliance. The park will maintain a data base for documentation of compliance issues (environmental and cultural). This documentation will include dates, brief descriptions of projects, comments concerning compliance, and signatures of personnel making comments. The cultural resource specialist has the collateral duty of Section 106 Coordinator and compliance officer.

BUDGET AND FTES:

		-----FUNDED-----		
Source	Activity	Fund Type	Budget (\$1000s)	FTEs
1996:	PKBASE-CR ADM	Recurring	2.50	0.10
			=====	
Total:			2.50	0.10

Project Statement

USAR-C-031.000

Last Update: 02/08/96

Priority: 0

Initial Proposal: 1996

Page Num: 0073

-----UNFUNDED-----

Activity	Fund Type	Budget (\$1000s)	FTEs
		=====	=====
Total:		0.00	0.00

(Optional) Alternative Actions/Solutions and Impacts

Disregard of this project can result in the park being found in noncompliance with regards to Section 106 or NEPA. The park has the responsibility to protect its resources.

Compliance codes : ARPA (ARCH. RES. PROT. ACT.)  
NHPA ((106) NAT. HIST. PRES.)

Explanation:

**APPENDIX A: CULTURAL RESOURCE DOCUMENTATION CHECKLIST**

TITLE	CURRENT AND APPROVED	INCOMPLETE; NEEDS REVISION OR UPDATING	NEEDED
PLANNING DOCUMENTS			
Preauthorization and Authorization Statement of Management (SFM)		X	
Outline of Planning Requirements (OPR)			
General Management Plan (GMP)			DCP
Development Concept Plan (DCP)			X
Resources Management Plan (RMP)		X	
Interpretive Prospectus (IP)		X	
SERVICEWIDE INVENTORIES, LISTS, CATALOGS AND REGISTERS			
Cultural Resources Management Bibliography (CRIB)			
Cultural Sites Inventory (CSI)			
List of Classified Structures (LCS)	X		
National Catalog of Museum Objects			
Cultural Landscapes Inventory (CLI)			
National Register of Historic Places	X		

**APPENDIX A: CULTURAL RESOURCE DOCUMENTATION CHECKLIST  
(CONT.)**

TITLE	CURRENT AND APPROVED	INCOMPLETE; NEEDS REVISION OR UPDATING	NEEDED
BASIC CULTURAL RESOURCE DOCUMENTS			
Archeological Overview and Assessment	X		
Archeological Identification Studies			
Archeological Evaluation Studies			X
Rapid Ethnographic Assessment Procedures (REAP)			
Cultural Affiliation Study			
Ethnographic Landscape Study			
Ethnographic Overview & Assessment		X	
Ethnographic Oral Histories & Live Histories		X	
Ethnographic Program			
Historic Resource Study		X	
Historical Base Map		X	
Park Administrative History		X	
Scope of Collection Statement			X
SPECIAL RESOURCE STUDIES AND PLANS			
Archeological & Ethnographic Collections Studies			
Archeological Data Recovery Studies			
Collection Management Plan			X
Collection Storage Plan			X
Collection Condition Survey			X
Cultural Landscape Report (CLR)			

**APPENDIX A: CULTURAL RESOURCE DOCUMENTATION CHECKLIST  
(CONT.)**

TITLE	CURRENT AND APPROVED	INCOMPLETE; NEEDS REVISION OR UPDATING	NEEDED
SPECIAL RESOURCE STUDIES AND PLANS CONT.			
Ethnohistory			
Exhibit Plan		X	
Historic Furnishing Report			
Historic Structure Report (HSR)			
Inventory & Collection Assessment Program (ICAP)			
Social Impact Study			
Special History Study			
Traditional Use Study			
HABS/HAER - Ha. 19, Midget Submarine			X



**APPENDIX B: PARK CULTURAL RESOURCE STATUS SUMMARY CHARTS**

Charts to be added as needed

**APPENDIX C: ANNUAL ACCOMPLISHMENTS REPORTS**

To be added on an annual bases beginning the end of FY-96.

## APPENDIX D: LIST OF RELATED ACTION PLANS

Name of Plan/Study	Preparer	Date	Comments
Pearl Harbor Naval Complex Master Plan. Volume I: Land Use Plan	Department of the Navy, Pacific Division, Naval Facilities Engineering Command	1992	
Pearl Harbor Naval Complex Master Plan. Volume II: Capitol Improvements Plan	Department of the Navy, Pacific Division, Naval Facilities Engineering Command	1992	
Historic Preservation Plan for National Historic Landmark, U. S. Naval Base, Pearl Harbor	Commander US Naval Base, Pearl Harbor	1978	being revised

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## APPENDIX F: GLOSSARY

Throughout this text certain words have been used to express very specific and precise meanings. The following glossary defines how these words are used in the Resource Management Plan.

**Accession:** a transaction whereby one or more objects are acquired in the same manner from one source at one time for a museum collection. Accessions include gifts, exchanges, purchases, field collections, loans, and transfers.

**Acquisition:** the act or process of acquiring through purchase or donation fee title to or other interest in real property (including development rights or remainder interest). Also applies to museum property (see: accession).

**Archeology:** the scientific study, interpretation, and reconstruction of past human cultures from an anthropological perspective based on the investigation of the surviving physical evidence of human activity and the reconstruction of related past environments. Historic archeology uses historic documents as additional sources of information. An **archeologist** is a scientist professionally trained to conduct such studies.

**Archeological resource:** any physical evidence of past human activity that is capable of revealing information through the investigative techniques used by archaeologists.

**Archives:** the non-current records of an organization or institution preserved for their historic value. Official records of the NPS are managed according to National Archives and Records Administration standards, and are outside the scope of this plan. The term "archives" is often used to refer to the repository where archives and other historic documents are maintained.

**Artifact:** a portable object resulting from human activity. The term usually refers to objects found in or removed from archeological sites.

**Association:** the relationship between a historic event, activity, or person and a cultural resource.

**Barbette:** an armored cylinder protecting a turreted gun(s) on a ship.

**Biofouling:** the layer of both dead and living organic material that is found encrusted over the surface of artifacts submerged in a salt water environment for an extended length of time.

**Building:** an enclosed structure with walls and a roof, consciously created to serve some residential, industrial, commercial, agricultural, or other human use.

**Cataloging:** the process of assigning a unique identifying number to a museum object and recording descriptive and documentary data on the Museum Catalog Record, Form 10-254 (or 10-254B).

**Conservation:** measures taken to prolong the life of a museum object. In the NPS, museum conservation encompasses the following two functions:

**Preservation:** action taken to prevent damage and to minimize deterioration of an object by practicing preventive conservation (q.v.) or by performing a suitable treatment on an object itself.

**Restoration:** action to return an object to a former appearance by removing later accretions and/or replacing or replicating missing elements.

**Cultural landscape:** a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

**Cultural resource:** a tangible entity significant for its cultural association(s) and integrity. Cultural resources include properties listed or eligible for listing in the National Register of Historic Places and cultural materials in museum collections. For purposes of National Register listing, cultural resources are categorized as districts, sites, building, structures, and objects. For NPS management purposes they are categorized as archeological resources, cultural landscapes, structures, museum objects and archival materials, and ethnographic resources.

**Cultural resource management:** the range of activities aimed at understanding, preserving, and providing for the enjoyment of cultural resources. It includes research related to cultural resources, planning for actions affecting them, and stewardship of them in the context of overall park operations. It also includes support for the appreciation and perpetuation of related cultural practices.

**Ethnographic resource:** a tangible or intangible aspect of a cultural system, past or present, that is identified as significant by a recognized ethnic group. Tangible resources include cultural resources that should be preserved primarily for their historic, technical, aesthetic, or scientific values and other natural and material entities that should be specifically managed with awareness of their ideological, religious, or utilitarian associations with ongoing cultural practices. Intangible resources consist of cultural practices and their associated knowledge and beliefs.

**Evaluation:** process by which the significance of a property is judged, and eligibility for National Register of Historic Places is determined.

**Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER):** architectural and engineering documentation programs that produce a thorough archival record of buildings, engineering structures, and cultural landscapes significant in American history and the growth and development of the built environment.

**HABS Architectural Data Form:** a one-page form intended to provide identifying information for accompanying HABS documentation.

**HABS/HAER Inventory Card:** a one-page form that includes written data, a sketched site plan, and a 35mm dry mounted contact print.

**Historic context:** an organizing structure created for planning purposes that groups information about historic properties based on common themes, time periods, and geographical areas.

**Historic fabric:** see **material**.

**Historic landscape:** a cultural landscape associated with events, persons, design styles, or ways of life that are significant in American history, landscape architecture, archeology, engineering, and culture; a landscape listed in or eligible for the National Register of Historic Places.

**Historic site:** a type of **cultural landscape**. A landscape significant for its association with a historic event.

**Historical significance:** the meaning or value ascribed to a structure, landscape, object, or site based on the National Register criteria for evaluation. It normally stems from a combination of association and integrity.

**Hygrothermograph:** a device that measures and records (usually on paper) the ambient humidity and temperature over a period of time.

**Library:** a collection of books, journals, pamphlets, and photographic, graphic, and audio documents associated with the theme and purpose of a particular park, center, region, or office and cataloged and made available for general staff and visitor reference and research use.

**Magnetometer:** a device used to detect ferric masses that are submerged in water and/or earth or sediments.

**Material:** the physical elements that were combined or deposited to form a property. Historic material or historic fabric is that from a historically significant period, as opposed to material used to maintain or restore a property following its historic period(s).

**Museum collection:** assemblage of objects, works of art, historic documents, and/or natural history specimens collected according to a rational scheme and maintained to they can be preserved, studied, and interpreted for public benefit. Museum collections normally are kept in park museums, although they may also be maintained in archeological and historic preservation centers.

**Museum object:** material thing possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design. Museum objects include prehistoric and historic objects, artifacts, works of art, archival materials, and natural history specimens that are part of a museum collection. Detached elements of structures may be designated museum objects.



**National Historic landmark:** a district, site, building, structure, or object of national historical significance, designated by the secretary of the interior under authority of the Historic Sites Act of 1935 and entered in the National Register of Historic Places.

**National Register of Historic Places:** the comprehensive list of districts, sites, buildings, structures, and objects of national, regional, state, and local significance in American history, architecture, archeology, engineering, and culture kept by the NPS under authority of the National Historic Preservation Act of 1966.

**Natural:** unhampered or unmodified by humans.

**Nautical vessel:** any of the following three type of watercraft:

**Boat:** a nautical vessel usually under 20 feet long, small enough to be treated as an object, easily transported for management purposes;

**Ship:** a larger nautical vessel that is still intact, treated as a historic structure;

**Shipwreck:** remains of a ship found in its original underwater or terrestrial context, treated first as an archeological site and ultimately as a historic structure depending on its structural integrity.

**106:** see Section 106.

**Period of significance:** the span of time in which a property attained the significance for which it meets the National Register criteria.

**Preservation:** the act or process of applying measures to sustain the existing form, integrity, and material of a historic property. It may include initial stabilization work, where necessary, as well as ongoing preservation maintenance and repair of historic materials and features. See **Conservation**.

**Protection:** action to safeguard a historic property by defending or guarding it from further deterioration, loss, or attack or shielding it from danger or injury. In the case of structures and landscapes such action is generally of a temporary nature and anticipates future preservation treatment; in the case of archeological sites, the protective measure may be temporary or permanent. Protection in its broadest sense also includes long-term efforts to deter or prevent vandalism, theft, arson, and other criminal acts against cultural resources.

**Restoration:** action to return an object to a former appearance by removing later accretions and/or replacing or replicating missing elements. See **Conservation**.

**Salvage:** recovery, through professional investigations and documentation, of significant cultural resource materials and data in lieu of in-place resource preservation.

**Section 106, or "106":** refers to Section 106 of the National Historic Preservation Act of 1966 as amended, which requires federal agencies to take into account the effects of their proposed

undertakings on properties included or eligible for inclusion in the National Register of Historic Places and give the Advisory Council on Historic Preservation a reasonable opportunity to comment on the proposed undertakings.

**Side scan sonar:** a type of sonar device often used to map water basins. The submerged sonar "fish" emits a pulse to either side and creates profile images of bottom structures.

**Significance:** see **Historical significance**.

**Stabilization:** action to render an unsafe, damaged, or deteriorated property stable while retaining its present form.

**State Historic Preservation Officer (SHPO):** an official within each state appointed by the governor to administer the state historic preservation program and carry out certain responsibilities relating to federal undertakings within the state.

**Structure:** a constructed work, usually immovable by nature or design, consciously created to serve some human activity. Examples are buildings of various kinds, monuments, dams, roads, railroad tracks, canals, millraces, bridges, tunnels, locomotives, nautical vessels, stockades, forts and associated earthworks, Indian mounds, ruins, fences, and outdoor sculpture. In the National Register program, "structure" is limited to functional constructions other than buildings.

**Submerged cultural resource:** an underwater historic or prehistoric remains.

**Submerged Cultural Resources Unit Report and Publication Series:** The Submerged Cultural Resources Unit (SCRU) was established to conduct research on submerged cultural resources throughout the NPS.

**Submerged Cultural Resources Assessment.** First line document that consists of a brief literature search, an overview of the maritime history and the known or potential underwater sites in the park, and preliminary recommendations for long-term management. It is designed to have application to GMP/DCPs and to become a source document for a park's Submerged Cultural Resources Management Plan.

**Submerged Cultural Resources Survey.** Comprehensive examination of blocks of park lands for the purpose of locating and identifying as much of the submerged cultural resources base as possible. A comprehensive literature search would most likely be a part of the Phase I report but, in some cases, may be postponed until Phase II.

**Phase I --** Reconnaissance of target areas with remote sensing and visual survey techniques to establish location of any archeological sites or anomalous features that may suggest the presence of archeological sites.

**Phase II --** Evaluation of archeological sites or anomalous features derived from remote sensing instruments to confirm their nature and, if possible, their significance. This may involve exploratory removal of overburden.

**Submerged Cultural Resources Study.** A document that discusses, in detail, all known underwater archeological sites in a given park. This may involve test excavations. The intended audience is managerial and professional, not the general public.

**Submerged Cultural Resources Site Report.** Exhaustive documentation of one archeological site which may involve a partial or complete site excavation. The intended audience is primarily professional and incidentally managerial. Although the document may be useful to a park's interpretive specialists because of its information content, it would probably not be suitable for general distribution to park visitors.

**Submerged Cultural Resources Special Report Series.** These may be in published or photocopy format. Included are special commentaries, papers on methodological or technical issues pertinent to underwater archeology, or any miscellaneous report that does not appropriately fit into one of the other categories.

**Undertaking:** as referred to in Section 106 of the National Historic Preservation Act, any federally assisted, federally licensed, or federally sanctioned project, activity, or program that can result in changes in the character or use of historic properties. Undertakings include new and continuing projects, programs, and activities that are (1) directly undertaken by federal agencies; (2) supported in whole or in part, directly or indirectly, by federal agencies; (3) carried out pursuant to a federal lease, permit, license, approval, or other form of permission; or (4) proposed by a federal agency for congressional authorization or appropriation. Undertakings may be either site-specific or non-site-specific. (See 36 CFR 800.2[o])

**Underwater archeology:** the sub-discipline of archeology that uses specialized skills and techniques to extend archeological method and theory to submerged sites. It includes nautical archeology, which is specifically focused on shipwreck sites.

**APPENDIX G: LOCATOR / RESOURCES MAP**

Resources map is inserted after this page.

## Cultural Resources Related to *U.S.S. Arizona* Memorial

