United States Department of the Interior Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

For HCRS use only received A1JG 5 1983 date entered

See instructions in *How to Complete National Register Forms*Type all entries—complete applicable sections

1. Name	9			
historic	Japanese Ligh	nthouse on Puluwat	Atoll	
and/or common	Puluwat Lightl	nouse		
2. Loca	tion			
street & number	Allei Island			not for publication
city, town Pul	Luwat Atoll	vicinity of	congressional district	
state Truk St	tate TTARE code	96942 county	-F.S.M. Truck	wist code
3. Class	ification			
district building(s) _X structure site	Ownershippublic private both Public Acquisition in process being considered	Status occupied work in progress Accessible yes: restricted yes: unrestricted no	Present Use agriculture commercial educational entertainment government industrial military	museum park private residence religious scientific transportation X other: not in us
name	er of Proper		Turned 1 Vo	20120
street & number			os Konno, Urutal Ka	пка
city, town	Puluwat Island, N/A	vicinity of	state	Tr u ķ State
5. Loca	tion of Lega	al Descripti	on	
courthouse, regist	ry of deeds, etc. N/A			
street & number	N/A			
city, town	N/A	l.	state	N/A
6. Repre	esentation i	in Existing	Surveys	
A survey of title (Se	he Japanese Lightho e Continuation Shee	ouse on Puluwat Ato et) has this pr	oll, and recommendat operty been determined el	ions for its reuse. egible?yes _Xno
date Apr	il, 1979		federal sta	te county local
depository for surv	vey records T.T. His	storic Preservation	office	
city, town Sa.	ipan		state	C.M. 96950

7. Description

Condition excellent _X_ good	deteriorated	Check one _X_ unaltered altered	Check one _X_ original s moved	ite date
X fair	unexposed			

Describe the present and original (if known) physical appearance

Present Appearance

The lighthouse complex, if viewed from above, is roughly keyhole shaped; the tower forming the top of the hole, with a four-sided two story operations building connected to it by a short hallway. The lighthouse, which is of all concrete construction, is situated atop a seven-sided platform which is formed by a concrete retaining wall, approximately one meter high, filled with coral boulders. Three sets of steps cut through the raised platform and allow for access to the lighthouse above. The tower is approximately 32 meters high.

The lighthouse complex is completely surrounded by a perimeter fence constructed of vertical concrete posts connected midway by horizontal reinforced concrete cross posts. In some places the vertical members have toppled and most of the horizontal connections have failed, leaving only rusting reinforcing rods inbetween. There are four openings in the perimeter fence allowing access to the inner area, including the main entrance at the east. A concrete sidewalk runs from the main tower entrance to the main entrance in the perimeter fence.

Also located within the perimeter is a single story concrete generator building measuring nine by four meters located at the extreme southwest corner of the site. The structure's western face is heavily damaged, as is the roof, apparently the result of a direct bomb strike. The rusting remains of a steel tower are located north of the lighthouse just within the perimeter fence. Three concrete tie-down pads surround the tower. Located atop the platform two meters south of the lighthouse is a concrete water catchment. The catchment has two openings on the top. A vertical concrete pipe protrudes from the northwest corner. The pipe was originally connected across the story roof of the operations building by a small diameter steel pipe, Other features on the platform consist of two one by one meter concrete walled wells; one just east of the water catchment and the other just northeast of the main steps leading to the tower.

The lighthouse tower is of all concrete construction. Its walls are approximately .6 meters thick. The main entrance of the lighthouse is located in the east face of the tower. A concrete sidewalk runs from this entrance to the main entrance in the perimeter fence. Entry to the tower is gained by climbing concrete steps equipped with a steel handrail. Inside the tower a circular stairway provides access to both the first and second floors of the main structure as well as the beacon area at the extreme top. Located at the top of the tower are the rusted remains of the beacon machinery. The beacon itself is no longer present. Above the machinery is a metal base where the beacon was originally located. A walkway, equipped with a steel safety rail runs around the circumference of the machinery. This area is covered by a metal dome supported by steel posts. The lightbeacon was turned by a gravity powered mechanism. A circular shaft from the machinery runs vertically through the entire length of the tower. Originally a weight was suspended at the top of the shaft and as gravity slowly pulled it to the bottom, large gears were moved forcing the beacon to turn.

8. Significance

1400-1499 1500-1599 1600-1699 1700-1799 1800-1899	9,	
Specific dates	1938-40	Builder/Architect A Japanese man whose name was not recorded

Statement of Significance (in one paragraph)

The lighthouse complex on Puluwat Atoll is significant for several reasons. First, its construction was a remarkable feat for that time. The entire complex was constructed using only simple hand tools. No heavy equipment was employed. Construction went on for two long years, and is remembered by those who participated as backbreaking labor. Second, in constructing the lighthouse, the Japanese greatly disrupted the lives of the Puluwatans. Not only were all physically able males pressed into construction gangs, it was also necessary for the Japanese to bring in additional Trukese workers from the Halls and the Lagoon Islands. Thus, construction of the lighthouse caused massive social impacts to the Atoll's culture, and extreme physical hardships for most Puluwatans. Prior to the construction, Puluwat had been almost completely isolated from the outside world, and its residents had had no influential encounters with foreigners. Finally, the structure itself is a good example of pre-War Japanese marine architecture.

-see continuation sheets-

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name/title	e Scott Russell	L. Historic Prese	rvation Off	icer		
organizat	tion T.T. Histor	ric Preservation (Office	date	12-3-80	
		N/A				
street & r	number			teleph	one 947	77 (overseas)
city or to	wn Saipan			state	C.M. 969	50
12.	State His	itoric Pres	ervatio	on Of	ficer (Certificatio
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National Register of Historic Places Inventory—Nomination Form

For NPS use only received date entered

Continuation sheet

Item number 6

Page

1

Notes on the Survey

In April 1979, a survey of the lighthouse was undertaken by Scott Russell of the Trust Territory Historic Preservation Office and Francis Buekea of the Truk Office. During the survey, which took three days, architectural measurements of the lighthouse and associated features were taken, a site map was prepared, and interviews with older residents of Puluwat were undertaken to collect ethnographic background information relating to the structure.

Survey activities were made difficult because of the extremely isolated location of Puluwat, and the Atoll's lack of such basic amenities as electricity, running water, restaurants, stores, hotels and automobiles. Survey equipment consisting of a camera, meter tape, writing materials and a compass were all that were available to the survey team. Due to time constraints, it was not possible to clear the site of the heavy jungle vegetation. This dense ground cover made measuring features difficult and time consuming. It also made it impossible to photograph entire elevations. Consequently the photos included with this nomination document specific architectural components such as windows, doorways, equipment, and also document structural damage.

The survey team during its brief stay did not have time to examine the airfield site in any detail, although a quick hike through the interior of Allei did reveal that these facilities are probably still in place. The Trust Territory Historic Preservation Office plans to conduct a survey of this complex sometime in the future.

National Register of Historic Places Inventory—Nomination Form

For NPS use only received date entered

Continuation sheet

Item number

Page

The two story operations building is connected to the tower by a narrow hallway. This portion of the complex, like the tower, is of all concrete construction. The first floor is divided into three rooms. Two covered porch areas approximately 1.7 meters wide extend from the western exposures. Located inside the first floor against the north wall is a stairway that provides access to the second floor. The second floor consists of one large room with covered porches extending approximately 1.7 meters out from the western exposures, corresponding with the porch areas on the first floor. Window and doorway openings in the operations building are numerous and fairly uniform in size. There are 18 windows, all approximately 1.6 meters high by .9 meters wide. Several have concrete slabs directly above them apparently to provide protection from rain. There are 5 doorways that provide entry and exit from the operations building. Most are roughly 2.5 meters high by 1 meter wide.

The tower appears to be in very good condition. There are no visable signs of major structural failure. The interior and exterior walls are free of vegetation, although exterior surfaces are marked by numerous bullet scars. Doors and window coverings are missing. Graffite is present throughout the interior and exterior of the tower.

The operations building has suffered more damage than the tower. A good deal of structural damage was observed which appeared to have been the result of attacks by U.S. aircraft during World War II. One exterior wall (on the northwest) has a large hole in it, and all exterior walls are scarred from strafing attacks. Most of the pillars which support the porch roofs are structurally damaged. In some instances the plaster and concrete have fallen away exposing rusting reinforcing rods. Window and door framing are present in some cases, but most are insect damaged. As was the case with the tower, the interior and exterior walls are heavily covered with graffite.

The area within the perimeter fence is covered with heavy jungle.

Please see measured drawings, site map and plates for further details of Lighthouse's appearance.

National Register of Historic Places Inventory—Nomination Form

For NPS use only received date entered

Continuation sheet

Item number

8

Page

1

ADDITIONAL INFORMATION

1. A Brief History of the Japanese Administration of Micronesia

The Japanese administration of Micronesia began in October, 1914, when shortly after the outbreak of World War I, a Japanese naval force peacefully occupied the German possessions of the Carolines, Marianas and Marshall Islands. This acquisition was legitimized in 1920 after the League of Nations officially awarded Micronesia to Japan as a Class C mandate.

Japan quickly moved to absorb Micronesia into its Empire, and from the 1920's onward, the islands became an integral part of Japan's economy. By the late 1930's, Micronesians had become a minority population. Although the Japanese never settled in large numbers, they did bring in thousands of Korean and Okinawan nationals to labor in the extensive agricultural and fishing industries that were established. By 1940, there were over 80,000 Japanese, Korean and Okinawans in the islands.

During its administration, Japan greatly improved health care, provided universal but limited educational opportunities to Micronesians, and began constructing harbors, roads and other needed infrastructure necessary for the islands to support an expanding economy. During this time, cash replaced barter as the main medium of exchange. On some islands, notably Koror and Saipan, moderate sized urban centers, complete with Japanese theaters, post offices, and geshia houses, developed. Micronesians, although obliged to learn Japanese language and culture, were never brought into the mainstream of the new economic and social order.

Beginning in the 1930's the Japanese Government began moving towards militarism. Although there was no concrete evidence, the western powers, especially the U.S., suspected that the Japanese were secretly fortifying the islands in violation of the terms of the League's mandate. In 1933, primarily because of its controversial Manchuria adventure, Japan withdrew from the League, and Micronesia became a defacto possession. Although no military fortifications were known to be built during this period, the construction of seaplane ramps, oil storage tanks and airfields were accelerated; facilities which could and would be adapted for military purposes.

On December 7, 1941, the Japanese launched a surprise attack against U.S. naval forces based in Pearl Harbor, Hawaii, bringing war to the Pacific. Although the islands were never critical to Japanese plans during offensive actions in the early years of the war, they did become extremely important to them as defensive positions after their costly defeat at Guadalcanal in 1942. Originally, the Japanese military planners assumed the islands would form an impenetrable barrier protecting the homeland, and that the United States would not be willing to pay the extremely heavy price in men needed to wrestle them away. Both assumptions, as history shows, proved incorrect, and in 1943 the U.S. military began its painful and costly assault on the islands. The next two years

National Register of Historic Places Inventory—Nomination Form

For NPS use only received date entered

Continuation sheet

Item number

ጵ

Page 2

saw some of the bloodiest battles of the Second World War, as the Japanese desperately attempted to retain ontrol of these strategic bits of territory. Developing a leap-frogging strategy, the U.S. invaded key islands, while by-passing others, leaving their Japanese defenders to starve.

After the fall of the Marianas, Japan's defeat was hastened by round the clock bombing raids carried out by B-29's against the Japanese home islands. Flying from hugh airfields on Guam, Tinaian and Saipan, the B-29's quickly reduced military targets and residential areas to smoldering ruins. However, the Japanese military pressed for a continuation of the conflict, and it was not until Tinian based B-29's dropped atomic bombs on Hiroshima and Nagasaki, that the Japanese would accept defeat.

By the end of 1945, Japan had surrendered all of its former holdings in Micronesia to U.S. Military Forces, thus ended her thirty year administration.

2. Additional Background Information on the Japanese Lighthouse

Construction of the lighthouse on Puluwat Atoll began in 1938, and after its completion, served as an important navigational aid for Japanese merchant (and later military) ships plying between the Palau and Truk Lagoons. According to local informants, the decision to build the lighthouse was made by the Japanese administration after a merchant ship went aground on the dangerous reefs which surround Puluwat Atoll. Apparently the loss of this ship plus several near disasters involving other ships on the same reef, prompted the Japanese to construct this substantial structure. Since construction began several years after the Japanese withdrew from the League of Nations, the United States and other League members were never informed of its existence.

As mentioned earlier, the lighthouse is a substantial structure. The tower, over thirty meters tall, and a two story operations building are of all concrete construction. Puluwat's isolated location and lack of natural resources forced the Japanese to ship in all necessary construction materials. Only snad and manpower were available on the Atoll. Lacking mechanical construction machinery, the work was done with hand tools and took two years to complete. Because of the scope of construction, it was necessary for the Japanese to import additional laborers from the Hall Islands and from Truk Lagoon. These unfortunate Trukese were forced to labor long hours day after day for two years.

According to Puluwat residents who participated, initial work centered on construction of an access road across Allei Island linking the dock area with the planned light-house site. Next, an elaborate raised foundation was constructed. By far most of the time was spent constructing the tower. Scaffolds, fashioned from the trunks of coconut trees, were used to permit workers access to the ever heightening tower. Work was finally completed sometime in 1940.

Shortly after completion of the lighthouse, the Japanese military began constructing a fighter strip on Allei. This airfield, part of the Japan's "Spider-webb" defensive

National Register of Historic Places Inventory—Nomination Form

For NPS use only received date entered

Continuation sheet

Item number

ድ

Page

3

strategy, was first spotted by U.S. intelligence on April 10, 1944. In addition to the airfield, U.S. intelligence reports noted a weather station, nine barracks, antiaircraft emplacements, and a radio station, all located on the western side of Allei. The report also noted the existence of a lighthouse 133 feet tall with a generator building nearby. Subsequent airstrikes by U.S. aircraft kept the airfield neutralized and also damaged the other installations on Allei, including the lighthouse. Dr. Duane Denfeld, a World War II specialist, has advanced the theory that the Japanese constructed lighthouses in Micronesia with two purposes in mind; one for use as navigational aids, and the other for use as reinforced military command posts. The heavy—duty construction of the lighthouse on Puluwat, and the apparent attention it received from attacking U.S. aircraft, may lend some support to Dr. Denfeld's theory. Although it is unclear at present whether the Japanese purposely planned lighthouse construction with specific military uses in mind, there is little doubt that the Japanese military used the Puluwat Lighthouse during defensive actions.

The lighthouse, after being knocked out of action was never restored to operational order. Residents of Puluwat, known for their skills of traditional navigation and canoe building, have long wished the beacon be repaired so that the light could be used during night sailing and fishing activities.

The lighthouse is now completely covered with tropical vegetation, as are all of the other Japanese installations on Allei. Only the tower of the lighthouse breaks through the forest canopy.

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National Register of Historic Places Inventory—Nomination Form

For NPS use only received date entered

Continuation sheet

Item number

10

Page

A note on Maps

No U.S.G.S. maps of Puluwat Atoll exist. The best available maps, showing the approximate locations of the lighthouse, have been included with this nomination. We hope this nomination will not be returned because of a lack of UTM references.

Verbal Boundary Description and Justification

The lighthouse site is bounded by a rectangular perimeter fence. This fence delineates the actual boundary of the site. An inspection of the area immediately outside of the fence failed to locate any features or objects related to the lighthouse. Therefore, the perimeter fence is being used as the official boundary for National Register purposes.

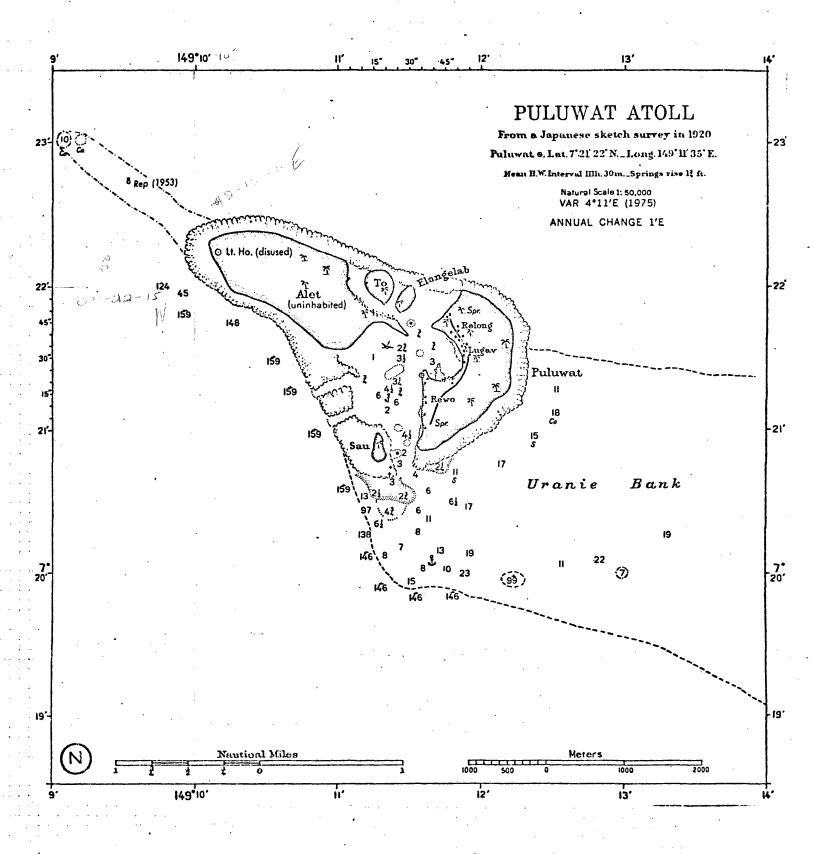
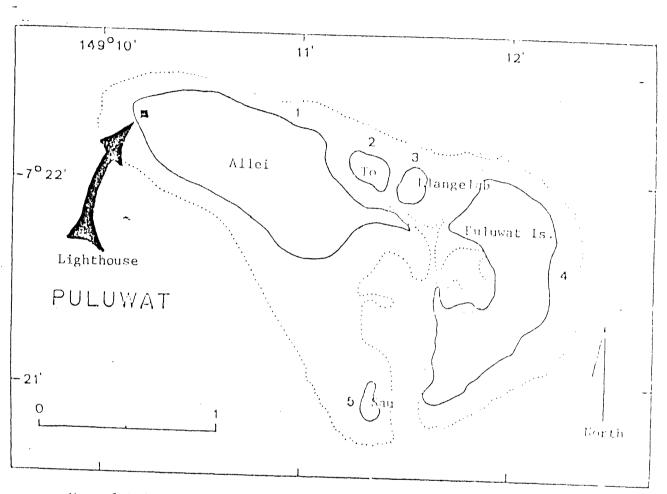


Fig 1
Puluwat atoll
note light house
(unused at northwest end of alet island)



Map of Puluwat Atoll showing location of Lighthouse (after Bryon).

Fig 2 Location of site note: property bounderies defined by parimeter fence shown in Fig 3

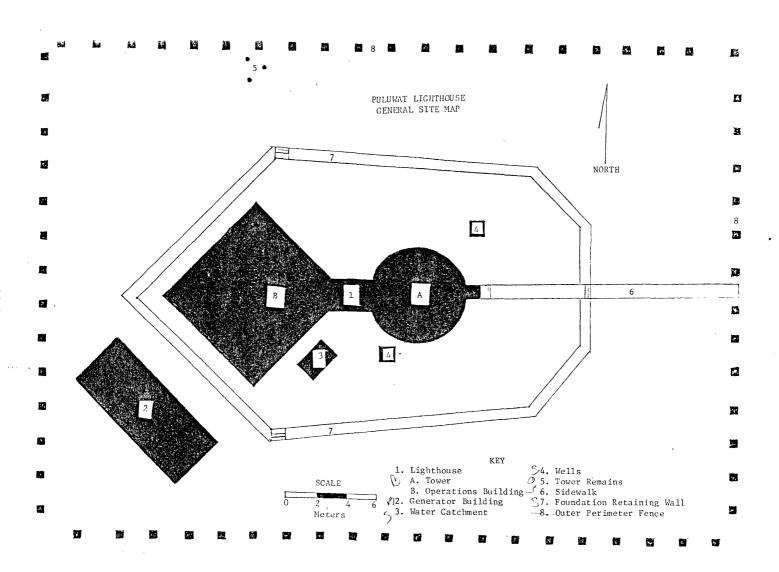


Fig 3
Detail of features on National
Register property
note item #8 perimeter fence

