

Inventory of Submerged Cultural and Historical Resources of Mili Atoll

TABLE OF CONTENTS

Abstract.	I
Acknowledgments.	II
Table of Contents.	1
Table of Photographs and Drawings.	2
Table of Maps.	5
Chapter One: Introduction.	7
Research Design.	
Limitations to Research.	
Previous Research.	
Survey Equipment.	
Team Members and Local Informants/Guides.	
Chapter Two: Background.	9
Historical Introduction to Mili.	
Current Conditions and Ecology.	
Chapter Three: Sites Identified.	
Summary of Sites Map.	14
SITE NUMBER 1: American Torpedo at Enedrik Island.	15
SITE NUMBER 2: Aircraft Debris near Enedrik Island.	17
SITE NUMBER 3: Vessel Wreckage Oceanside of Ejowa Island.	19
SITE NUMBER 4: Japanese Airplane Wreckage at Nar Island.	23
SITE NUMBER 5: Japanese Landing Craft Debris at Melka Island.	27
SITE NUMBER 6: Japanese Patrol Boat Wreckage at Melka Island.	30
SITE NUMBER 7: Wreckage of an American A-24 Aircraft.	37
SITE NUMBER 8: Japanese Dock at Mili Island.	47
SITE NUMBER 9: Wreckage of the Japanese Ship Nankai Maru.	51
SITE NUMBER 10: Wreckage of an American B-25 Aircraft.	61
SITE NUMBER 11: Wreckage of a Japanese "Betty" Bomber Aircraft.	72
SITE NUMBER 12: Unknown Aircraft Wreckage at Enajet Island.	77
OTHER SITES IN MILI.	80
Chapter Four: Site Significance.	82
Chapter Five: Conclusions.	85
References Cited.	86
Bibliography.	89
Appendices:	
Appendix 1. List of Military Documents.	95
Appendix 2. List of Japanese Vessels Operating in Mili Atoll.	103
Appendix 3. List of US Aircraft Losses.	104
Appendix 4. Video Tape Summary.	106
Appendix 5. List of Separate Still Photographs.	107
Appendix 6. Contractor's Curriculum Vitae.	112

Inventory of Submerged Cultural and Historical Resources of Mili Atoll.

TABLE OF PHOTOGRAPHS AND DRAWINGS

Chapter 2	Historical Introduction to Mili.	
1.	Photo of modern Mili, with Airstrip.	10
2.	Photo of bomb craters in central Mili, Mili, 1944.	13
SITE NUMBER 1.	AMERICAN TORPEDO.	
	No photos available, torpedo never located.	
SITE NUMBER 2.	ENEDRIK AIRCRAFT WRECKAGE.	
	No photos available, site never located.	
SITE NUMBER 3.	EJOWA VESSEL WRECKAGE.	
1.	Brass porthole, front.	20
2.	Brass porthole, rear.	20
3.	Brass porthole, top.	21
4.	Brass porthole, flange.	21
SITE NUMBER 4.	JAPANESE AIRCRAFT WRECKAGE.	
1.	Aircraft debris.	24
2.	Aircraft debris, close-up.	24
3.	Burnt aircraft aluminum.	25
4.	Large debris section.	25
SITE NUMBER 5.	JAPANESE LANDING CRAFT DEBRIS.	
1.	Drawing of Daihatsu medium LCU.	28
2.	Drawing of Shohatsu motor launch.	28
SITE NUMBER 6.	JAPANESE PATROL VESSEL WRECKAGE.	
1.	Twin cylinder engine.	31
2.	Engine valve covers.	31
3.	Collector manifold.	32
4.	Vessel winch or windlass.	32
5.	Propeller tail-shaft.	33
6.	Wood keel section.	33
7.	Wood hull shard.	34
8.	Rudder section.	34
9.	Winch.	35
10.	Air tank.	35
SITE NUMBER 7.	AMERICAN A-24 WRECKAGE.	
1.	Military recognition photo.	39

2.	Military photo.	40
3.	Aircraft drawing.	40
4.	Radial engine and propeller from north.	41
5.	Engine and cylinders with propeller from south.	41
6.	Exhaust collection on bottom.	42
7.	Inner-cooler near radial engine.	42
8.	Valve in partial head remains.	43
9.	Machine guns, 50 caliber, behind radial engine.	43
10.	Left side machine gun ammunition box.	44
11.	Right side machine gun ammunition box.	44
12.	Pilots armor plate.	45
13.	Aluminum panel on sand near radial engine.	45

SITE NUMBER 8. JAPANESE DOCK AT MILI, MILI.

1.	Military aerial photo 205295.	48
2.	Military aerial photo 205291.	48
3.	Mili dock today from the south side.	49
4.	Mili dock today from the north side.	49

SITE NUMBER 9. NANKAI MARU VESSEL WRECKAGE.

1.	Bow of vessel.	53
2.	Cable damage in bow of vessel.	53
3.	Forward bulkhead remains.	54
4.	Jackknife fish in forward bulkhead area.	54
5.	Cargo railing with cement stacks below.	55
6.	Cement cargo stacked in hold.	55
7.	Steam boiler.	56
8.	Engine room cat-walk.	56
9.	Mast fallen amid steel debris.	57
10.	Air vent lying on bottom.	57
11.	Electric motor.	58
12.	Ships propeller.	58
13.	Stern section on bottom.	59
14.	Stern bollards on bottom.	59

SITE NUMBER 10. B-25 AIRCRAFT WRECKAGE.

1.	Military photo of a B-25D taxiing on the ground.	64
2.	Military cross section drawing of a model G.	64
3.	Military drawings of a model C.	64
4.	Military photo of a pacific version of a D model.	65
5.	Front wide view of the aircraft.	65
6.	Right side view of the front of the aircraft.	66
7.	Throttle quadrant and pilots instruments.	66
8.	Port side wing with missing engine location.	67
9.	Left side wing and wing-tip.	67
10.	Top turret with dual 50 caliber machine guns.	68

11.	Left side waist gun in gimble.	68
12.	Right side waist gun in sand.	69
13.	Radio section on aircraft.	69
14.	Empty life raft compartment.	70
15.	Right wing decay.	70

SITE NUMBER 11. JAPANESE "BETTY" BOMBER WRECKAGE.

1.	Military Recognition Photo.	73
2.	Military Drawing.	73
3.	Aircraft landing gear structure.	74
4.	Aircraft wing wreckage from West.	74
5.	Aircraft wing wreckage from East.	75
6.	Bomb crater near Aircraft wreckage.	75

SITE NUMBER 12 UNKNOWN AIRCRAFT WRECKAGE.

1.	B-25 Propeller nose cone.	78
2.	PBY-5A Propeller nose cone.	78

OTHER WOTJE SITES.

1.	MI-Other-1 Oceanside Mili wreckage of Molik Vessel.	81
----	---	----

APPENDIX PHOTOS.

No Photos.

Inventory of Submerged Cultural and Historical Resources of Mili Atoll

TABLE OF MAPS

Mili Atoll Summary of Sites Map.		14
Site Number 1	Map Mi-1	
American Torpedo Site.	Map of Enedrik Island Area.	16
Site Number 2	Map Mi-2	
Unknown Aircraft Wreckage.	Map of Enedrik Island Area.	18
Site Number 3	Map Mi-3	
Ejowa Oceanside Wreckage.	Map of Ejowa Island Area.	22
Site Number 4	Map Mi-4	
Japanese Aircraft at Nar Island.	Map of Nar island Area.	26
Site Number 5	Map Mi-5	
Japanese Landing Craft Debris.	Map of Melka Island Area.	29
Site Number 6	Map Mi-6	
Japanese Patrol Boat Wreckage.	Map of Melka Island Area.	36
Site Number 7	Map Mi-7	
American A-24 Aircraft Wreckage.	Map of North Mili Anchorage.	46
Site Number 8	Map Mi-8	
Japanese Dock at Mili, Mili.	Map of Mili, Mili Anchorage.	50
Site Number 9	Map Mi-9	
Wreckage of Nankai Maru.	Map of Mili, Mili Anchorage.	60
Site Number 10	Map Mi-10	
Wreckage of B-25 Bomber.	Map of Bokrikrik Island area.	71
Site Number 11	Map Mi-11	
"Betty" Bomber Wreckage.	Map of Bokrikrik Island area.	76
Site Number 12	Map Mi-12	
Oceanside Aircraft Wreckage.	Map of Enajet Island Area.	79

Other Wotje Sites.

Site 1.

Map Mi Other-1.

Molik Vessel Wreckage.

Map of Mili, Mili Airbase.

81

Summary of Sites Map copied from an unknown RMIHPO Map. Site Maps 1-11 All copied from: *U.S. Defense Mapping Agency, Map Number 81796, Mili Atoll, (Northwestern Part), 3rd Edition, 1985.* Site Map 12 copied from an unknown source. Mili Other Site 1 copied from: *USSBS, 1947.*

Inventory of Submerged Cultural and Historical Resources of Mili Atoll

CHAPTER ONE: INTRODUCTION

RESEARCH DESIGN

Preliminary research, primarily the identification of potential sites for this report, was done by archival military and historical research, oral history by local informants, and by my own past experience in SCUBA diving at Mili Atoll. The research has been over a period of over 21 years, since my first dive on the Nankai Maru in 1979. This information generated a list of known and suspected sites which were explored and documented during this survey.

The actual field work was done November 8 through 17, 2001 at Mili atoll. This inventory of the submerged cultural and historic resources of Mili Atoll was done in the format of a non-intrusive archaeological underwater survey. No site or individual artifact was removed or disturbed. Photography, both still and video, was used to record these sites and artifacts, and in the rare cases of posing items for photographic identification, they were replaced to their exact original location.

Each site was assigned three two-letter abbreviations followed by a three digit number, as adopted by the RMI HPO office. The first abbreviation identifies the site as located in the Marshall Islands (MI), the second, the atoll, Mili (Mi), and the third, underwater (Lg), followed by a number identifying the site, (001). In this report Mili sites were numbered counter-clockwise around the atoll, starting from the North, through West, then to the South. Sites were recorded using GPS, and some sites additionally logged using compass coordinates to conspicuous points on shore.

The sites and artifacts were evaluated using the formal criteria of their levels of significance listed in the RMI Historic Preservation legislation of 1992. A separate section, Chapter Four, lists and categorizes each of the sites and their artifacts. Recommendations for preservation are listed within this section, and a general Conclusion, Selected References, Bibliography, and Appendices conclude the report.

LIMITATIONS TO RESEARCH

The primary limitation to research is the fact Mili Atoll is 70 miles from the district center of Majuro, and has no modern infrastructure of any kind. This meant there was no electrical power, no SCUBA compressors, limited supplies or support of any means, nor any way to quickly remedy any problem with only one air-flight per week. Everything, including gasoline, SCUBA tanks, camera equipment, generator, food, even bedding, had to be shipped via small boat before or with the expedition. Extra items for essential equipment, repair kits, even first aid, all had to be included, and they *all* had to

be sealed against water damage from the ocean or the rains. Mili is a wonderful place to visit, but a difficult place to do work.

The secondary limitation to research was environmental, as many of the sites lie in shallow murky water, rocked by significant wave action driven by trade-winds over the exposed areas of water many of the sites were located in. Windy and hard rainy days made difficult survey days. This affected the photo work adversely, but most sites were still filmed well enough to complete the work requested.

Site age and search area size created another limitation, as most sites were created in the battles of World War Two. Mili lagoon, just in the three square miles of anchorage, was a massive area to search. Even if the site or artifact were set into the water marked and intact, the effects of 55 years of water action and decay have depreciated both their condition and cultural significance. Thus merely locating an aircraft that crashed into a vast expanse of water or the analyzing of a ship bombed into a puzzle of metal shards became part of the *normal* limitations to research for many sites in this report.

PREVIOUS RESEARCH

The final limitation to this survey was that there was virtually no prior research into the submerged history of Mili atoll in any field. Anthropological or historical studies, mainly Republic of the Marshall Islands Historic Preservation Office Reports within the Marshall Islands by *Spennemann, 1992, Christiansen, 1994, and Williamsen, 2001*, primarily discussed sites and assets on shore.

Bits and pieces of nautical tales, basic military history, and a few other anthropological publications exist, none of which discuss or are relevant to the submerged resources discovered during this survey. The major works in these areas are listed in the Bibliography.

SURVEY EQUIPMENT

Primary SCUBA equipment was of Scubapro or Oceanic manufacture, with assorted navigation and safety equipment. A Garman 45 hand held GPS and military type compass were used for mapping. Underwater video was filmed with a Nikon VN-760 Hi8 camera in a Bentley marine housing. Still photography underwater was with a Sea and Sea Motor Marine MX10 system, and a HP model C5340A digital camera was used for photography above water. This report was built on a Compaq desktop computer using the Microsoft "Word" format.

TEAM MEMBERS AND LOCAL INFORMANTS/GUIDES

Matthew B. Holly was the only member of this survey, and all local informants or guides are listed in the individual site reports or in the Reference section of this report.

CHAPTER TWO: BACKGROUND

CURRENT CONDITIONS AND ECOLOGY

The Marshall Islands is a sovereign Republic, a member of the United Nations, and is located in the central Pacific, approximately 2,500 miles from Hawaii, New Zealand, Australia, Guam and Japan. Arranged in two parallel chains of atolls and islands, the eastern chain, called Ralik or "sunrise", and the western chain called Ratak, or "sunset", stretch over one million square miles of Pacific Ocean. They lie between 4 and 15 degrees north of the equator, and at 160 and 173 degrees east longitude, west of the international date line. Each day starts first in the Marshall Islands, being the previous day in Honolulu or Los Angeles. This fact sometimes affects modern historical records as an item occurring at the same moment on the 2nd, for example, in the Marshall Islands, may be listed as occurring on the 1st by the reporter in the United States.

Prior to 1979, the Marshall Islands was part of the Trust Territory of the Pacific Islands, administered by the United States Government since the end of World War II. They have an assembly, called a "Nitijela", containing 33 senators elected by the people of their representative islands or atolls. These senators in turn elect a president, who appoints his cabinet, and all have terms of 4 years.

The Marshall Islands has also signed an economic and defense agreement with the United States, called "The Compact of Free Association", who also leases parts of Kwajalein Atoll for the testing of United States missile and tracking systems. The Marshall Islands is also the site of America's nuclear testing legacy, with over 60 nuclear bomb explosions at the atolls of Bikini and Enewetak during the 1940s' and 50s'.

MILI TODAY

Mili Atoll is one of the 29 atolls of the Republic of the Marshall Islands. The atoll was formed thousands of years ago as coral grew atop a dying and sinking volcano, leaving a distinct fringing coral reef with an inner lagoon. Mili has over 100 separate islets on this "fringe", with channels out to the ocean from the north, northeast and a small shallow one to the southeast. The lagoon averages 150 feet deep, but generally drops rapidly to thousands of feet on the ocean-side.

The wind typically comes from the east, the average daily temperature is 85 degrees Fahrenheit, and is very humid and rains often. Housing was typically island style, with few concrete buildings. The current population is estimated at nearly 1,000, the majority of which live on Mili islet, the largest in Mili atoll and the site of the Japanese Naval Air Base during World War II.



Mili Atoll today is a lush green jungle of islands surrounding a deep blue lagoon. The current airstrip was re-cut from the original World War II Japanese Runway "A" shown above in the aerial photograph. Downtown is lagoonside and south of the runway, with some buildings visible, and was home-base for this survey. The lagoon is typically rough here, being on the windy exposure, and the water milky white with less than 10 foot visibility. Boat launching here was an art-form, and care for all equipment was essential.

HISTORICAL INTRODUCTION TO MILI

First, Mili Atoll also has numerous spellings in various texts which may confuse the researcher. First called Mulgrave by Captain Marshall, it also has the spelling Mille in most United States military and Japanese documents. Other spellings include Milli, Meli, and Mire. Additionally, the separate small atoll of Ngaririk, called Knox in most older texts and maps, is located to southeast of Mili across a shallow extension of reef. Ngaririk is generally included in most discussions as part of Mili, and is included within the current Mili Atoll district for political representation.

There was no prior historical research of Mili Atoll concerning the submerged sites for this report. Most historical information was terrestrial and was basic social or anthropological studies. Information obtained from military aircraft mission reports even contained errors, written from fast glimpses of battle from memory hours after the event. Oral history of the atoll from local informants, young and old, was sparse, and in many cases conflicting. Generally, the only positive information useful for this survey came from spear-fishermen, with experience searching the waters of Mili with their own eyes.

ORIGINS OF THE MARSHALL ISLANDS AND THEIR PEOPLE

The people of the Marshall Islands were deemed to have originally come from Asia, but have no confirmed lineage or date of migration. They were have thought to have arrived approximately 1,000 years ago, being wayfarers seeking their own uninhabited islands for development. Early information about the Marshall Islands comes from oral history and accounts by explorers, traders and missionaries (*Hart, 1992*).

MILI EXPLORERS AND COLONIAL HISTORY, 1700 -1914

Mili Atoll was estimated to have been visited by Spanish explorers as early as the 16th century, and it was the first of the Marshall Islands atolls to be discovered and written in text by Captains Marshall and Gilbert in 1788. Mili was also recorded in text in 1821 by Captain Kotzebe, and again in 1824 as the atoll became famous with the mutiny of the crew of the whaleship *Globe* (*Hezel, 1979*).

Mili became know for Marshallese violence and death with the capture of ships and crews until later in the century, and was famous for visiting missionaries and blackbirders, including Bully Hayes who lost 2 of his ships in the atoll during this period. The Germans administered the Marshall's from 1885 to 1914, but Mili was not considered an important atoll and not given much attention. There were no known underwater assets from this period in Mili Atoll, but the remains of an older vessel, including a porthole, copper spikes and nails, were found near Ejowa islet in the northwest of Mili atoll. Wau islet in the eastern end of the atoll was also rumored to have had vessel remains, but not enough evidence was discovered to warrant a search..

JAPANESE MANDATE PERIOD AND WORLD WAR II, 1914 -1945.

The Japanese ousted the Germans from the Marshall Islands shortly after WWI began, being allies of the British at that time. After WWI the islands were given to the Japanese as a "Class C Mandate" by the League of Nations. Mili was probably first used by the Japanese military in 1935 after her withdrawal from the League of Nations and with the establishment of a 6 man weather and lookout station (*Crowl, 1955:205-209*) This was Mili's status in 1937 when Amelia Earhart allegedly crash landed her plane here during her famous round the world flight. No physical proof of this crash on Mili, or any other definitive proof of her survival has ever been produced on the atoll, but the stories still abound (*Loomis, 1985*).

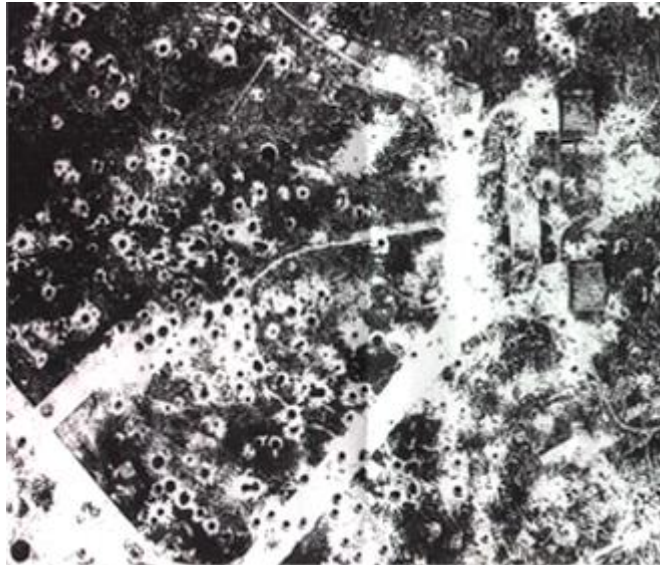
War came to Mili suddenly on the morning of February 1, 1942, with one raid by U.S. Naval aircraft from carrier USS Yorktown. The air-raid totaled five Douglas SBD "Dauntless" aircraft, who lacking targets or opposition, bombed a native water tank though to be for oil storage. No vessels, aircraft or military targets of any kind were found or damaged (*Lundstrom, 1984:48*).

During the next two years, the Mili Base was expanded to three runways, with two hangers, piers, shops and facilities for 2,600 Navy personnel. It was designed as a fighter and bomber staging point to attack south for the Ellice, Fiji, and Samoa campaigns. Mili had assorted aircraft assigned to support this plan or defend the atoll, and was the only airbase with fighters within range to provide additional aircover for the Tarawa and Makin garrisons of the Gilbert Islands to the south (*Crowl, 1955*).

Unfortunately for the Mili defenders, the loss of Guadalcanal, secured by February 1943, and the allied pressure on Bougainville and Rabaul, forced the Japanese military planners to draw defensive lines on their Pacific map. On September 30, 1943, Admiral Koga was given Imperial Headquarters Directive No. 280, which ordered him to shorten his defensive lines, with Mili, and the rest of the Marshall's, left on the outside. Ordered to fight and die to the last man, Mili was additionally re-enforced in late 1943 and early 1944 with an additional 2,530 Japanese *Army* troops, which seriously overcrowded the incomplete Navy base. This caused the typical Army-Navy conflicts of authority, and added to additional hardships in the months to come (*Sherrod, 1952:226*).

The next major air-raids occurred in October 1943, with the first attack and reconnaissance mission by B-24's of the 7th Air Forces 30th Bomber Group, on October 16, 1943. These were the first raids in preparation for the invasions of the Gilbert and Marshall Islands. They attacked over the next three days with support from a US Navy carrier strike force providing fighter cover and additional bombers. They did not find a sleepy base as in 1942, but ran into heavy anti-aircraft fire complete with fighter protection from the bases Mitsubishi A6M "Zero" fighters, primarily of the 281st Air Group (*Hata, 1989:167*).

The American bombing raids continued and grew, especially after the capture of the Japanese bases in the Gilberts in November 1943, which provided closer airfields. The involved Army and Navy fighters, fighter/bombers, dive bombers, torpedo bombers, medium and heavy bombers. By the date of the invasion of Kwajalein and Majuro in February, 1944, all the Japanese aircraft in Mili, along with all the main transport vessels in the lagoon or surrounding atolls were destroyed. The remaining aviators, key to future defensive of Japan, were removed by flying-boats or submarine, which also provided the last supplies for the nearly 5,100 men. The Mili garrison was cut off and left to die.



Over the next 18 months the Mili Airbase was bombed with over 4.5 million pounds of bombs, as shown by craters in the central area near the hangers in the photo above (*CINPAC Photo No. 205295*). By the time Mili garrison had surrendered on August 22, 1945 aboard the USS Levy (DE-162), the Japanese commander, Captain Masanari Shiga, had lost 2,705 of his men, 1,500 of them due to malnutrition and starvation. Captain Shiga later committed suicide in Majuro by poison, aware that the coming war crimes investigation would have probably found him guilty of the execution of five American aviators captured from the B-25 crash (at Mili Site MI-Mi-Lg-010), and two Catholic Priests (*Cook, 1945:Exhibit 9 and 36*).

At the end of the war, after the removal of all Japanese and Korean soldiers and workers, 300 Marshallese were still on Mili Atoll, so many eyewitness accounts for underwater sites were potentially available. Some of this information was passed on and given by informants for use during this survey.

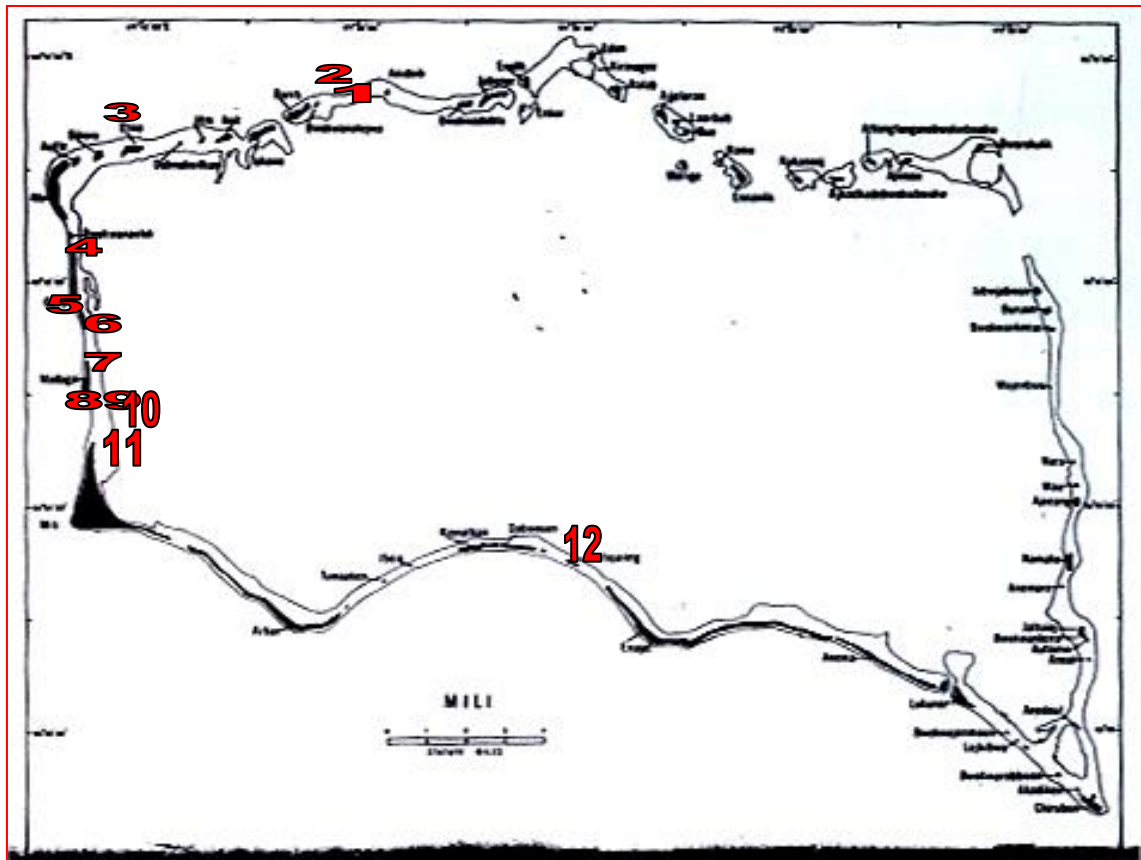
TRUST TERRITORY YEARS

The period after the war was dominated by the United States and its' policies. While international focus was on the nuclear testing program and the development of Kwajalein, more local attempts were made to improve the infrastructure in the Marshall Islands. The building of docks, roads, clearing of dangerous ordinance and re-planting of coconuts all included the removal of war relics in their path. The collection of copper and brass for cash, cutting up airplanes for their aluminum panels, and pushing relics into bomb craters and filling them over was all done without any local concern. While destroying the past in an archaeological sense, this removal of war items erased from view many of the horrible memories the Marshallese people had suffered during the war. This mentality has been explained that simply, and this lack of concern for the past has eliminated sites from this and prior periods.

CHAPTER THREE: MILI SITES

SUMMARY OF SITES MAP

SITES ARE NUMBERED IN RED



The survey was done counter-clockwise along the lagoonside shore, starting in the north, going through the west, then around to the south.

This map was copied from an unknown RMI research paper taken from the RMIHPO Office.

MILI SITE 1 REPORT

NAME: AMERICAN TORPEDO NEAR ENEDRIK ISLAND
RMIHPO Site Number MI-Mi-Lg-001

GENERAL DESCRIPTION AND LOCATION

The torpedo was not located during this survey.

GPS Position (Approximate area): N 06.14.500 x E 171.50.700

Level of Site Significance: *SIGNIFICANT*

DETAILS

The American Torpedo has been described to me for over 20 years, from my first trip to Mili Atoll in 1979. Many Marshallese have seen the torpedo, and read English inscriptions on the unit. It has been described as made of stainless steel, but is probably aluminum, with 2 propellers (one person said 1 propeller), and being about 12 to 14 feet long, with a diameter as large as a mans reach around it, being about 2 feet.

It originally rested on the sand between the islands which make up Enedrik Island. This is still called 1 island even though there is a channel between them. A through search was made around and between the islands, in the channel and the channel to the next island to the west, and out into the lagoon to about 40 feet of water, all with no success.

The local fishermen think it is either buried in the sand, or has washed into deep water, but in any case I asked them to tie a line and float to it if they ever spot it again.

I am guessing this was an aerial torpedo dropped or lost and ran up into the shallows and never exploded. It is also possible it was from an American aircraft, possibly the one we never found at Mili Site MI-Mi-Lg-002, but I do not have any TBM "Avenger" losses for Mili Atoll. US Submarine torpedoes used more brass, and Japanese aerial torpedoes had brass and carbon steel components, with dual brass propellers.

A map of the site, Map Mi-1, follows the photo section of this report.

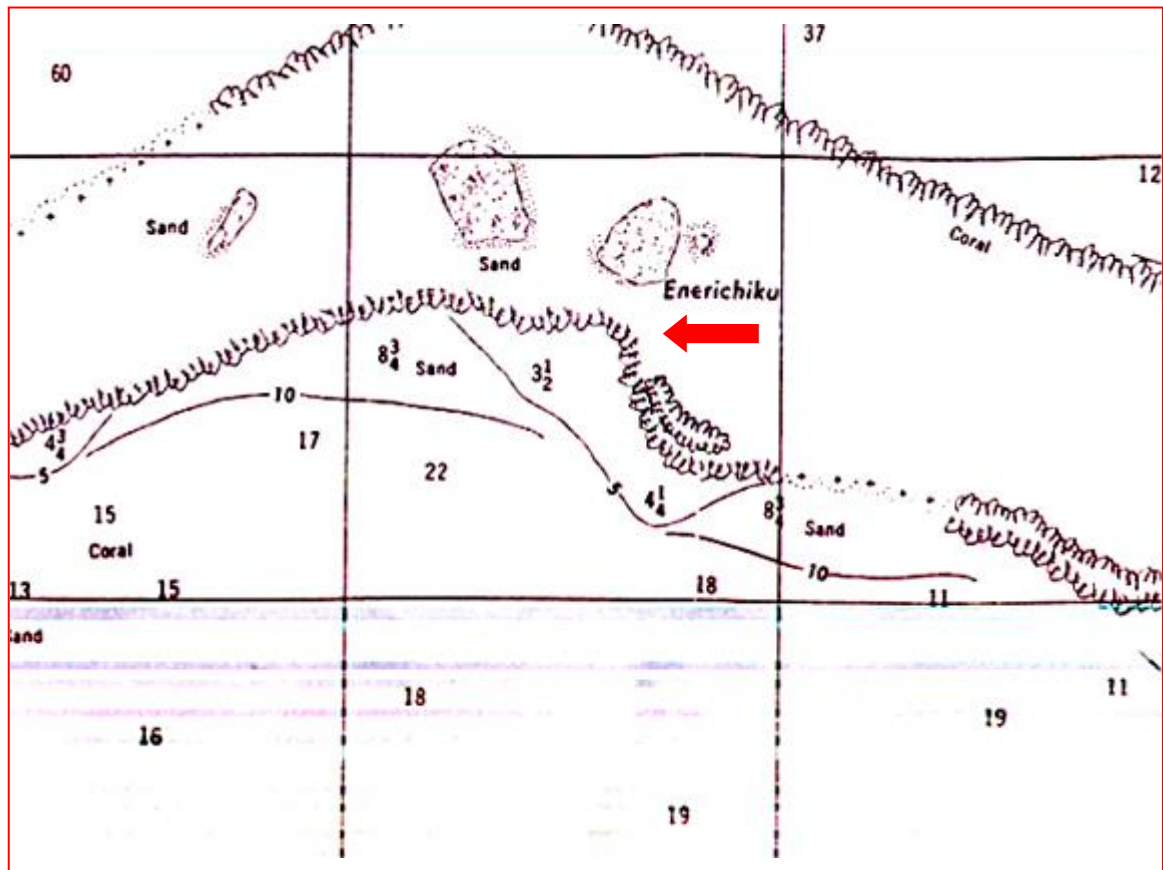
COMMENTS AND CONCLUSION

I was disappointed in not finding this torpedo for the survey, as it may have lead to the discovery of the aircraft remains of Site 2, of which we could also not find. I will keep my friend Kazzi Chutaro looking, and will inform the RMI HPO office when we finally spot it. No artifacts were located at this site.

MAP OF MILI SITE 1 REPORT

The **Red** arrow indicates last known site of the torpedo.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, revised in 1985.



MILI SITE 2 REPORT

NAME: AIRCRAFT DEBRIS NEAR ENEDRIK ISLAND
RMIHPO Site Number MI-Mi-Lg-002

GENERAL DESCRIPTION AND LOCATION

I did not locate any Aircraft Debris at Enedrik Island or the surrounding area.

A map of the site, Map Mi-2, follows the photo section of this report.

GPS Position: Not taken. Approximately: N 06.14.500 x E 171.50.700.

Level of Site Significance: *UNDETERMINED SIGNIFICANCE*

DETAILS

This aircraft debris had been described to me for over 20 years, back to the Amelia Earhart expedition days. The 3 islands in the area were thoroughly walked around during low tide, with nothing seen on shore, in the sand, or on the reef to indicate any aircraft, or anything man-made, had ever crashed in the area. No aluminum shards, no wire, no copper or brass pieces, no rusty metal. Zero. It had been said the wreckage was also in the surf zone, but we also walked way out at low tide and saw nothing.

It should also be said the island, Enedrik, is actually 2 islands, a large and small one, with a very narrow channel in-between. The sand and rubble extending into the lagoon was also searched while looking for the torpedo of Mi Site 1, and nothing was spotted here either.

COMMENTS AND CONCLUSION

There is also a legend this is where Amelia Earhart crash landed her aircraft, and that the missing wingtip is in the deep on the oceanside, but still visible during the calm summer months. I have a number of Marshallese, old and young, that swear to this information, but we found nothing. The site has no artifacts.

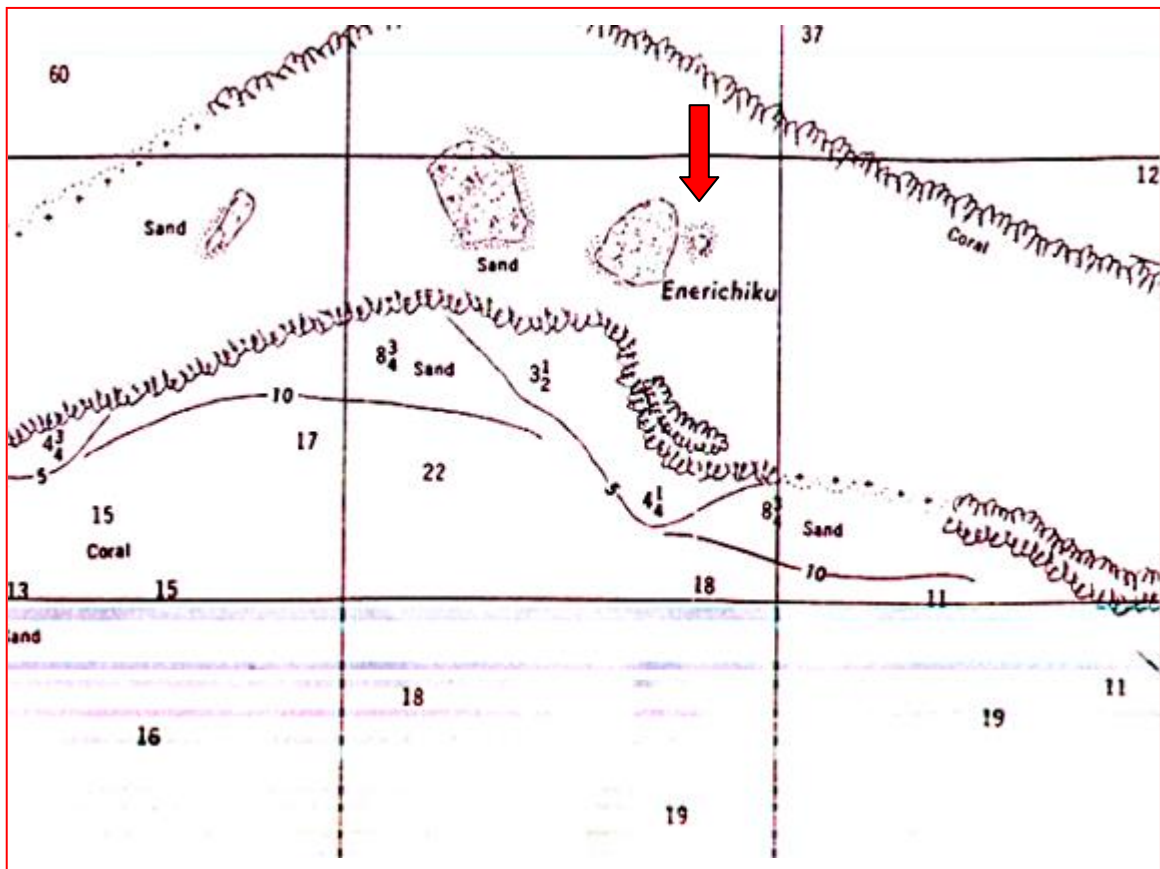
PHOTO SECTION OF SITE 2 REPORT

There were no photos taken of the site.

MAP OF MILI SITE 2 REPORT

The Red arrow indicates last known site of the aircraft debris.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd Edition, 1985.



MILI SITE 3 REPORT

NAME: VESSEL WRECKAGE OCEANSIDE OF EJOWA ISLAND
RMIHPO Site Number MI-Mi-Lg-003

GENERAL DESCRIPTION AND LOCATION

The Wreckage of an unknown vessel, probably wooden and older than 100 years, was located by Marshallese fishermen and reported to me during this survey. The site is on the windward oceanside of Ejowa Island, and was impossible to visit during the survey. A fisherman, Mr. Kazzi Chutaro, had collected a brass porthole from the site, and besides the wooden debris with steel and copper fasteners on the reef plain, this was the only proof the story was real.

A map of the site, Map Mi-3, follows the photo section of this report.

GPS Position (At the island): Approximately N 06.13.250 x E 171.45.000.

Level of Site Significance: *SIGNIFICANT*

DETAILS

The site was not visited during the survey, but photos of the brass porthole are included as the front of the porthole, Photo Mi-3-1, the back, Photo Mi-3-2, and another from the top as Photo Mi-3-3. Photo Mi-3-4 shows the flange. The divers told me the wreckage had only a wood keel and some frames (ribs) remaining, and extended off into the deep past their vision. This would typically be over 100 feet deep. Additionally, an anchor chain was spotted by the divers extending up a surge channel up upon the oceanside reef, so it is possible the vessel anchored due a calm moment, and was caught in a wind/current change and was lost.

The fact that the porthole had only 1 dog (tightening wing nut), and the porthole had a flat portion on the flange top and bottom, it may indicate the vessel was older, and may give some clue to the vessel's identity. A number of vessels are known to have been lost in Mili or the Mili area in the 1800's, and this may be one of them. This site may have additional artifacts, but for now is just a speculative story.

CONCLUSION

If any site deserves additional exploration and documentation, this is the one. This could be a significant archaeological find. Unfortunately, this site would require summer weather, advanced divers, and additionally safety and skills to explore and record. Sharks, many aggressive, reside in the area. Until then, I would recommend the site be closed to recreational divers and be watched and protected until a proper survey

could be made. The porthole, now privately owned, was the only artifact located from this site.

PHOTO SECTION OF THE SITE 3 REPORT



Photo Mi-3-1. The front side (outside of a ship) view of the brass porthole.



Photo Mi-3-2. The backside (Inside of a ship) view of the brass porthole.



Photo Mi-3-3. A top view of the brass porthole.

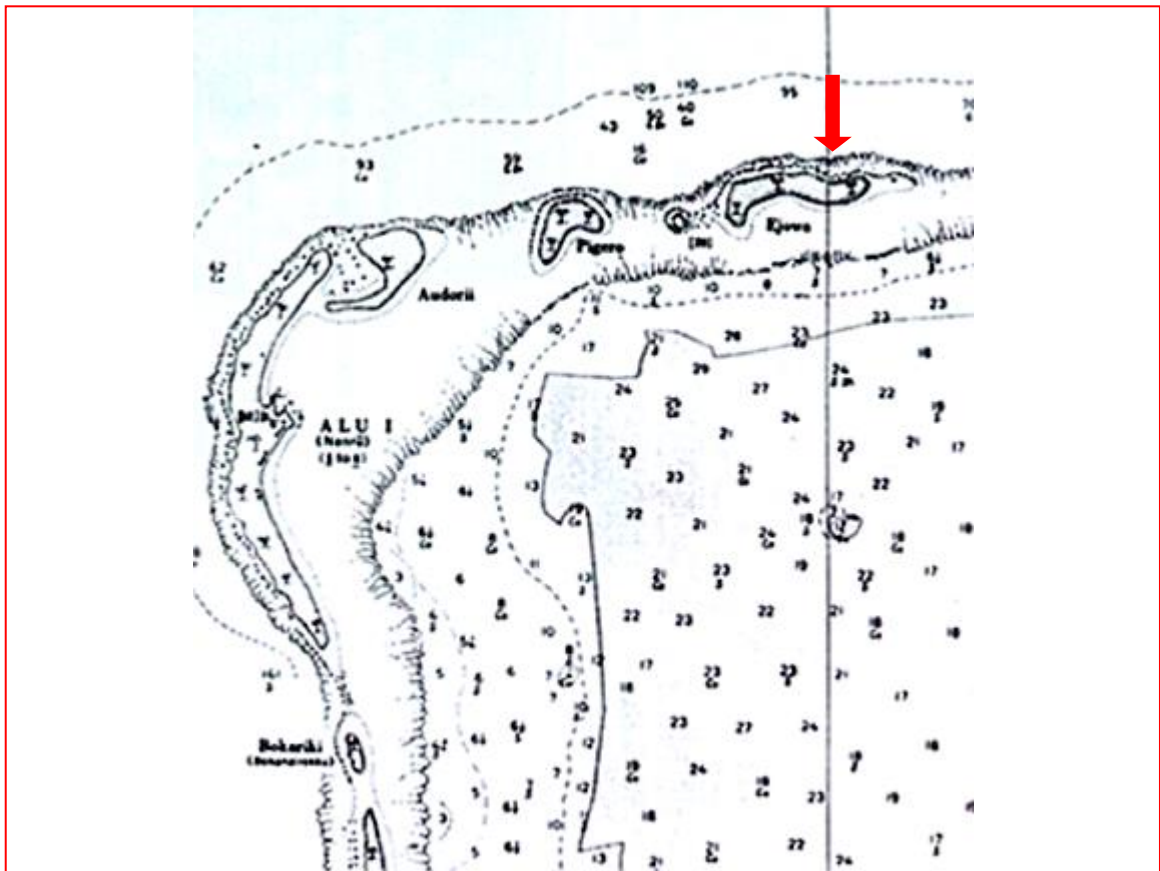


Photo Mi-3-4. Flange shown on porthole.

MAP OF MILI SITE 3 REPORT

The **Red** arrow indicates the approximate location of the vessel site.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 4 REPORT

NAME: JAPANESE AIRCRAFT WRECKAGE AT NAR ISLAND
RMIHPO Site Number MI-Mi-Lg-004

GENERAL DESCRIPTION AND LOCATION

The Wreckage of an unknown Japanese Aircraft, probably a Mitsubishi A6M "Zero" or an Aichi D3A "Val" was found *in*, not on or near, Nar Island. It is apx. 100 yards south of Steve Jacobs house, the prominent house on the island. It is located approximately 40 feet inland from the high water mark.

A map of the site, Map Mi-4, follows the photo section of this report.

GPS Position (At the main aircraft section): N 06.09.944 x E 171.43.575

Level of Site Significance: *LESS SIGNIFICANT*

DETAILS

The aircraft, a single engine model, was reported to have forced landed in the lagoonside shallows, and eventually washed up onto and into the sand after the engine broke off the airframe. Years passed, and the aircraft was driven higher up the beach, and land formed behind the fuselage. The engine was not located due to zero visibility.

The wreckage is now located in the island, as the beach contour has changed over the last 57 years, capturing the wreckage in the land. The beach changes are obvious, and the aircraft remains site is now the local trash burn pit. Coconuts and fronds were removed from over the remains so they could be located and photographed. The trash fires have destroyed much of the structure extending above the ground level, and the exact identification of aircraft type is difficult.

At first I felt the aircraft must be a Mitsubishi A6M "Zero", but the visible span of the top of the fuselage may be wider than a Zero and indicate another aircraft, logically an Aichi D3A "Val". Both aircraft were single engine, and these are the most logical choices. No archival or military information was located to provide any other clues to the aircraft exact type or the crash history.

No significant artifacts were found at the site.

COMMENTS AND CONCLUSIONS

This is another classic example of time moving on. The site has been where the local owner has burned his palm fronds and trash for a number of years, slowly eating

away the aircraft remains. Much is still buried in the ground, but not enough I imagine to provide any more historical clues.

PHOTO SECTION OF THE SITE 4 REPORT



Photo Mi-4-1. Japanese aircraft remains buried in the ground at Nar Island.



Photo Mi-4-2. Japanese Aircraft Debris, possible end of canopy slide.



Photo Mi-4-3. Photo of burnt aluminum sections.

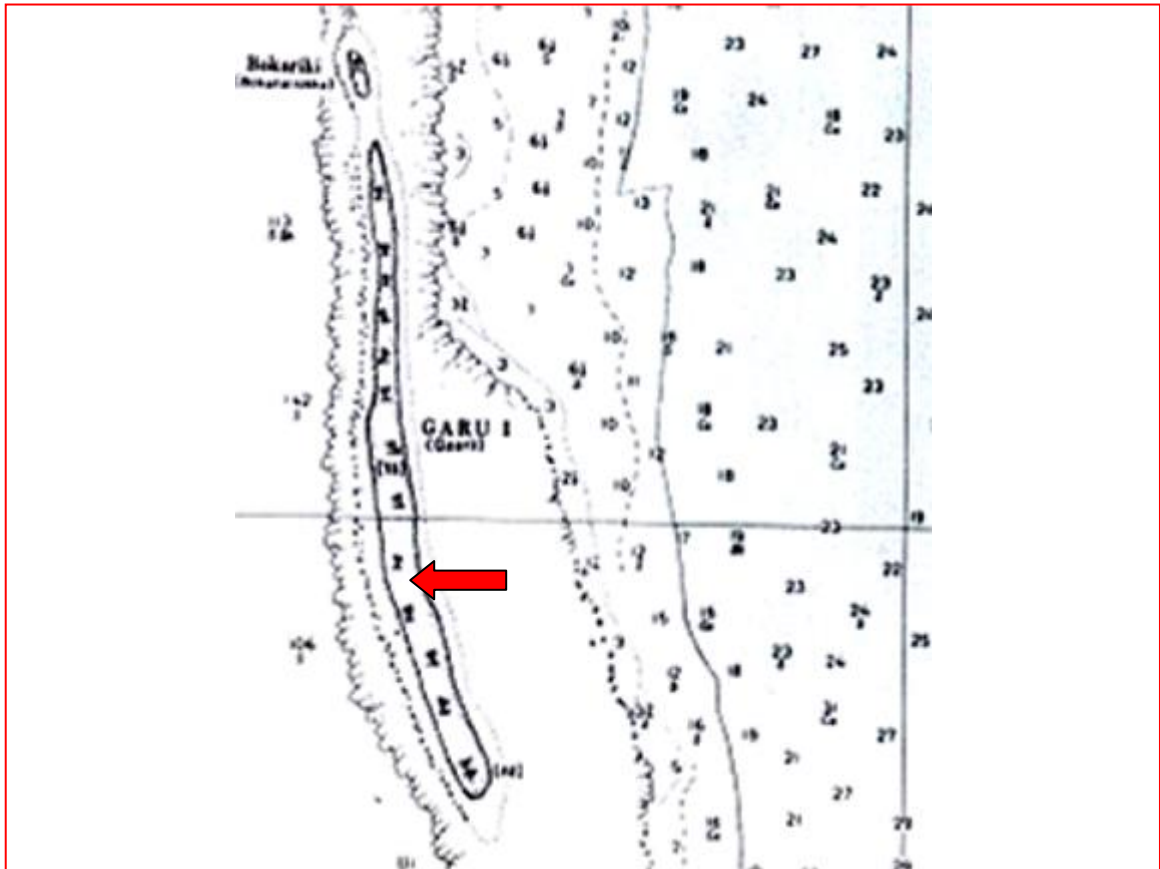


Photo Mi-4-4. Largest piece of Japanese aircraft metal from the Site.

MAP OF MILI SITE 4 REPORT

The **Red** arrow indicates the site of the Japanese Aircraft Wreckage At Nar Island.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 5 REPORT

NAME: JAPANESE LANDING CRAFT DEBRIS
RMIHPO Site Number MI-Mi-Lg-005

GENERAL DESCRIPTION AND LOCATION

The Japanese Landing Craft (LCU) is a marine item included in this report only because it would be otherwise overlooked and lost to history. The LCU is now located buried on Melka Island in Mili, a happy container of island plants. Very little of the structure remains.

A map of the site, Map Mi-5, follows the photo section of this report.

GPS Position (At the center of the hull): N 06.07.900 x E 171.43.700.

Level of Site Significance: *LESS SIGNIFICANT*

DETAILS

The Japanese landing craft was probably a Daihatsu model, its' details described previously in a RMIHPO Report Number 7 on Wotje by *Spennemann* in 1991. A photo from his report is attached as Photo Mi-5-1. The LCU was apx. 40 feet long, 12 feet wide, driven by a small diesel engine. The landing craft had a small drop down door, and this model could only haul troops and small equipment.

From the local stories and details, it seem the Japanese dug out a slot in the island on the oceanside even with the reef plain at low tide, and dragged and winched the LCU over matting and pipes until the LCU was literally parked in a pit in the island. The pit for the LCU left the top of the vessel at ground level, and the soldiers then buried the LCU even with the land, and camouflaged the top from discovery from US aircraft. It was never removed or used for whatever reason, and has remained buried in Melka Island since the war.

Virtually all of the LCU has rusted away, and only a ring of rust, the rudder post, the engine, and a winch remain today. The plants are very green nearby. Another craft, a Japanese Shohatsu power launch, is included as Photo Mi-5-2, as another similar comparative example.

CONCLUSIONS AND COMMENTS

The LCU is just another sample of vanishing history, and was included only due to it being a marine item. There are no artifacts at this site, or any plans to remove it or touch the site in its' remote location. Kazzi Chutaro lead me to the site.

PHOTO SECTION OF SITE 5 REPORT

*Figure 26. Daihatsu Type "A" Medium-sized Landing Craft. Navy version. A- Deck view
B - Side view.*

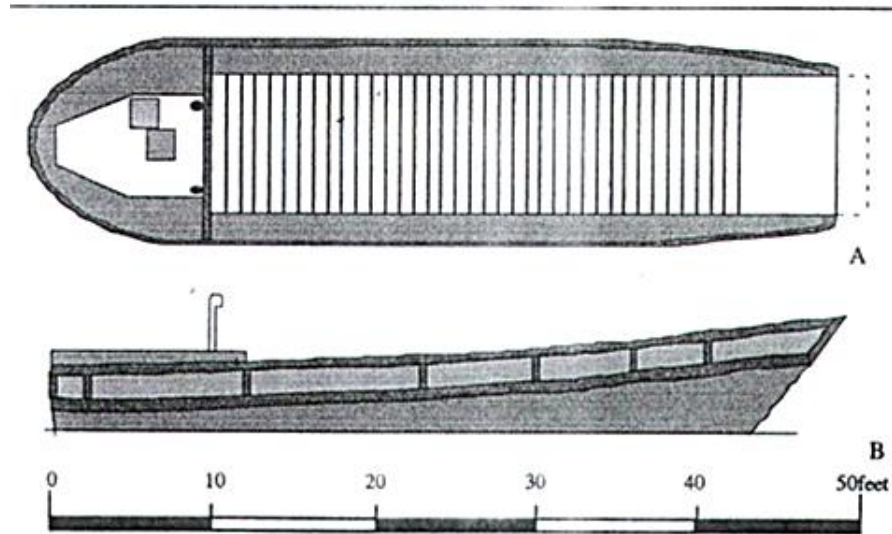


Photo Mi-5-1. Japanese Daihatsu "A" Type Medium Landing Craft (*Spennemann, 1991/7:41*).

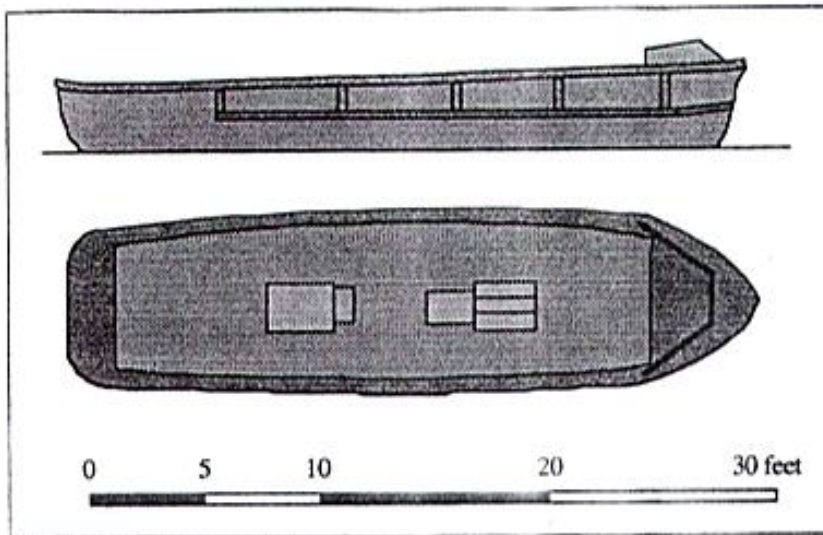


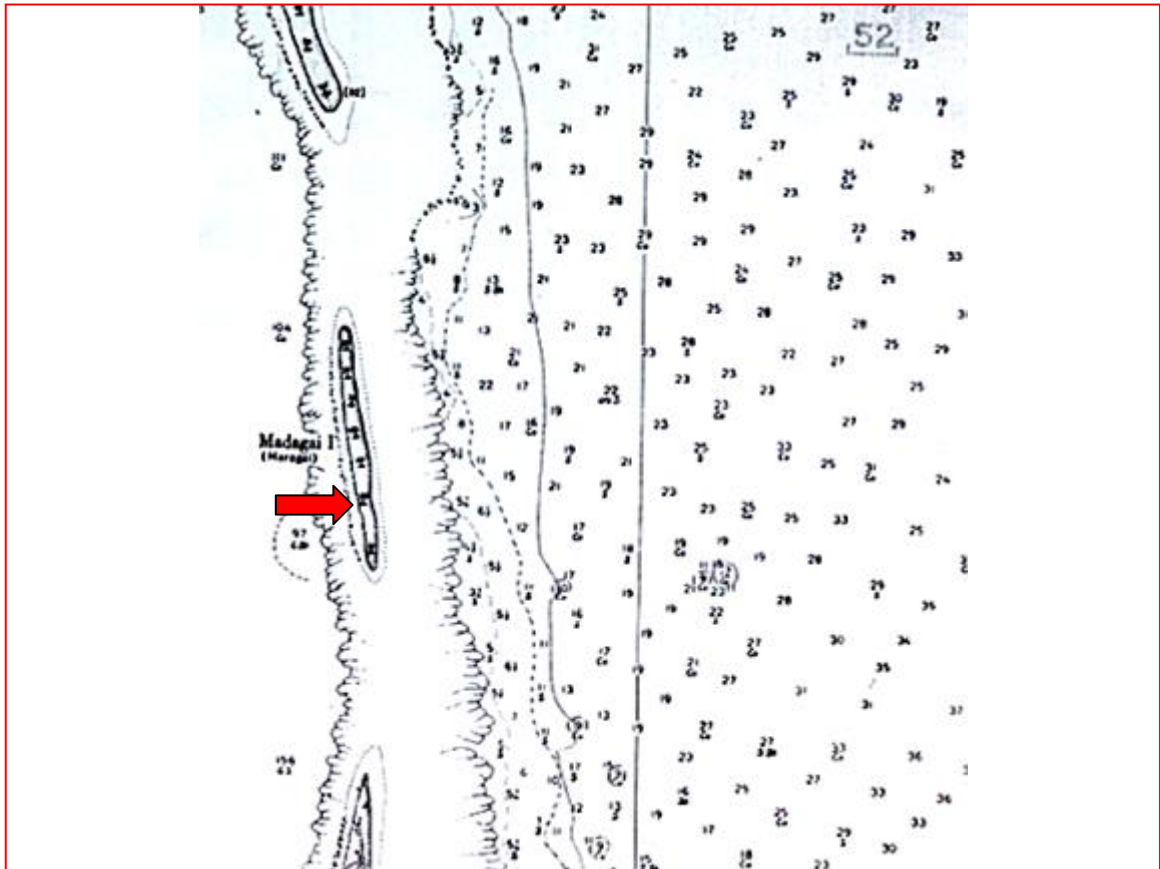
Figure 24. Drawing of a Shohatsu power launch

Photo Mi-5-2. Japanese Shohatsu Power Launch (*Spennemann, 1991/7:38*).

MAP OF MILI SITE 5 REPORT

The **Red** arrow indicates the site of the Japanese Landing Craft.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 6 REPORT

NAME: JAPANESE PATROL BOAT WRECKAGE
RMIHPO Site Number MI-Mi-Lg-006

GENERAL DESCRIPTION AND LOCATION

The Wreckage of a Japanese Patrol Boat was located lagoonside of Melka Island on a sand and rubble bottom in apx. 6 to 10 feet of water. The vessel remains are only machinery and small sections of wood, and the visibility was about 5 feet in very murky, particle filled water. Moderate wave action and visibility made the film quality poor and difficult.

A map of the site, Map Mi-6, follows the photo section of this report.

GPS Position (Near the main engine): N 06.07.700 x E 171.44.050

Level of Site Significance: *LESS SIGNIFICANT*

DETAILS

The wreckage was probably one of two listed Special Duty Subchasers (No. 14 or 19) or the one converted Picket boat (listed as No. 204, but possible the No. 402, which was from Wotje) designated to Mili Atoll during the war (*Christiansen, (Mili Atoll) 1994:21*).

The wreckage was centered around the main engine, with large twin cylinders and valve covers, shown in photo Mi-6-1 and 2. The engine also had a collector manifold of sorts (Photo Mi-6-3), and a hand-wheel which must have engaged the propeller shaft directly (Photo Mi-6-4). The tail-shaft (Photo Mi-6-5) was very large diameter, which also had the propeller removed during a brass/copper salvage drive. The engine was mounted in a wood hull shown in photo Mi-6-6, and had wood shards remaining around the site (Photo Mi-6-7). Other ship parts, rudder (Photo Mi-6-8), winch (Photo Mi-6-9), and machinery (Photo Mi-6-10) also reside in the site. All photos are of poor quality due to the horrible visibility.

The engine was unique to me, and without any identification. The anchor was reportedly in the site near the front of the vessel, and was not set or being used, indicating the vessel had probably beached itself in this location, and sunk there. There was no indication of fire, and many military reports claim other vessels were attacked in the Mili Lagoon, some nearby. The 3 Mili vessels have not been located in any other location.

COMMENTS AND CONCLUSIONS

This site had the worst possible conditions and visibility I could possibly try to film in, and only proved a vessel was once there. There was almost no marine life, and no significant artifacts at the site.

PHOTO SECTION OF THE SITE 6 REPORT



Photo Mi-6-1. Twin cylinders of the vessels main engine.



Photo Mi-6-2. Valve cover side of main engine. Possible throttle controls.



Photo Mi-6-3. Engine collector manifold.



Photo Mi-6-4. Wheel on engine probably engaged propeller shaft.



Photo Mi-6-5. Tail-shaft of Melka Island vessel.



Photo Mi-6-6. Vessel wood keel structure.



Photo Mi-6-7. Wood shards litter the bottom of the site.



Photo Mi-6-8. Vessels' steel rudder.



Photo Mi-6-9. Remains of ships winch or windlass.

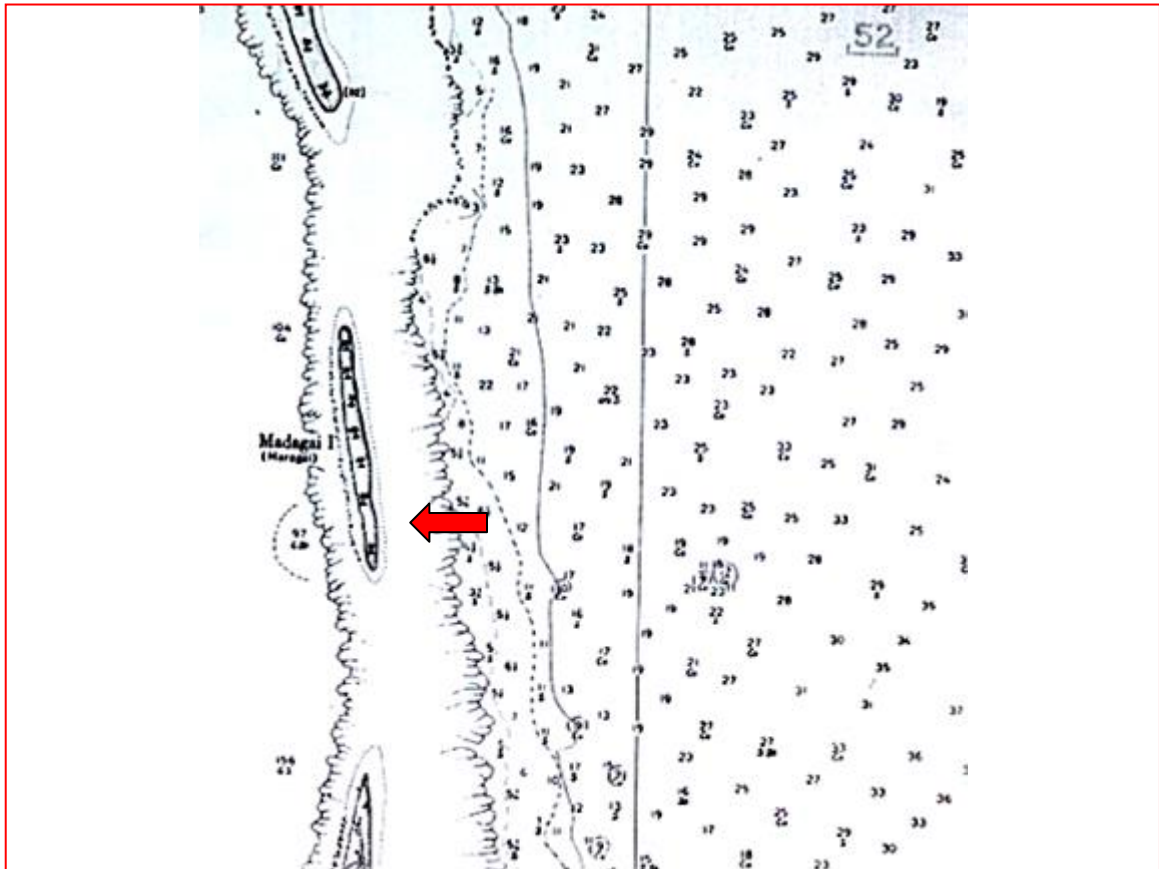


Photo Mi-6-10. Air or fuel tank supporting vessels' machinery.

MAP OF MILI SITE 6 REPORT

The **Red** arrow indicates the site of the Japanese Patrol Boat.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 7 REPORT

NAME: WRECKAGE OF AN AMERICAN A-24 AIRCRAFT
RMIHPO Site Number MI-Mi-Lg-007

GENERAL DESCRIPTION AND LOCATION

The Wreckage of an American A-24 Aircraft was located in the lagoon near the northern end of Mili Island. The wreckage was found apx. 400 yards into the lagoon, apx. 300 yards south of the northern tip of Mili, Mili in 8 to 10 feet of water. The wreckage is scattered over the reef plain, in apx. a 200 yard long by 300 yard wide area, starting from the farthest point from shore, the initial crash point, and extending both south and west from this point. This was probably the natural flow of the waters action during stronger wind, waves and current.. The site is very murky with limited visibility and strong wave action, making photographic work very difficult. A map of the site, Map Mi-7, follows the photo section of this report.

GPS Position (At the aircraft engine): N 06.06.312 x E 171.44.259

The aircraft engine is at a compass courses degrees magnetic to the following points:

North End of the Island North of Mili:	330 degrees.
North End of Mili:	315 degrees.
Dual Purpose Guns on North Mili, Mili:	285 degrees.
Copra Warehouse on Mili:	195 degrees.
South End of Mili not visible in rain.	Apx. 165 degrees.

Level of Site Significance: *SIGNIFICANT*

DETAILS

The American A-24 wreckage is a debris field of aircraft parts, sitting amongst the coral and sandy bottom of the lagoonside reef plain. A recognition photo of the aircraft was included as Photo Mi-7-1, and a military photo of the aircraft as Photo Mi-7-2 (*Tillman, 1998:10*). Aircraft drawings are included as Photo Mi-7-3. These photos and diagrams, along with the military details of the aircraft (*Angelucci, 1979:38-39*), helped identify the wreckage as an A-24. The crash site and mission details were also described in the 7th Air Force Mission Report number 531-17, dated January 27, 1944, of which a copy is attached in the appendix. The major portion of the remaining aircraft, being the engine, is the starting point to view the debris field..

The American Army A-24 was known as a Banshee, and was the Army's' virtual exact version of the Navy' SBD-3 Dauntless. Models A-24A and A-24B were equal to SBD-4 and SBD-5 models. It was produced by the Douglas Aircraft Company, and had a length of 33 feet, wingspan of 41 feet, and carried a crew of 2, a pilot and rear seat gunner/radioman. It could carry 1,000 pounds of bombs, and had 2 forward facing 50

caliber machine guns operated by the pilot, and twin 30 caliber guns operated by the rear gunner. It was widely used early in the war, but by 1944 was only used in Allied air superiority areas, such as the Marshall's.

This aircraft, serial number 42-254402, belonged to the 531st Fighter/Bomber squadron of the 7th Air Force, and at the time of the crash was based in Makin, Gilberts. The aircraft was on part of a 23 plane mission on January 27, 1944, to bomb installations on the Mili Airbase. It was escorted by 10 P-39s and attacked Mili from the northeast over the lagoon. According to the Mission Report, this plane was hit by anti-aircraft ground fire on approach and crashed steeply into the water lagoonside near the north point of Mili, Mili. No survivors were seen and the crew was presumed killed in the air or upon impact. No remains were found after the war, and none of my inquiries to the elder Marshallese on Mili resulted in any knowledge of this aircraft crash or where the aircrew remains finally went. It is presumed the aircrew, Pilot 2nd Lt. Jack R Allen, and his rear seat gunner, S/Sgt. Blair M. Benner, disappeared into the lagoon site or their bodies recovered and buried somewhere on shore.

Another 531st Mission, in MR #531-3, also described in this Survey, reports the attack on the Nankai Maru at site MI-Mi-Lg-009.

The aircraft remains are centered around the 9 cylinder Wright R-1820-52 Cyclone radial engine, very obvious in photo Mi-7-4. It is standing basically upright, balanced on the three very bent aluminum propellers (Photo Mi-7-5). Various engine parts, such as exhaust stacks (Photo Mi-7-6) and inter-coolers (Photo Mi-7-7) and Valves (Photo Mi-7-8) lie close-by, as does the landing gear and other miscellaneous items.

Lying just behind the radial engine are the 2 forward facing 50 caliber machine guns (Photo Mi-7-9) with their feed boxes of ammunition still full (Photos Mi-7-10 and 11). These 2 50 caliber machine guns with their ammunition boxes and ammunition are the obvious artifacts of the site. They are loose and easily removable, and are coveted by collectors.

The last major part found was the pilots seat armor (Photo Mi-7-12). The largest fuselage piece of aluminum is shown in Photo Mi-7-13. Smaller pieces of aircraft aluminum are scattered towards the south and shore, and make up a large debris field. The site was discovered after 4 attempts.

The marine life at the site is limited to small reef creatures able to survive the typical rough seas, murky waters and shallow depths. Lots of purple sea cucumbers.

COMMENTS AND CONCLUSIONS

The site artifacts are limited to the 2 remaining 50 caliber machine guns, with their attached or associated ammunition boxes full of 50 caliber rounds nearby. I am surprised the ammunition hasn't been recovered for the brass, or the guns collected as

souvenirs. This site needs protection, or these few notable items collected and preserved/restored.

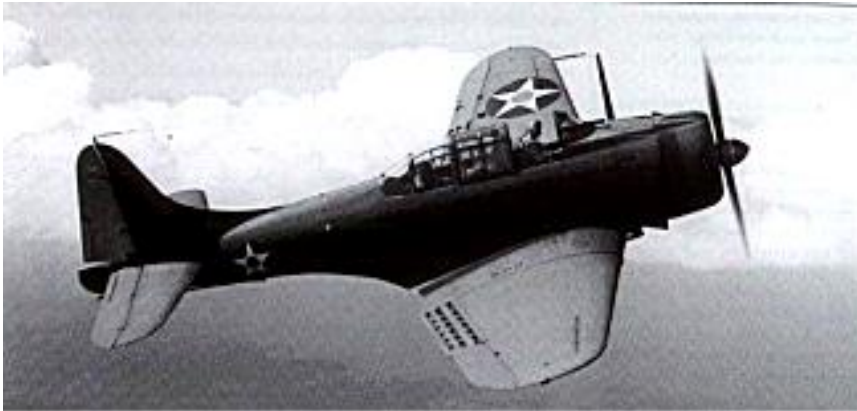
This site was known to only one local Marshallese, Mr. Jinna Lanjok, and not listed on any reports I have ever reviewed. Debris was found by local skin divers over a 4 day period, which had only 6 to 8 feet of visibility. I drew up a pattern sketch of the debris field, and guessed the source. On the last day I swam right up the aircraft engine. None of the skin divers or elders had any stories on the outcome of the aircrew, and Jinna had always presumed this to be a Japanese aircraft. The point of my comment is that even after 55 years, the outer islands can still hid common history. This information is dying off with the elders, and soon will become lost secrets of the past. More research into these sites, especially the ones from the war years, is needed much sooner than later, besides the protect of the artifacts, otherwise the site history may be impossible to reconstruct.

My only suggestion is to provide a copy of this report to the Mili Council, and teach the people on Mili the value of protecting this site as they can as part of their history.

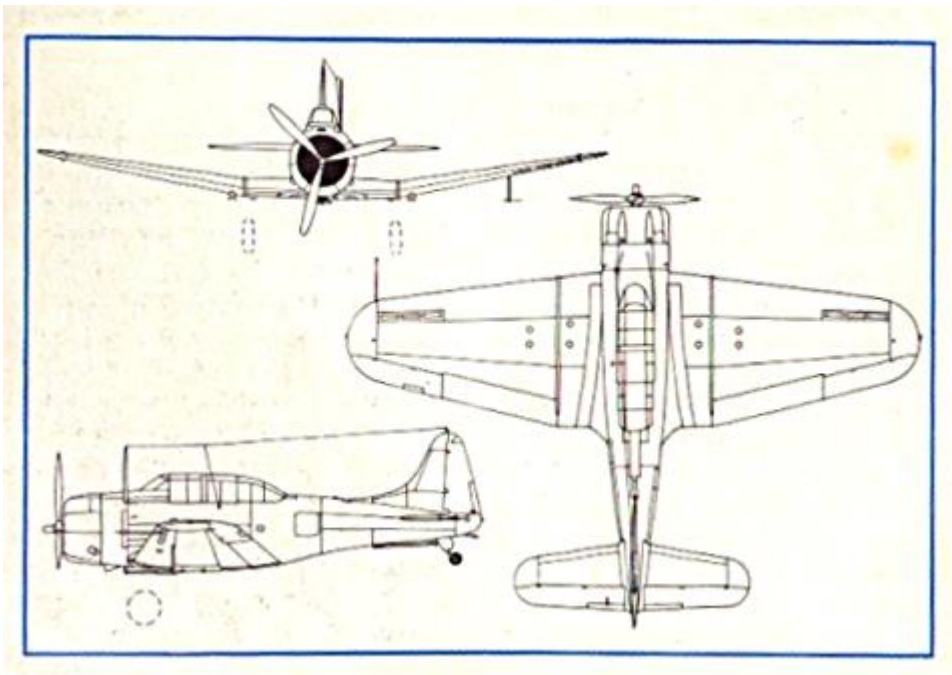
PHOTO SECTION OF WOTJE SITE 7 REPORT



Mi-7 1 Photo of a US Navy SBD-3 (Army's A-24) model (*Angelucci, 1979:39*).



Mi-7-2 Photo of a US Navy SBD-3 (*Tillman, 1998:10*).



Mi-7-3 Photo of the SBD (A-24) aircraft drawings (*Angelucci, 1979:38*).



Photo Mi-7-4. A-24 engine with propellers, north side.



Photo Mi-7-5. Wright cyclone 9 cylinder radial engine, with exposed cylinder heads. A very bent propeller is in the background. Photo from north side.



Photo Mi-7-6. Exhaust headers lie nearby the engine in the sand.



Photo Mi-7-7. Inner-cooler lies in the sand near the engine.



Photo Mi-7-8. Valve lies in a partial head section in the nearby sand.



Photo Mi-7-9. Both forward firing 50 caliber machine guns are visible in this photo taken behind the radial engine. Ammunition boxes are to the left and right.



Photo Mi-7-10. Author holds a 50 caliber bullet next to the left machine gun ammunition box.



Photo Mi-7-11. Right side ammunition box, with decayed and live rounds still in the box.



Photo Mi-7-12. Pilot/Gunners' protective steel armor plate.



Photo Mi-7-13. Largest piece of aluminum found at the site is this apx. 15 x 30 inch panel

MILI SITE 8 REPORT

NAME: JAPANESE DOCK AT MILI, MILI
RMIHPO Site Number MI-MI-LG-008

GENERAL DESCRIPTION AND LOCATION

The Japanese Dock at Mili is now nothing more than a collection of large stones and cement pieces from the dock built during World War 2. It has none of the features of other outer island Japanese built docks, primarily due to the fact that it is one of the only ones build on an exposed western lagoonside side sandy beach.

The site is very murky with limited visibility and strong wave action, making photographic work very difficult. No underwater photos or video was taken at the site, with only surface and archaic photos. A map of the site, Map Mi-8, follows the photo section of this report.

GPS Position (At the low water mark at the dock): N 06.05.039 x E 171.44.331

Level of Site Significance: *LESS SIGNIFICANT*

DETAILS

The Japanese Dock was constructed of concrete pilings, large stones, re-enforced steel, and coral fill. Larger concrete deadmen (large blocks of concrete to firmly hold structures) were poured in the water on the ends and various support positions. There was virtually no protection against the prevailing wind and waves, and little depth at the end. The patrol vessels and cargo ships could only be serviced by the 4 landing crafts, 5 power boats or 17 other small tenders allocated to the atoll (*Christiansen (Mili), 1994:21*). An aerial photo taken by a Navy aircraft (probably an SBD Dauntless) from November, 1943 showed the dock and miscellaneous support craft (Photo Mi-8-1), and a second photo from the same time shows the beach with the dock in the background (Photo Mi-8-2).

The dock was heavily bombed, and the normal wind and weather destroyed the rest. The remains are visible in photos Mi-8-3 and 4, both taken from the shore at low tide. An additional photo of the lagoonside beach shows additional housing and the dock, none of which remains today.

COMMENTS AND CONCLUSIONS

The Japanese Docks around the Marshall Islands have always been an interesting study, as most have been built for decades of use. Unfortunately the one at Mili, Mili was built out of desperation and in a horrible location, and the bombing and time have

taken its' toll. The Japanese Dock at Mili, and all the nearby housing supports, are nothing but rocks and broken cement.

PHOTO SECTION OF THE SITE 8 REPORT



Photo Mi-8-1. A photo of the Japanese Mili Dock taken during the November, 1943 raid. Note the tenders at the dock, and 1 pulled up on-shore. (*CINCPAC Photo No. 205295*)



Photo Mi-8-2. The Japanese Dock at Mili is at the far upper right corner, with housing over the water in this November 1943 aerial photograph. (*CINCPAC Photo No. 205291*).



Photo Mi-8-3. The Japanese Mili Dock today, south side view. Note the concrete deadmen.

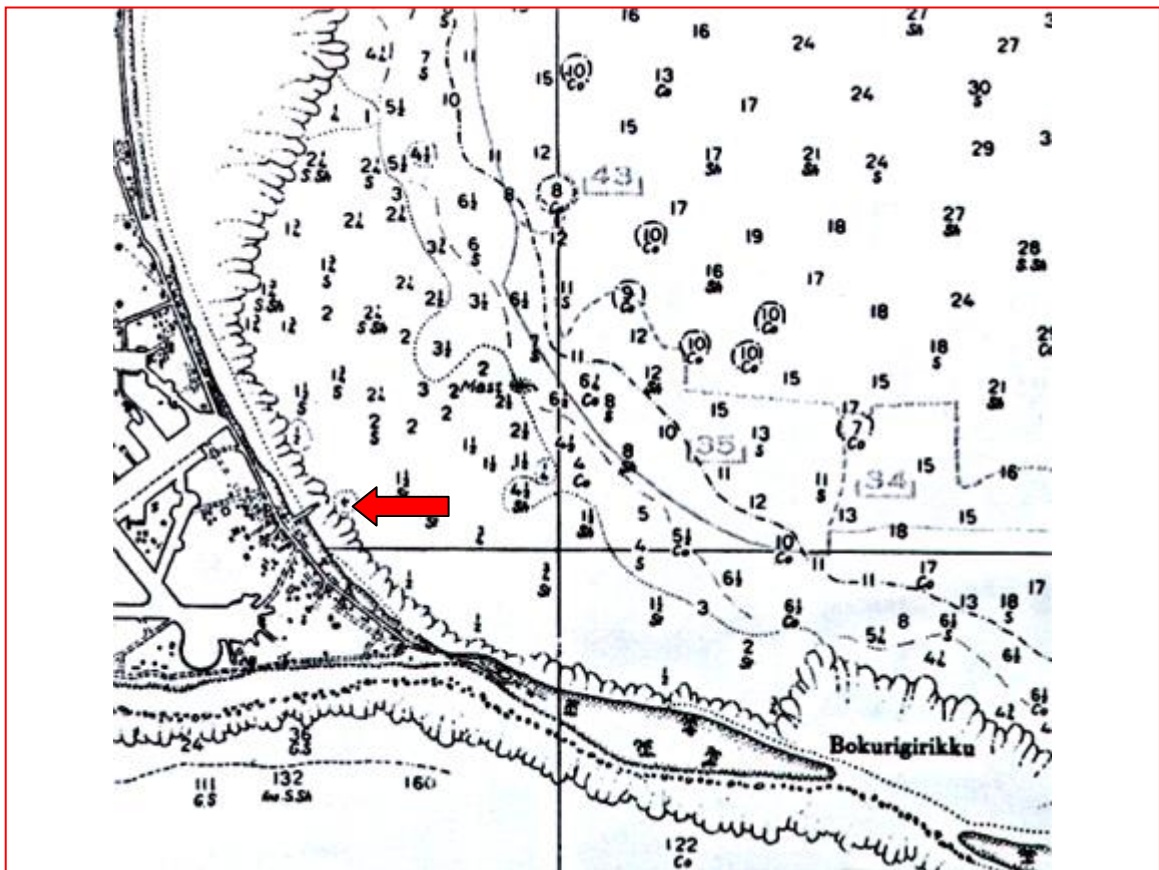


Photo Mi-8-4. View of the Japanese Mili dock looking down the north side.

MAP OF MILI SITE 8 REPORT

The **Red** arrow indicates the site of the Japanese Dock Remains.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 9 REPORT

NAME: WRECKAGE OF THE JAPANESE SHIP NANKAI MARU
RMIHPO Site Number MI-Mi-Lg-009

GENERAL DESCRIPTION AND LOCATION

This Site is the wreckage of the Japanese Cargo vessel Nankai Maru, also referred to in some sources as the Nankai Maru No. 2 (*Carey, 2000:64 this entry is probably in error, and another ship was sunk instead of the Nankai Maru No. 2*). It was sunk on a course pointing 70 degrees magnetic, bow west into the prevailing wind. It sits on a 30 foot (bow) to 24 foot (stern) sandy bottom, with small coral heads in the area.

The site is very murky with limited visibility and strong wave action, making photographic work very difficult. A map of the site, Map Mi-9, follows the photo section of this report.

GPS Position (At the stern of the vessel): N 06.05.394 x E 171.44.833

The ship is at a compass courses degrees magnetic to the following points:

North End of Mili:	300 degrees
Copra Warehouse on Mili:	240 degrees
South End of Mili, Mili:	165 degrees
Thin spot of Bokrikrik Island:	not taken
South End of Bokrikrik Island:	120 degrees

Level of Site Significance: *SIGNIFICANT*

DETAILS

The Nankai Maru was listed as a freighter, with an apx. length of 330 feet and a 33 foot beam, drawing apx. 15 feet of water. It was rated between 1,600 and 2,500 GRT, probably closer to the upper range. It was of riveted steel construction, with steam boilers for propulsion, driving a large bronze propeller. It had 4 cargo holds, a stern house, and few accommodation spaces. It was sunk at anchor, and although the anchor and chain was visible in 1979. it not located during this survey, probably buried in the sand.

The vessel was sunk while unloading supplies, mainly rice and cement, on apx. December 25, 1943, by Army A-24 (SBD's) of the 531st fighter bomber squadron, as reported by POW's after the war. Direct hits or near misses sunk it quickly and upright, and reportedly killed a number of the stevedores and crew. It had previously discharged 4 amphibious battle tanks, which still are on the island. The rice, even wet, was recovered by the hungry garrison, and this was the last cargo vessel to supply the atoll.

The attack is described in the Army's 7th Air Force Mission Report No. 531-3, which is included in the appendix.

The vessel seemed to have the following layout; 4 cargo holds, 2 masts, probably dual port and starboard with attached booms, a small fore-peak house, a small equipment house mid-ship, and a stern engine room and pilothouse above. One of the cargo holds was probably used for fuel storage, coal or wood, and water and small fuel tanks nearby.

The survey started at the stern, which was the tie-up and GPS reference point, which also sticks out of the water at low tide. Swimming towards the bow passes a mosaic of ship debris, a mass and mess of broken and twisted steel. Few items were identifiable without careful analysis and review, and experience on similar vessels.

The Photo Section of this Site report starts at the bow, with Photo Mi-9-1 showing the remains of the bow. The bow was intact and you could stand on it and be dry at low tide when I visited it in 1979. It has been struck twice since then by other vessels, crushing it forward and deeper underwater. An anchor cable has also cut through and around the bow area (Photo Mi-9-2), this was from the local vessel M/V Flying Cloud.

The remains of a bulkhead is shown in Photo Mi-9-3, which also has a school of Jackknife fish living in the area (Photo Mi-9-4). The cargo hold behind the bulkhead has a railing visible in Photo Mi-9-5, and a stack of cement to the bottom of the hold is visible in Photo Mi-9-6.

The main engine was steam boiler driven, as shown in Photo Mi-9-7. An engine catwalk is shown in the boiler area in Photo Mi-9-8. Nearby, a mast is lying amid the debris (Photo Mi-9-9), and an air vent is lying on the bottom (Mi-9-10).

The stern had an electric motor (Mi-9-11) probably driving the windlass, and sits above the massive propeller shown in Photo Mi-9-12. The stern structure itself is lying 50 feet away on the bottom in Photo Mi-9-13, as are the stern bollards still attached to their piece of plate steel decking in Photo Mi-9-14.

COMMENTS AND CONCLUSIONS

The bombing was effective and intense, as the ship was probably target practice for the duration of the war. The vessel wreckage is a broken puzzle with pieces missing. No artifacts of any kind were seen, but local Marshallese claim to have recovered dinner plates from the wreckage in the past.

The site is good for diving, but not great. It is interesting to a shipwreck diver, and is good for close up photography. The site is full of reef fish of every description, but the surrounding area is sandy with limited coral life. The site has typically rough surface conditions with limited visibility and debris filled water. Locals claim spear-fishing in and around the vessel brings in the local sharks.

PHOTO SECTION OF SITE 9 REPORT



Photo Mi-9-1. Bow section of the Nankai Maru.



Photo Mi-9-2. Cable damage from the M/V Flying Cloud in the bow area.



Photo Mi-9-3. Bulkhead Wall near bow area.



Photo Mi-9-4. Jackknife fish near the forward bulkhead area.



Photo Mi-9-5. Cargo hold railing sitting atop the cargo of cement.



Photo Mi-9-6. Stacked cargo of cement.



Photo Mi-9-7. Boiler section near the stern of the vessel.



Photo Mi-9-8. A section of broken engine room catwalk near the boiler.



Photo Mi-9-9. A fallen mast lying amid the ships debris.



Photo Mi-9-10. An air vent lies on the bottom.



Mi-9-11. An electric motor sits near the stern at deck level.



Photo Mi-9-12. Massive propeller is in place amid a sea of debris at the stern.



Photo Mi-9-13. A section of the stern near the deck level.

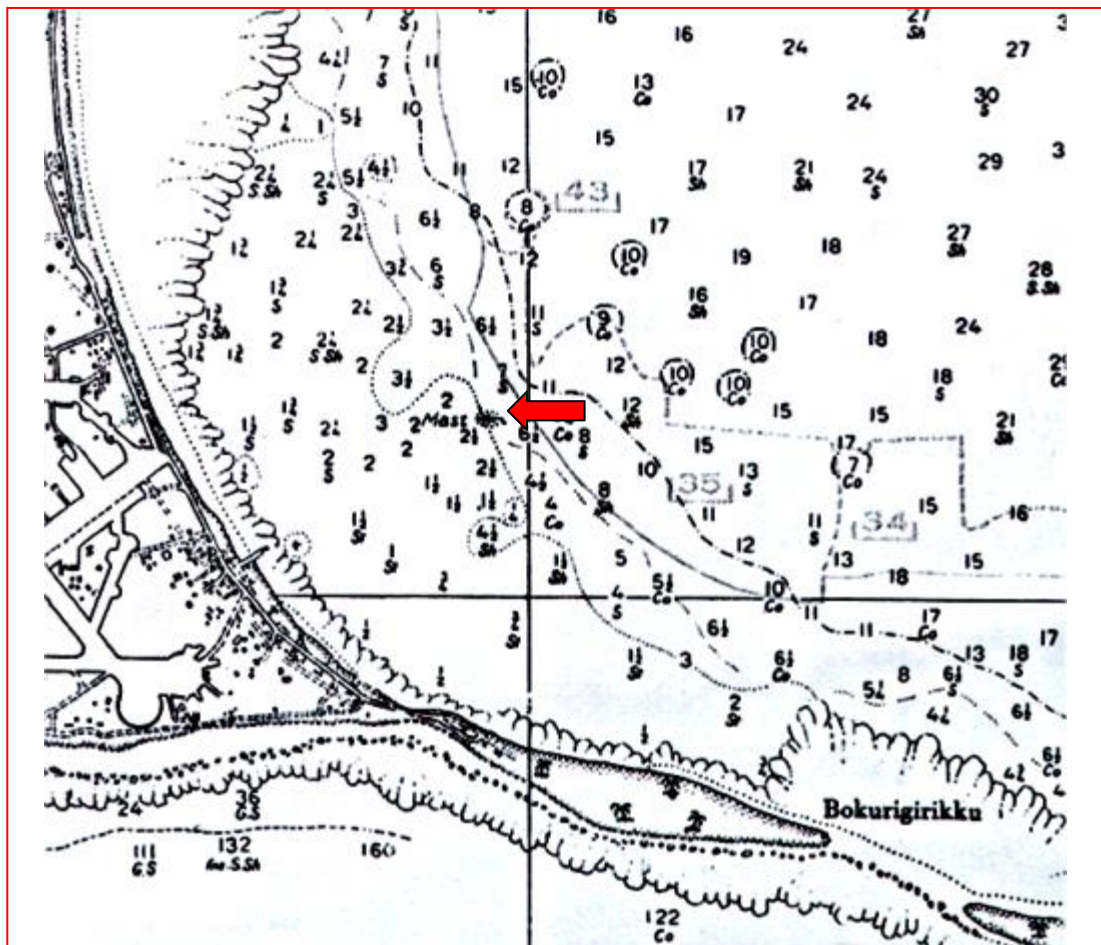


Photo Mi-9-14. Stern Bollards sit on their section of steel deck, torn off the stern of the vessel, now sitting nearby on the sand.

MAP OF MILI SITE 9 REPORT

The **Red** arrow indicates the site of the Nankai Maru Wreckage.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 10 REPORT

NAME: WRECKAGE OF AMERICAN B-25 AIRCRAFT
RMIHPO Site Number MI-MI-LG-010

GENERAL DESCRIPTION AND LOCATION

The Wreckage of an American B-25 Aircraft was located in the lagoon off the southern end of Mili Island. The wreckage was found apx. 1,500 yards into the lagoon, apx. 800 yards south-south-east of the wreckage of the Nankai Maru (MI-Mi-Lg-009). The main section was found in 34 feet of water on a sandy bottom. Additional wreckage is scattered over an apx. 300 yard long by 100 yard wide area, leading back towards the Nankai Maru, presumed to be near the initial crash point. The aircraft could have floated with the natural flow of the long-shore current, but this would be against the prevailing wind. The site was murky with limited visibility and strong surface wave action, making finding the aircraft and photographic work very difficult. A map of the site, Map Mi-10, follows the photo section of this report.

GPS Position (At the main aircraft section):

The aircraft is at a compass courses degrees magnetic to the following points:

North End of Mili:	degrees
Copra Warehouse on Mili:	degrees
South End of Mili, Mili:	degrees
Thin spot of Bokrikrik Island:	degrees
South End of Bokrikrik Island:	degrees

Level of Site Significance: *VERY SIGNIFICANT*

DETAILS

The aircraft wreckage, that of a U.S.Army B-25, is one of the most important finds of this survey, and one of the most significant artifacts of WWII in the Marshall Islands. The aircraft is remarkably in good condition, and has a historic story from beyond its mere crashing into Mili lagoon.

The aircraft, a model B-25D-15 Medium Bomber, was made by North American Aviation, Inc., and had a wingspan of 67 feet with a length of 52 feet. Photo Mi-10-1 is a military photo of a D model taxiing on the ground. Photo Mi-10-2 is the cross section of an early G model, which had a similar fuel tank and waist gun layout as the D-15 model. Photo Mi-10-3 is the drawings of a similar C model. Photo Mi-10-4 is another rare aircraft photo of an RAF version converted to the standard Pacific C/D model. It typically carried 3000 pounds of bombs in different assortments and configurations during the war. This model D-15 carried somewhat less bomb-load due to an extra 335

gallon bomb bay fuel tank. It also normally carried a crew of 5 or 6, and on this mission, an extra military intelligence officer was an observer and 7th crewmember.

The Pacific version of the D-15 model, as shown in the 4th photo, had unique single 50 caliber machine guns mounted below each side of the cockpit of the aircraft in pods, to aid in ground attacks. The mounting of the waist guns were forward of the rear top turret, presumably to defend against more common rear attacks encountered in the Pacific.

This aircraft, serial number 41-30613, was based in Makin, Gilbert Islands as part of the 7th Air Forces 41st Bomb Group, 396th squadron. This mission, on January 19, 1944, was listed in *Mission Report No. 60*, and this aircraft with 16 other B-25s' was tasked with attacking any shipping and targets on the Mili Base. This aircraft was shot down probably seconds after dropping its' bomb load and made a forced landing immediately into the lagoon directly upwind from the Japanese base. Five of the aircrew escaped into the top mounted life raft, and 2 died in the crash. Three, presumably the 2 pilots and a third up front, were moderately burned during the crash, and all indications point to the aircraft receiving an anti-aircraft near miss above the cockpit, additionally knocking out the right engine. All were immediately captured by the Japanese (*Cook, Mili War Crimes Investigation, September 19, 1945*).

The 5 remaining aircrew were interrogated, tortured, and finally executed by beheading in late January or early February, 1944, when the Japanese feared they were to be invaded along with Kwajalein and Majuro. It is not known exactly which 5 of the 7 aircrew survived the crash to be executed, nor where the remains of the other 2 aircrew went. A war crimes trial after the war convicted 10 Japanese soldiers of these crimes. The atoll Commander, Captain Masanari Shiga, committed suicide in Majuro after in testimony he claimed responsibility for the executions of these aircrew and 2 other Catholic Priests (*Cook, Mili War Crimes Investigation, September 19, 1945*).

The major portion of the aircraft itself is in one piece, being the wings and fuselage back to the top turret. The engines and tail of the aircraft tore off the aircraft, probably during the water landing and were not located during the survey.

The front of the aircraft is almost complete, with the forward bombardiers position either crushed, missing, or buried in the sand (Photo Mi-10-5). A side photo of the cockpit, Photo Mi-10-6, shows the pilots seat and profile of the aircraft, less the glass, which was reportedly removed by the Marshallese after the war for personal use.

A close-up of the cockpit shows the throttle quadrant controls (Photo Mi-10-7), which also shows the right engine feathered, possibly due to the right engine being knocked out during the attack.. The back seat position is full of loose live 50 caliber machine gun shells, possibly for the forward guns, and the walk-through to the rear of the aircraft is blocked by the extra full tank. The bombardiers position is buried in the sand, and I don't know what artifacts may be buried there.

The plane is missing both engines, but the port engine mounting location is shown in Photo Mi-10-8. The wings are intact, and still suspended above the sand and Photo Mi 10-9 shows the left wingtip.

The rear twin 50 caliber machine gun turret is intact (Photo Mi-10-10), and is the last rear portion of the plane at the site. Both waist guns are present, the left gun still on its gimbals (Photo Mi-10-11), and the right gun in the sand (Photo Mi-10-12).

The aircraft also has other miscellaneous points that were photographed, including radios (Photo Mi-10-13), the empty life raft compartment (Photo Mi-10-14), and decay on the right wing (Photo Mi-10-15).

A fair amount of the aircraft is buried in the sand and may hide other artifacts. Attempts to locate the missing engines and tail section were not successful. Marine life consists of beautiful coral growth and local reef fish in and around the site.

The crew loss in this crash are listed with their rank and serial number below.

CREW LIST: From *Missing Air Crew Report Number 1900.*

	Name	Rank		Serial Number
1.	Johnston, John Alexander	Flight Officer (Pilot)		T-328
2.	Kimmey, David Wellington	2 nd Lt. (Co-Pilot)	*	0-747-818
3.	Castillo, Frank	2nd Lt. (Naval Intelligence)		0-741-832
4.	Duval, Peter	1 st Lt. (Naval Intelligence)	*	0-728-261
5.	Quinn, James Lawrence	S/Sgt.		32-373-700
6.	Wages, James A., Jr.	S/Sgt.		20826151
7.	Walker, James Garfield	S/Sgt.	*	35-429-070

* Note: (These men were mentioned from reports to have survived the crash and were executed and buried on Mili, Mili).

COMMENTS AND CONCLUSIONS

The aircraft wreckage and aircrew story are both unique and significant assets of Mili Atoll. The assets include easily removable machine guns, ammunition, flight controls and instruments, radios, seats, and misc. aviation hardware. The subsequent War Crimes Trial detailed the story of the aircrews last days, their execution, and their unknown burial somewhere in Mili. The site should be provided with protection from unsupervised visitors, and the local government should do its' part to protect this part of their history. Buoys should be placed near-by to prohibit anchor damage by visitors.

PHOTO SECTION OF SITE 10 REPORT



Photo Mi-10-1. Photo of a B-25 model D taxiing on the ground (Avery, 1992:41).

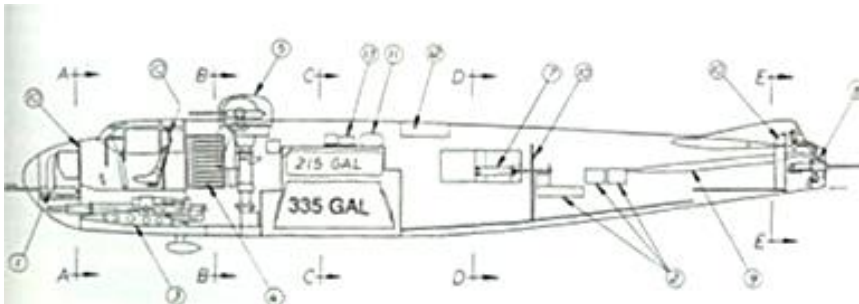


Photo Mi-10-2. Drawing of a similar G model with the center bomb bay 335 gallon fuel tank (Avery, 1992:57).

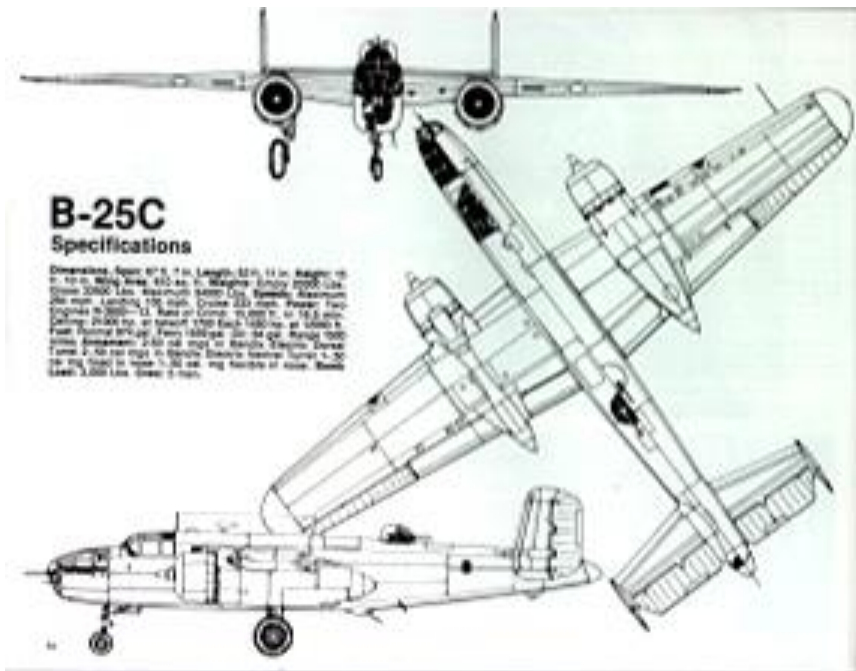


Photo Mi-10-3. Drawing of a similar B-25C model aircraft. (McDowell, 1978:14).



Photo Mi-10-4. Unique photo of an exact Pacific version of a D model B-25, flown in this photo by the RAF. Note single 50 caliber machine gun under the cockpit, plus waist guns mounted forward of the top turret (*Avery, 1992:148*).



Photo Mi-10-5. Front of the B-25.



Photo Mi-10-6. Photo of the pilots area, with most glass and 1 pilot seat missing. The mast for radio wire antenna and the base for radio direction finder are visible on the top of the aircraft.



Photo Mi-10-7. Throttle quadrant of the B-25D. Fourth large lever from the right, the pitch control, is pulled back and down away from the others which are pushed all the way to the top of the quadrant, and indicates the right engine was possibly being feathered.



Photo Mi-10-8. Missing engine position on the left wing.



Photo Mi-10-9. Left wing and wingtip, complete with coral growth.



Photo Mi-10-10. Top turret with dual 50 caliber machine guns.



Photo Mi-10-11. Left side waist 50 caliber machine gun.



Photo Mi-10-12. Right side waist machine gun in the sand.



Photo Mi-10-13. Radios just forward of left side waist machine gun position.



Photo Mi-10-14. Empty life raft compartment.

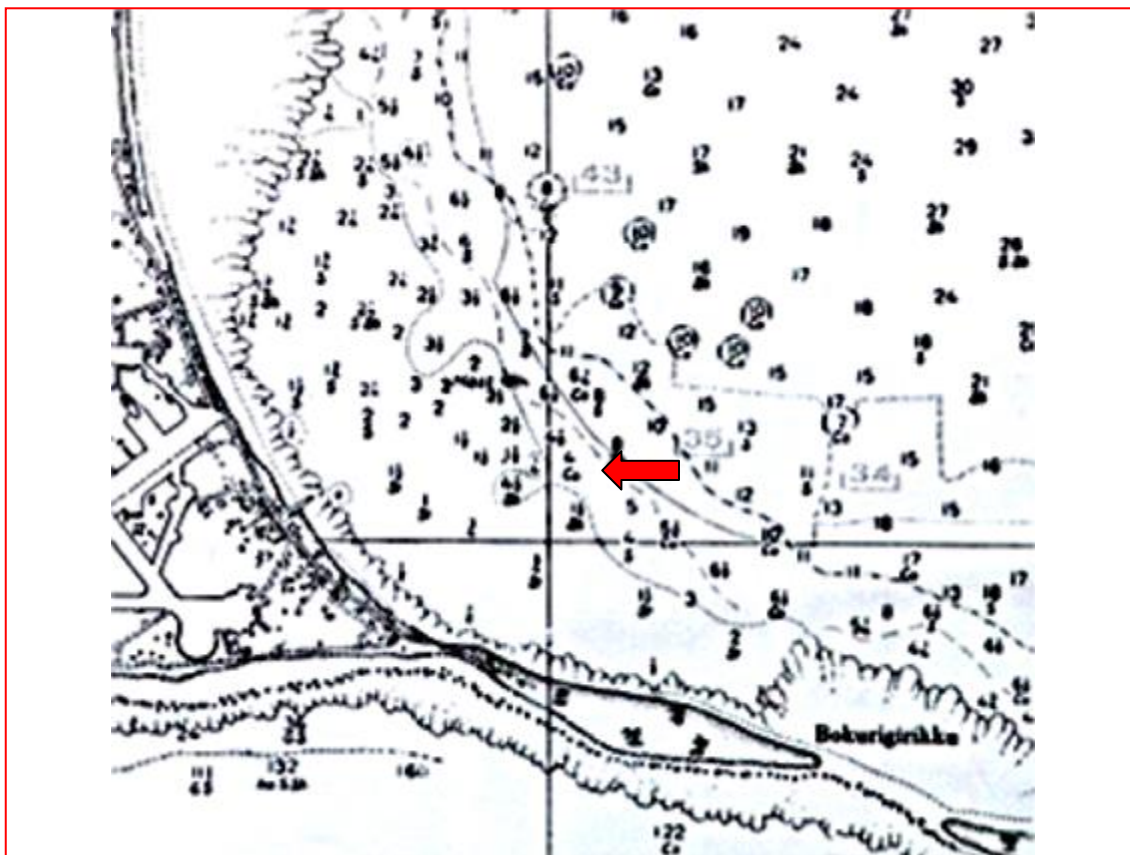


Photo Mi-10-15. Right wing decay with coral growth.

MAP OF MILI SITE 10 REPORT

The **Red** arrow indicates the site of the American B-25 Wreckage.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 11 REPORT

NAME: WRECKAGE OF JAPANESE "BETTY" BOMBER AIRCRAFT
RMIHPO Site Number MI-MI-LG-011

GENERAL DESCRIPTION AND LOCATION

The Wreckage of a Japanese G4M Bomber was located buried in the sand at the high water mark near the center of Bokrikrik Island, the next island south of, but attached, to Mili, Mili.

A map of the site, Map MI-11, follows the photo section of this report.

GPS Position (At the main aircraft wing section): N 06.04.649 x E 171.44.815.

Level of Site Significance: *LESS SIGNIFICANT*

DETAILS

The Japanese Mitsubishi G4M Bomber was code named and called a "Betty" by the Allies. It was a bomber, similar in description and size to an American B-25 medium bomber, with an 82 foot wingspan, and a length of 65 feet, shown in a military photo and drawings in Photos Mi-11-1 and 12. I first found the aircraft in 1979, when it was in much better condition. During the survey it was re-located, but only a section of the left wing remains, and positively identified by comparing it with other "Betty" remains on the island (Photo Mi-11-3). Other photos, Mi-11-4 and 5, show its' location on the beach. It is not known what model it was.

A brief search of the water and area found no other debris. Numerous bomb craters are in the area (Photo Mi-11-6), on the reef and island, as an ammo dump was also nearby during the war. This probably helped destroy any major aircraft remains, as did the tides, storms, and time.

I found no information on its' loss, or any local stories on its' crash.

There were no artifacts found at the site besides the aircraft wing section.

COMMENTS AND CONCLUSIONS

This site is another example where time wears away history. I see no easy way to protect it, and this survey may be the last record of this bit of history.

PHOTO SECTION OF SITE 11 REPORT.



Photo Mi-11-1. Military recognition photo of a Mitsubishi G4M "Betty" (*Angelucci, 1977:153*).

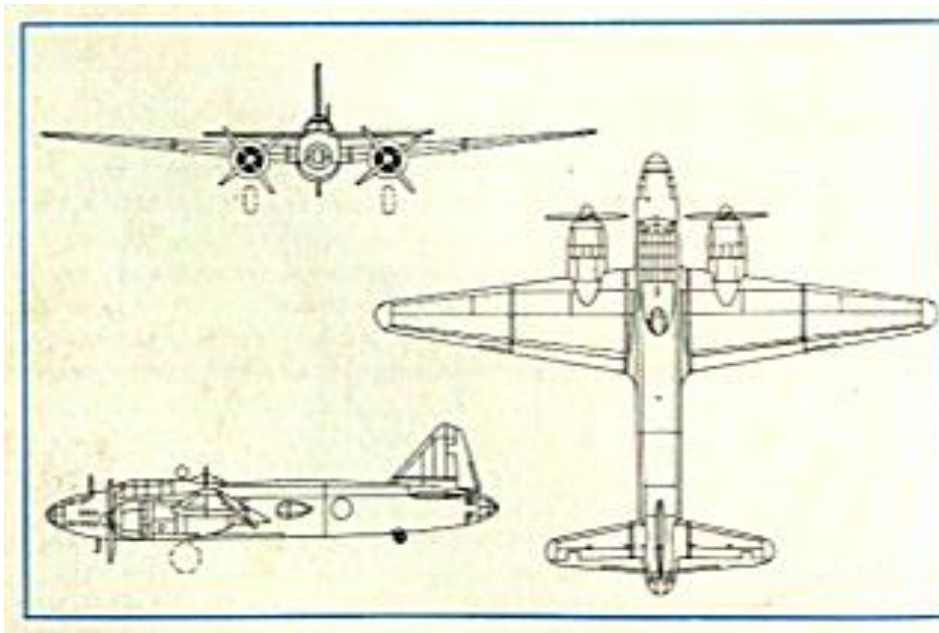


Photo Mi-11-2. Aircraft drawings of a Mitsubishi G4M Bomber (*Angelucci, 1977:152*).



Photo Mi-11-3. "Betty" wing section with landing gear boss.



Photo Mi-11-4. View of the wreckage from the west.



Photo Mi-11-5. View of the wreckage from the east.

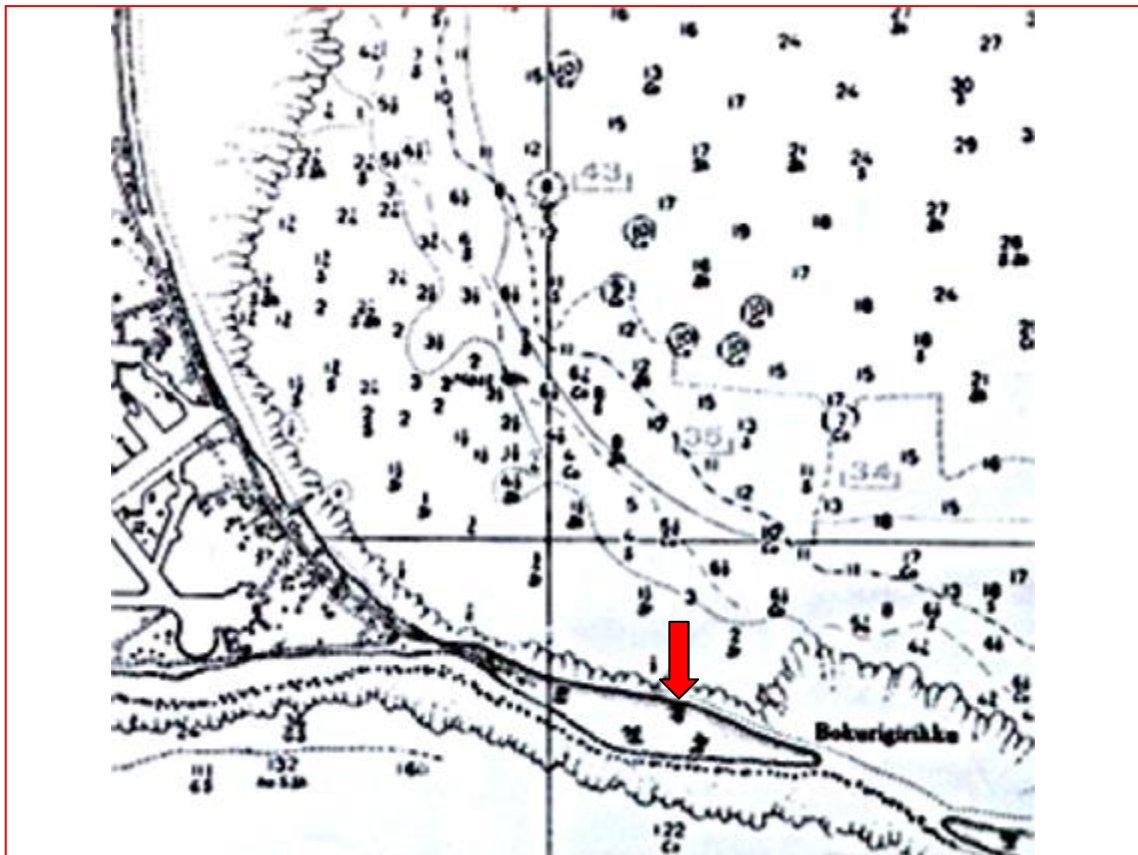


Photo Mi-11-6. View of the nearby reef with a bomb crater in the foreground on the reef, and one more visible behind to the left on the underwater reef plain. It is low tide.

MAP OF MILI SITE 11 REPORT

The **Red** arrow indicates the site of the Japanese "Betty" Bomber Wreckage.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



MILI SITE 12 REPORT

NAME: UNKNOWN AIRCRAFT WRECKAGE AT ENAJET ISLAND RMIHPO Site Number MI-MI-LG-012

GENERAL DESCRIPTION AND LOCATION

The Wreckage of an unknown aircraft is located on the oceanside on Enajet Island, but was not located by me during this survey. The aircraft was (in the early 1990s') a debris field of remains extending from the 2 aircraft engines in apx. 60 feet of water to miscellaneous shards of aircraft aluminum in the surge channels and up onto the beach. The site was previously visited by other divers in the early 1990s', and their story provides part of this report.

A map of the site, Map Mi-12, follows the photo section of this report.

GPS Position (At the approximate area of the wreckage): N 06.01.500 x E 171.55.500

Level of Site Significance: *LESS SIGNIFICANT*

DETAILS

Many sites I found on the outer islands in the late 1970s' or 1980s' simply do not exist anymore. Many of my older photographs were destroyed in a 1992 storm, so memories, combined with military reports or oral history are my only source of details.

Divers who re-discovered this aircraft in the early 1990s' claim the aircraft was a B-25 bomber, based upon viewing and photographs of the propeller hub nose cone. (Photo MI-12-1). Local Marshallese claim the aircraft was a "Seaplane", and a PBY-5 had the same type nose cone (MI-12-2), and some were lost at sea, and it is remotely possible one floated in to shore and was destroyed in the surf zone. There are some pontoon float sections of assorted seaplanes on Mili Atoll, but we did not find any to photograph or analysis for US markings and serial numbers. These could have also been post war, so again the mystery continues.

COMMENTS AND CONCLUSIONS

My guess is the aircraft was a lost PBY-5, as I do not have any other missing bomber group B-25s'. There is also a report it was a Japanese plane, possibly a "Betty" bomber. Without viewing the remains at the site or older photographs, no definite proof of the aircraft type or model are possible. The prior divers were knowledgeable enough to identify the nose cone, so this should rule out a Japanese plane. Any other comments without a photo or finding the site are speculation. No artifacts were found at the site.

PHOTOS OF SITE 12 REPORT

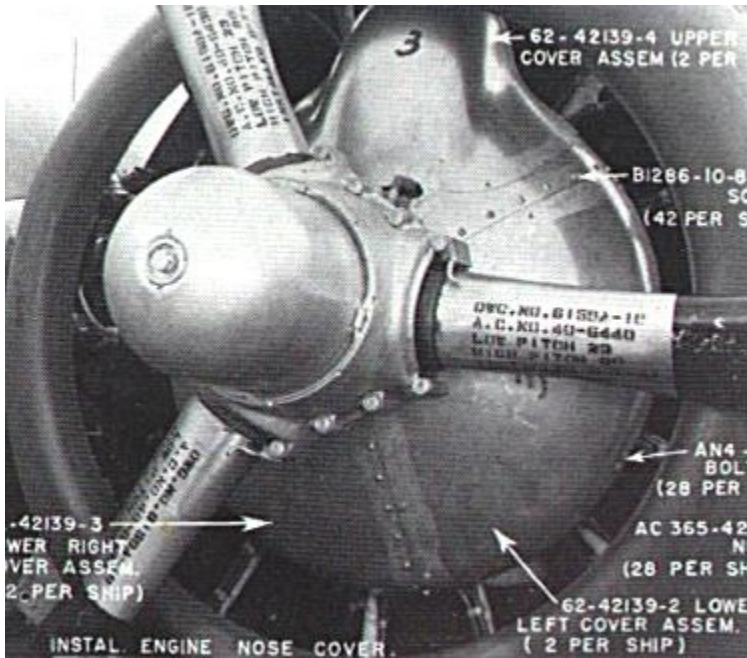
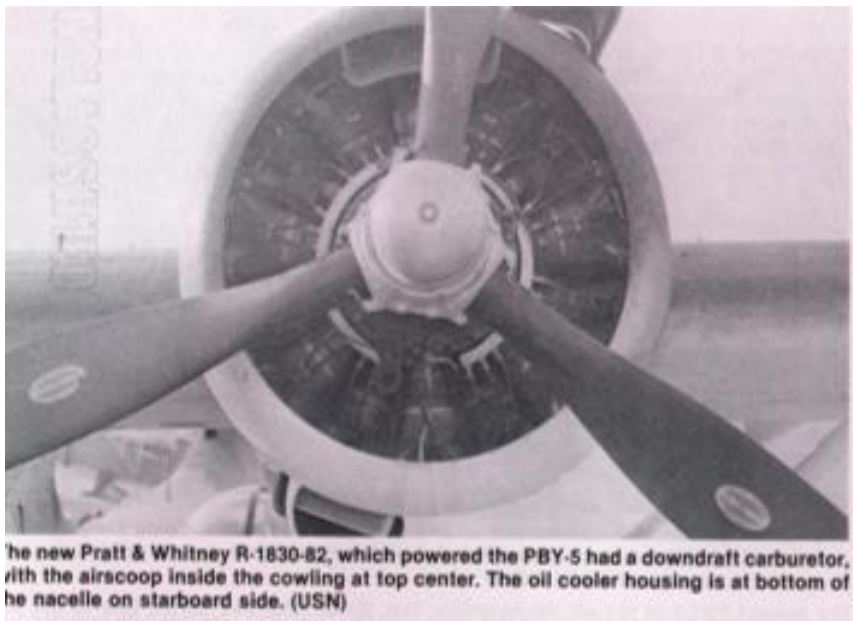


Photo Mi-12-1. The propeller hub nose cone of a B-25 bomber engine.



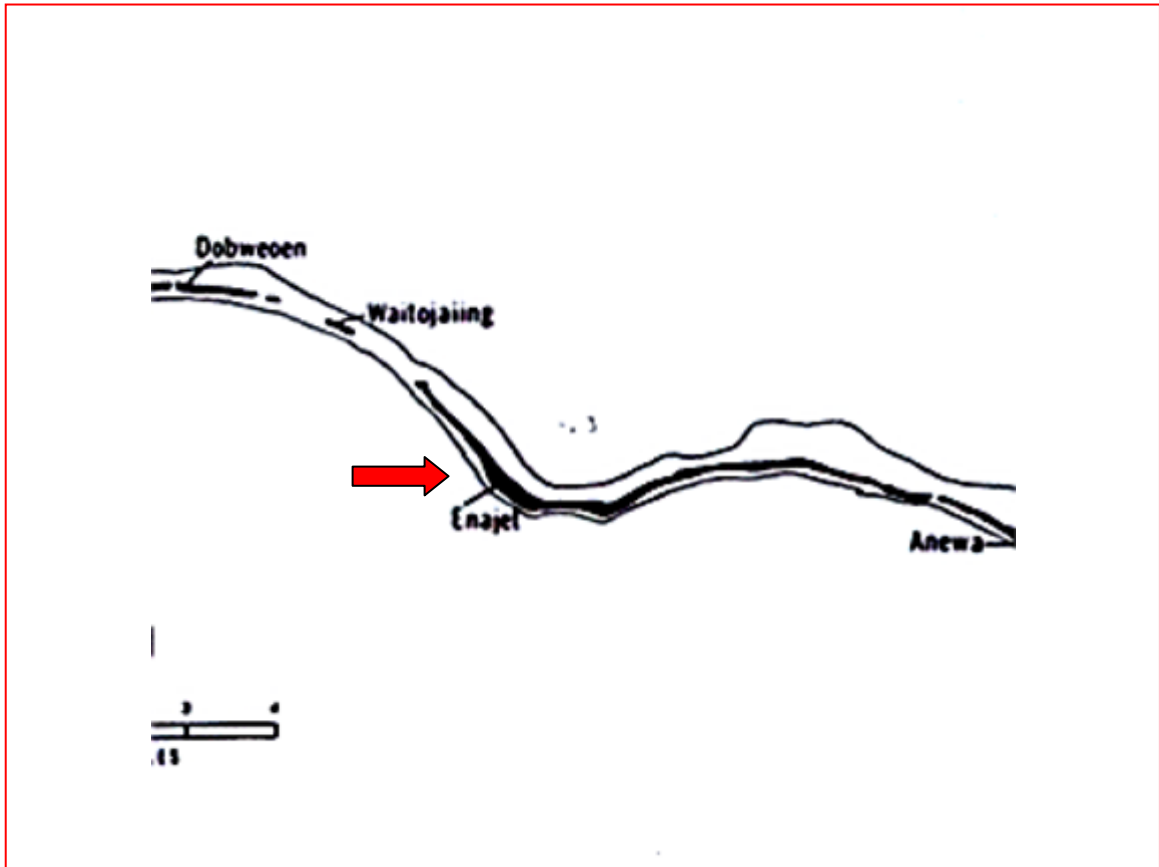
The new Pratt & Whitney R-1830-82, which powered the PB5-5 had a downdraft carburetor, with the air scoop inside the cowling at top center. The oil cooler housing is at bottom of the nacelle on starboard side. (USN)

Photo Mi-12-2. Photo of a PB5-5A engine with the same propeller hub and nose cone. (Scarborough, 1983:24).

MAP OF MILI SITE 12 REPORT

The **Red** arrow indicates the site of the Unknown Aircraft Wreckage.

The Map was scanned from the United States Defense Mapping Agency Chart 81796, Mili Atoll, Northwestern Part, 3rd edition, 1985.



OTHER MILI SITES

NAME: MOLIKS' MODERN VESSEL WRECKAGE AT MILI, MILI
Designated as Mili Other-1. No RMIHPO Site Number

GENERAL DESCRIPTION AND LOCATION

The Wreckage of a modern steel (1960s') trading vessel lies in pieces on the western side of Mili, Mili, just south of the new channel cut through the reef for boat service. The vessel belonged to Molik Ishugoru, who had a business in Majuro. According to local stories, the vessel either accidentally ran aground, or was blow ashore during off-loading operations. A Photo of the wreckage, Photo Mili Other-1, shows part of the stern in the foreground, a section of reef, then the main engine stands out prominently out on the reef in the surf zone. The area is very rough and dangerous.

The site and details are included in this survey to help future researchers avoid confusion over the era of this wreckage. There are no artifacts.

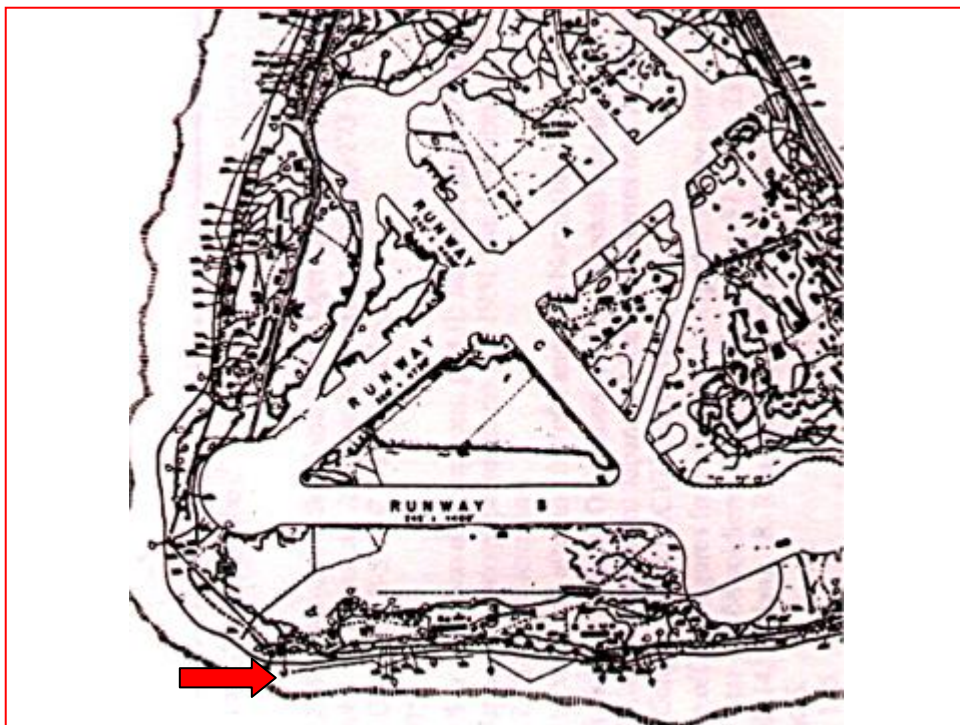
PHOTO SECTION OF THE OTHER SITE REPORT



MAP OF MILI OTHER SITE 1

The Mili Base Map copied from a USSBS Survey Map, 1947.

Site is located at the red arrow.



CHAPTER FOUR: SIGNIFICANCE OF MILI UNDERWATER ASSETS

SITE ANALYSIS

Each site was judged according to its' significance level, based upon the criteria listed in the RMI Historic Preservation Legislation of 1992.

Judgements on each of the sites level of significance were based upon the surveyed assets and my underwater and historical experiences. All background information to make these judgements is included in each individual Site Report. Any comments and opinions are mine alone, and may not represent the exact opinion of the Republic of the Marshall Islands Historic Preservation Office, The Mili Atoll Local Government, or the United States Department of the Interior through the National Park Service, although I would hope it does.

CRITERIA FOR RECOGNITION AS CULTURAL OR HISTORIC PROPERTY.

A Site or Asset shall be recognized as having cultural or historic value if it appears to meet one or more of the following criteria:

1. Possession of cultural value.
2. Possession of social value.
3. Possession of interpretive or educational value.
4. Possession of research question and answer archaeological value.
5. Possession of archival or information of archaeological value.
6. Possession of archaeological or builders excellence.
7. Possession of archaeological representation.
8. Possession of historical ambience or "sense of the past".
9. Possession of aesthetic value with "sense of the past pleasing to the eye".
10. Possession of social historical value.
11. Possession of particularistic historical value.

DEFINITIONS OF THE LEVELS OF SIGNIFICANCE

1. Very Significant. One of a kind, preserved, rich in artifacts, or unique history.
2. Significant. One of a kind, well preserved, not disturbed by construction or the assets of a prehistoric site not yet surveyed.
3. Less Significant. Similar to other assets, disturbed by construction or the environment, common history.
4. Insignificant. Abundant in other areas, located in disturbed or destroyed areas, no significant history.
5. Undetermined Significance. No detailed survey of site.

TABLE OF MILI SITES AND THEIR SIGNIFICANCE

Site 1. American Torpedo.

Level of Significance: *SIGNIFICANT*
Possesses historical value, one of a kind.
(This site was never located.)

Site 2. Unknown Aircraft Debris.

Level of Significance: *UNDETERMINED SIGNIFICANCE*
Could possess historical or archaeological value.
(This site never located.)

Site 3 Wreckage near Ejowa Island.

Level of Significance: *SIGNIFICANT*
Possess historical or archaeological value, one of a kind, pre-dates oral history.
Also has both a "sense of the past" and significant archaeological value.

Site 4. Japanese Aircraft Wreckage at Nar Island.

Level of Significance: *LESS SIGNIFICANT*
Site is disturbed and partially destroyed, and not one of a kind. Aircraft of this era and type are represented elsewhere on shore on the atoll. The site has been used for years as a trash/burn pit.

Site 5. Japanese Landing Craft Debris.

Level of Significance: *LESS SIGNIFICANT*
Site is disturbed and partially destroyed. Although the site is one of a kind for Mili Atoll, it is not a significant historical item. Only the unique historical story remains.

Site 6. Japanese Patrol Vessel Wreckage at Melka Island.

Level of Significance: *LESS SIGNIFICANT*
Site is disturbed and almost completely destroyed. Although this was the only Patrol Vessel found in Mili Atoll, other Patrol vessels, some in very good condition, exist around the Republic. This site is history.

Site 7. American A-24 Aircraft Wreckage.

Level of Significance: *SIGNIFICANT*
Site is disturbed and partially destroyed, but has unique one of a kind individually assets This aircraft is a unique WW2 aviation loss, is recognizable, had loss of life, and represents a true "sense of the past". The assets, especially the guns, need protection.

Site 8. Japanese Dock at Mili, Mili.

Level of Significance: *LESS SIGNIFICANT*

Site is destroyed. The site is only mentioned as someday another dock will be built at Mili, Mili, and if this site is re-used for a new dock, this history of the old dock will remain in this report. The site has no assets.

Site 9. The wreckage of the Japanese vessel Nankai Maru.

Level of Significance: *SIGNIFICANT*

Site is partially destroyed, but is a unique asset for the atoll. This wreckage is the only significant WW2 Japanese asset underwater in the atoll. The site has no assets, but does provide a nice site for tourist SCUBA diving. The wreckage is packed full of fish life, and is another assets that had a loss of life and a "sense of the past". It should be marked with buoys to avoid anchor damage and provide an aid to navigation, as 2 modern ships have collided with the bow section of the wreckage in the last 10 years.

Site 10. The wreckage of the American B-25 Bomber.

Level of Significance: *VERY SIGNIFICANT*

Site is partially destroyed, but represents a unique place in history. The wreckage section discovered is basically intact and with assets that need protecting. The site provides an excellent example of WW2 history, had a loss of life, and had an additional story relating to the execution of the aircrew and the eventual war crimes trial.

Site 11. The wreckage of a Japanese "Betty" Bomber.

Level of Significance: *LESS SIGNIFICANT*

Site is virtually destroyed. The site is not unique, and is represented on shore in other parts of the airbase. The asset is only the remaining aluminum wing section. The site has no history, and only a slight sense of history, compared to the other more significant sites nearby.

Site 12. The wreckage of an unknown aircraft oceanside of Enajet Island.

Level of Significance: *LESS SIGNIFICANT*

Site is virtually destroyed. The site was not located during the survey, and prior records do not define any unique place in WW2 history. There is no oral history of the site, nor any significant assets to protect.

CHAPTER FIVE: CONCLUSION

The Mili Survey was difficult but efficient. Poor underwater visibility and rough weather created hard work but most the known or rumored underwater sites were discovered. Some sites visited 20 years ago simply do not exist today. The vast collection of artifacts at Mili Atoll is on-shore, and the nautical history, compared to other outer islands with prior Japanese WW2 bases, is sparse. What was shown was that time, wind, water, and waves have done more destruction than artifact collecting visitors or divers. Mili has a small collection of underwater artifacts, but nevertheless includes sites important to the history of the atoll and of the Marshall Islands.

Military history has shown Mili to be an example and horror story of military planning. The island defenders, defiantly proud to die in battle for their country, were instead by-passed and left to starve in an American aerial and naval target practice environment for 18 months. Few Japanese aircraft or ships were ever allowed to fly over or enter the atoll, thus these type of artifacts, typical to atolls such as Jaluit or Wotje, rarely existed in Mili Atoll.

Two aircraft, the B-25 (MI-Mi-Lg-010) and the A-24 (MI-Mi-Lg-007) are significant sites, and are prime examples for tourist visitors. They need the protection of their important and limited artifacts. One good weekend of serious collectors, and Mili's prime sites could be stripped. And another site, the one exciting example of a prior World War 2 artifact, the wreckage of probably an older sailing vessel oceanside of Ejowa (MI-Mi-Lg-003) was discovered, and also needs further research and protection. Most of the other sites have less significance and importance. Additional undiscovered sites may lie in the vast shallows off Mili, Mili, or in deeper water, scattered across the lagoon floor for eventual discovery.

My main recommendation would be to mark and buoy nearby various sites to avoid anchor damage from commercial vessels and tourist visitors alike. Further attempts to educate the community on the impact of trash and debris on the development tourism assets would also be wise. It seems the community only listens when money is involved, so if tourism develops and money flows, then possibly these sites will be protected in the future by these increase revenues. All the other worthy comments have been said before, it is again up to the leaders of the Republic to decide the future of its' own past history.

Inventory of Submerged Cultural and Historical Resources of Mili Atoll.

REFERENCES

- Angelucci, Enzo & Paolo Matricardi,
1979 *World War II Airplanes, Volume 2*. Rand Mc Nally & Company,
Chicago IL.
- Avery, Norm L.,
1994 *B-25 Mitchell The Magnificent Medium*. Phalanx Publishing Co,
St. Paul MN.
- Carey, Alan C.,
2000 *We Flew Alone, United States Navy B-24 Bombing Squadrons*
Schiffer Publishing Company Ltd. Atglen PA.
- Christiansen, Henrik,
1994 *The Archaeology of World War II in the Marshall Islands.*
Volume Four: Mili. Historic Preservation Office, Republic of the
Marshall Islands Page 21.
- Chutaro, Kazzi,
2001 *Oral History*, Personal Communication on Mili Atoll.
- CINPAC,
1944 *Photos Number 205291, 205295*.
National Archives and Records Administration College Park, Maryland.
- Cook, Lt. Emmett E., Jr.
1945 *Record of Proceedings of War Crimes Investigation conducted at*
Mille (spelled Mili) And Majuro Atolls, Marshall Islands by order of The
Commander Marshalls Gilberts Area. Prepared for the Commander
Marshalls Gilberts Area, CinCPOA (Commander in Chief, Pacific Ocean
Area). Manuscript on file at National Archives and Records
Administration, College Park, Maryland. (This file has 38 exhibits and
over 90 pages).
- Crowl, Philip A., & Edmund G Love,
1955 *Seizure of the Gilberts and Marshalls, The War in the Pacific*
United States Army in World War II. Office of the Chief of Military
History, United States Army Washington DC.

- Hart, Kevin,
1992 *Sung for Anidreb: A Brief History of the Marshall Islands*.
Marshall Islands Publishing. Majuro, Republic of the Marshall Islands
- Hata, Ikuhiko and Yasuho Izawa,
1989 *Japanese Naval Aces and fighter Units in World War II*
Naval Institute Press, Annapolis Maryland.
- Hezel, Francis X.,
1979 *Foreign Ships in Micronesia*. Saipan, Mariana Islands, F.J. Hezel &
Trust Territory Historic Preservation Office
- Lantak, Jinna,
2001 *Oral History*, Personal communication on Mili Atoll.
- Lavin, Jedke,
2001 *Oral History*, Personal communication on Majuro Atoll.
- Loomis, Vincent,
1985 *Amelia Earhart*
Random House New York, NY
- Lundstrom, John B.,
1994 *The First Team Pacific Naval Air Combat from Pearl Harbor to
Midway* Naval Institute Press, Annapolis Maryland.
- McDowell, Ernest R.,
1979 *B-25 Mitchell in Action*
Squadron/Signal Publications, Inc. Carrolltown TX
- Prymak, Bill
2002 *Oral History*, Personal communication via e-mail, Site 12 data.
- Sherrod, Robert
1952 *History of Marine Corps Aviation in World War II*.
Combat Forces Press Washington
- Scarborough, W.E.,
1983 *PBY Catalina in Action*
Squadron/Signal Publications, Inc. Carrolltown TX
- Spennemann, Dirk H.R.,
1991/7 *Submerged Cultural Resources of Wotje Atoll, Marshall Islands*.
Historic Preservation Office, Republic of the Marshall Islands.

Stern, Rob,

1984 *SBD Dauntless in Action Aircraft Number 64*
Squadron/Signal Publications, Inc. Carrollton Texas

Tillman, Barrett,

1998 *SBD Dauntless Units of World War 2*
Osprey Publishing Oxford UK

United States Army,

November 21, 1945 through December 3, 1945
Judge Advocate Generals Office Case No. 24, Docket No. 146719
Trial of OISHI, et al (Mili War Crimes Trial).
National Archives and Records Administration College Park, Maryland.

United States Army,

Undated *List of Losses in Marshall Islands Area*
(Computer printout) Schofield Barracks, Honolulu, HI.

United States Army,

Seventh Air Force, Mission and Missing Air Crew Reports:
MR 531-3, December 24, 1943 (Attack on Nankai Maru)
MR 531-17, January 27, 1944 (Attack on Mili, Loss of A-24)
MR 60, January 21, 1944 (Attack on Mili, Loss of B-25)
Missing Air crew Report 1900, January 19, 1944 (Loss of B-25 at Mili)
National Archives and Records Administration, College Park, Maryland.

Williamson, Richard V. and Donna K. Stone

2001 *Anthropological Survey of Wotje Atoll*.
HPO Report 2001/09 Republic of the Marshall Islands Historic
Preservation Office, Majuro Atoll, Marshall Islands

Inventory of Submerged Cultural and Historical Resources of Mili Atoll.

BIBLIOGRAPHY

- Angelucci, Enzo & Paolo Matricardi,
1979 *World War II Airplanes, Volume 2*. Rand Mc Nally & Company,
Chicago IL.
- Avery, Norm L.,
1994 *B-25 Mitchell The Magnificent Medium*. Phalanx Publishing Co,
St. Paul MN.
- Bailey, Dan E.,
1990 *WW II Wrecks of the Kwajalein and Truk Lagoon*. North Valley
Publications, Redding CA.
- Carey, Alan C.,
1999 *The Reluctant Raiders*. Schiffer Publishing Company Ltd. Atglen
PA.
- Carey, Alan C.,
2000 *We Flew Alone, United States Navy B-24 Bombing Squadrons*
Schiffer Publishing Company Ltd. Atglen PA.
- Chapin, John C.,
1994 *Breaking the Outer Ring: Marine Landings in the Marshall Islands*.
Marine Corp Historical Center Washington, DC.
- Christiansen, Henrik,
1994 *The Archaeology of World War II in the Marshall Islands*.
Volume One: Taroa Maloelap. Historic Preservation Office, Republic of
the Marshall Islands
- Christiansen, Henrik,
1994 *The Archaeology of World War II in the Marshall Islands*.
Volume Two: Wotje. Historic Preservation Office, Republic of the
Marshall Islands
- Christiansen, Henrik,
1994 *The Archaeology of World War II in the Marshall Islands*.
Volume Three: Jaluit. Historic Preservation Office, Republic of the
Marshall Islands

- Christiansen, Henrik,
1994 *The Archaeology of World War II in the Marshall Islands. Volume Four: Mili*. Historic Preservation Office, Republic of the Marshall Islands
- Christiansen, Henrik,
1994 *The Archaeology of World War II in the Marshall Islands. Volume Five: Tourism*. Historic Preservation Office, Republic of the Marshall Islands
- Controvich, James T.,
1990 *The Central Pacific Campaign, 1943-1944*. A Bibliography. Meckler Corporation Westport, CT.
- Cook, Lt. Emmett E., Jr.
1945 *Record of Proceedings of War Crimes Investigation conducted at Mille (spelled Mili) And Majuro Atolls, Marshall Islands by order of The Commander Marshalls Gilberts Area*. Prepared for the Commander Marshalls Gilberts Area, CinCPOA (Commander in Chief, Pacific Ocean Area). Manuscript on file at National Archives and Records Administration, College Park, Maryland. (This file has 38 exhibits and over 90 pages).
- Cressman, Robert,
1993 *That Gallant Ship USS Yorktown (CV-5)*. Pictorial Histories Publishing Co. Missoula MT.
- Crowl, Philip A., & Edmund G Love,
1955 *Seizure of the Gilberts and Marshalls, The War in the Pacific United States Army in World War II*. Office of the Chief of Military History, United States Army Washington DC.
- Dorr, Robert F
1999 *B-24 Liberator Units of the Pacific War*. Osprey Publishing Ltd., Oxford UK.
- Ewing, Steve,
1982 *USS Enterprise (CV-6) The Most Decorated Ship of World War II* Pictorial Publishing Company Missoula MT.
- Ewing, Steve,
1982 *American Cruisers of World War Two* Pictorial Publishing Company Missoula MT.

- Forman, Wallace R.,
 1996 *B-24 Nose Art Directory*
 Specialty Press Publishers and Wholesalers North Branch MN.
- Forsyth, John F.
 1991 *Hell Divers US Navy Dive-Bombers at War*
 Motorbooks International Publishers & Wholesalers Osceola, WI.
- Francillon, Rene J.,
 1995 *Japanese Aircraft of the Pacific War*
 Naval Institute Press, Annapolis Maryland.
- Francillon, Rene J.,
 1969 *Imperial Japanese Navy Bombers of World War Two.*
 Hylton Lacy Publishers Ltd., Berkshire England
- Hammel, Eric,
 1995 *Aces Against Japan*
 Presido Press, Novato CA.
- Hart, Kevin,
 1992 *Sung for Anidreb: A Brief History of the Marshall Islands.*
 Marshall Islands Publishing Majuro, Marshall Islands.
- Hata, Ikuhiko and Yasuho Izawa,
 1989 *Japanese Naval Aces and fighter Units in World War II*
 Naval Institute Press, Annapolis Maryland.
- Hezel, Francis X.,
 1979 *Foreign Ships in Micronesia.* Saipan, Mariana Islands, F.J. Hezel &
 Trust Territory Historic Preservation Office
- Holly, Matthew,
 2000 *The Submerged Cultural Resources of Majuro and Kwajalein
 Lagoons* Republic of the Marshall Islands Historic Preservation Office
 Majuro, Marshall Islands.
- Holly, Matthew,
 2001 *The Submerged Cultural Resources of Wotje Lagoon*
 Republic of the Marshall Islands Historic Preservation Office
 Majuro, Marshall Islands.
- Howard, Clive & Joe Whitley,
 1946 *One Damned Island after Another*
 The University of North Carolina Press NY.

- Johnson, Richard S. Lt. Col.,
1995 *How to Locate Anyone Who is or Has Been in the Military*
MIE Publishing San Antonio Texas
- Lambert, John W.,
1990 *The Pineapple Air Force Pearl Harbor to Tokyo*
Phalanx Publishing Co., Ltd. St. Paul MN
- Lambert, John W.,
1997 *Low Level Attack: The Pacific*
Specialty Press Publishers and Wholesalers North Branch MN
- Lantak, Jinna,
2001 *Oral History*, Personal communication on Mili Atoll.
- Lavin, Jedke,
2001 *Oral History*, Personal communication on Majuro Atoll.
- Lundstrom, John B.,
1994 *The First Team Pacific Naval Air Combat from Pearl Harbor to Midway*
Naval Institute Press, Annapolis Maryland.
- Loomis, Vincent,
1985 *Amelia Earhart*
Random House New York, NY
- McDowell, Ernest R.,
1979 *B-25 Mitchell in Action*
Squadron/Signal Publications, Inc. Carrolltown TX
- Miller, Mark S.,
1991 *In the Arms of the Sea A historical guide to the shipwrecks of Kwajalein Atoll*
Enigma Books Gig Harbor WA
- Morrison, Samuel,
1962 *History of United States Naval Operations in World War II*
Little, Brown and Company, Boston
- Musciano, Walter A.,
1979 *Corsair Aces The Bent-Wing Bird Over The Pacific*
Arco Publishing Company, Inc. New York NY
- National Aeronautics Council,
1944 *Recognition Guide to Operational War Planes*
National Aeronautics Council, Inc. New York, NY

- Naval Analysis Division,
 1947 *The United States Strategic Bombing Survey,
 The American Campaign Against Wotje, Maloelap, Mille, and Jaluit*
 Naval Analysis Division
- Peattie, Mark R.,
 1988 *Nanyo The Rise and Fall of the Japanese in Micronesia, 1885-1945*
 University Of Hawaii Press Honolulu, Hawaii
- Rust, Kenn C.,
 1979 *Seventh Air Force Story in World War II.*
 Sun Shine House Terre Haute IN.
- Sakaida, Henry,
 1997 *Japanese Army Air Force Aces 1937-1945,*
 Osprey Publishing London UK
- Sakaida, Henry,
 1998 *Imperial Japanese Navy Aces 1937-45*
 Osprey Publishing London UK
- Scarborough, W.E.,
 1984 *PBY Catalina in Action*
 Squadron/Signal Publications, Inc. Carrolltown TX
- Scutts, Jerry,
 1993 *Marine Mitchells In World War Two,*
 Phalanx Publishing Co., Ltd. St. Paul MN
- Sherrod, Robert
 1952 *History of Marine Corps Aviation in World War II.*
 Combat Forces Press Washington
- Spennemann, Dirk H.R.,
 1991/7 *Submerged Cultural Resources of Wotje Atoll, Marshall Islands.*
 Historic Preservation Office, Republic of the Marshall Islands.
- Stern, Rob,
 1984 *SBD Dauntless in Action Aircraft Number 64*
 Squadron/Signal Publications, Inc. Carrollton Texas
- Sullivan, Jim,
 1977 *F4U Corsair in Action*
 Squadron/Signal Publications Carrollton, TX

- Tillman, Barrett,
1997 *U.S. Navy Fighters Squadrons in WW2*
Specialty Press Publishers and Wholesalers North Branch MN
- Tillman, Barrett,
1998 *SBD Dauntless Units of World War 2*
Osprey Publishing Oxford UK
- United States Army,
November 21, 1945 through December 3, 1945
Judge Advocate Generals Office Case No. 24, Docket No. 146719
Trial of OISHI, et al (Mili War Crimes Trial).
- United States Army,
Undated *List of Losses in Marshall Islands Area*
Schofield Barracks, Honolulu, HI.
- United States Army,
Seventh Air Force, Mission and Missing Air Crew Reports:
MR 531-3, December 24, 1943 (Attack on Nankai Maru)
MR 531-17, January 27, 1944 (Attack on Mili, Loss of A-24)
MR 60, January 21, 1944 (Attack on Mili, Loss of B-25)
Missing Air crew Report, January 19, 1944 (Loss of B-25 at Mili)
National Archives and Records Administration, College Park, Maryland
- United States Marine Corps,
1991 *The Marshalls: Increasing the Tempo.*
The Battery Press Nashville TN
- Williamson, Richard V. and Donna K. Stone
2001 *Anthropological Survey of Wotje Atoll.*
HPO Report 2001/09 Republic of the Marshall Islands Historic
Preservation Office, Majuro Atoll, Marshall Islands

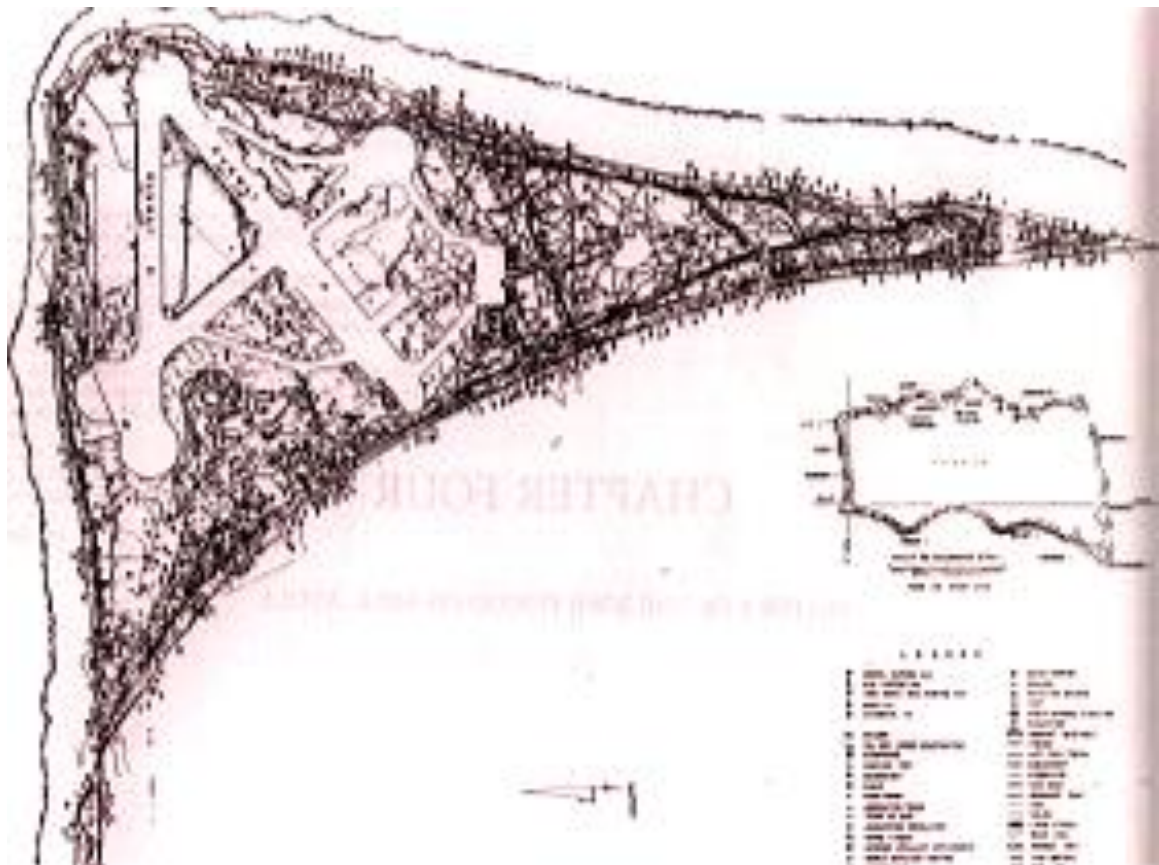
Inventory of Submerged Cultural and Historical Resources of Mili Atoll.

APPENDICES

APPENDIX 1

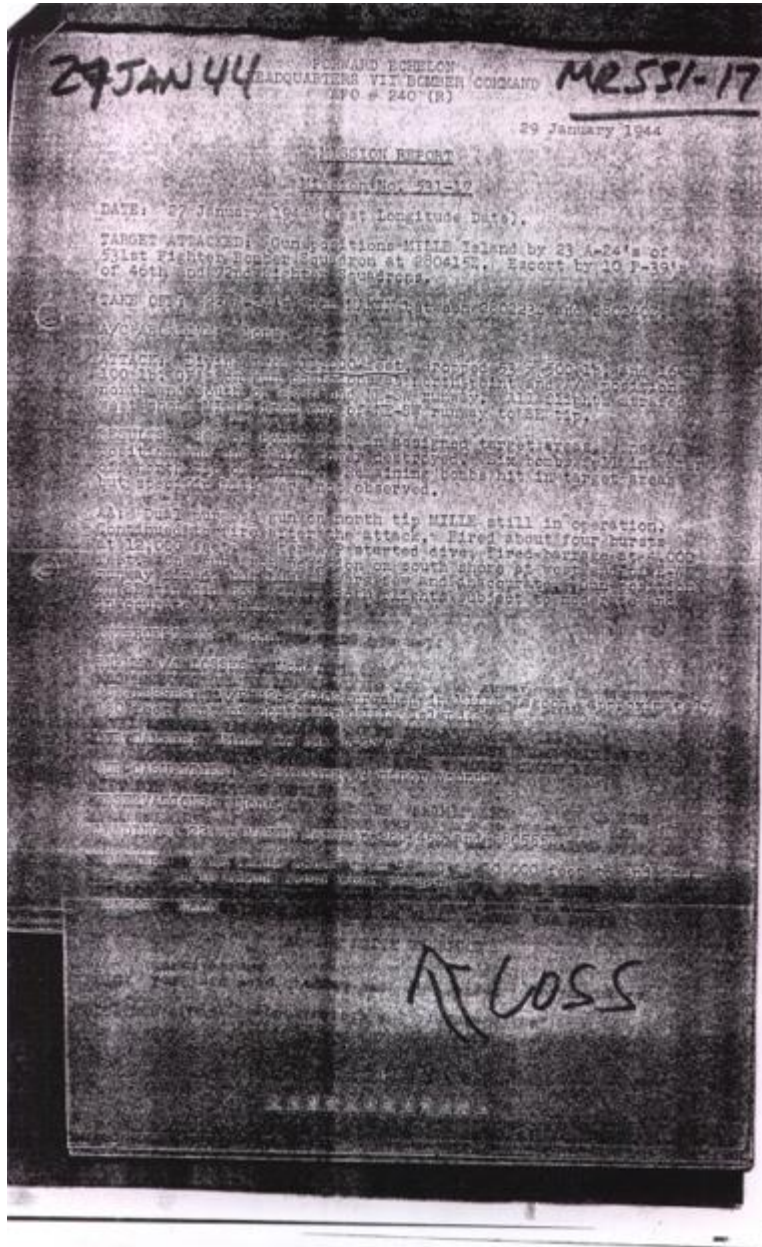
**MILITARY DOCUMENTS RELATED
TO MILI ATOLL**

Document 1
Detailed Mili, Mili Base Map.



Document 2.

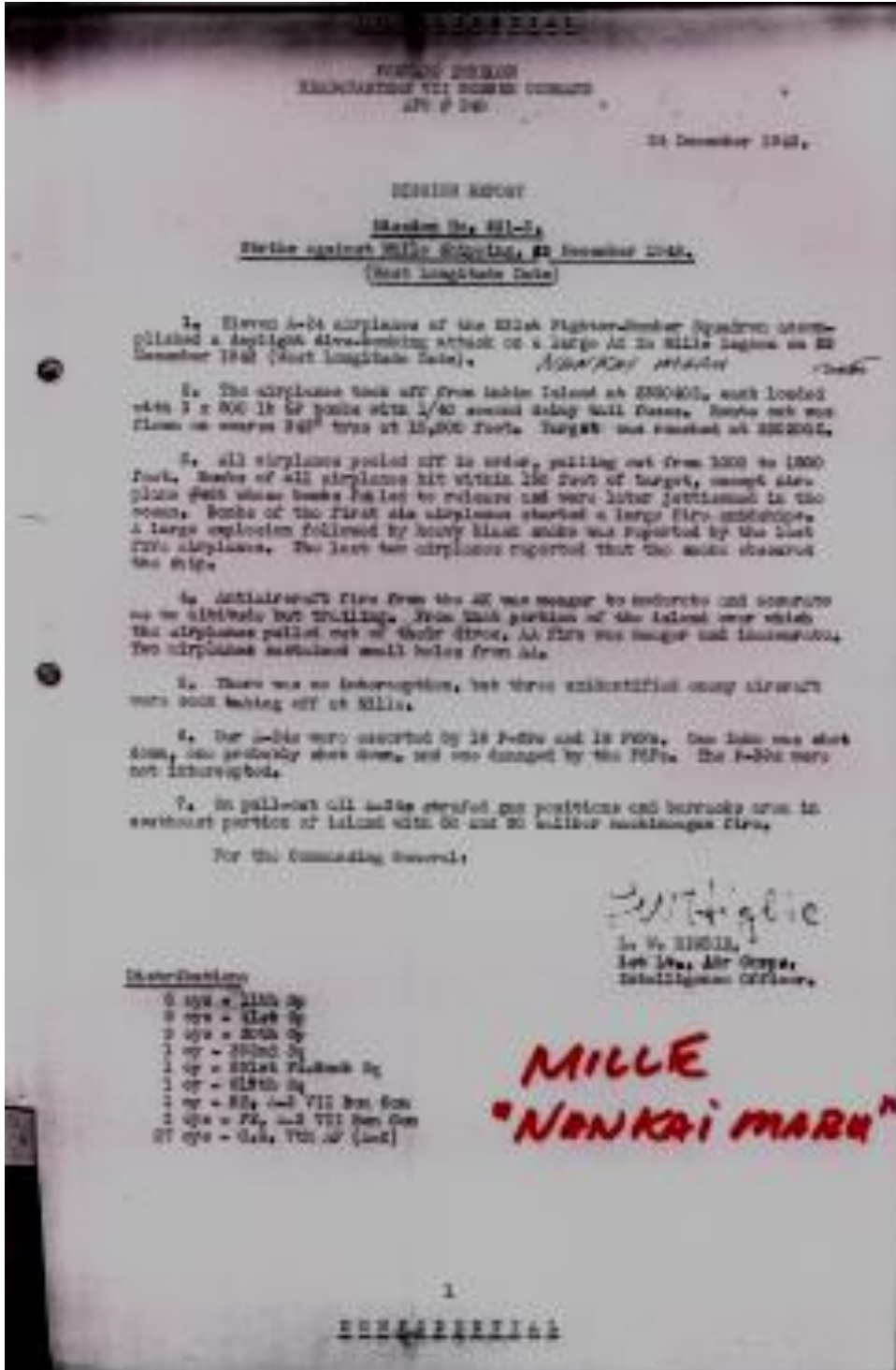
Mission Report 531-17, Loss of American A-24 Aircraft at Site MI-Mi-Lg 007.



Page 2.

Document 3.

Mission Report 531-3, Page 1 of 1. Attack on the Japanese ship Nankai Maru, now Site Number MI-Mi-Lg-009.



Page 3.

LOSSES

CONFIDENTIAL

THE LOSS: A/B 113 hit poor target, bounced to left of over
 tail of another B-25 and landed in water near shore line in Laguna.
 It was seen to coast on top of water and stop alongside another
 B-25 in Laguna. No personnel seen to get out of our A/B. No
 other fire was directed at this plane. A/B 113 now water landing
 approximately 20 miles from target on course 145 degrees true
 at 7 degrees 15 minutes N., 172 degrees, 15 minutes E., at 1900Z.
 Radio check up by crew of downed and returned to Manila.
 No other losses. A/B 113 with both engines shut down with
 severe damage to nose belly landing gear and fuselage. No
 other losses. No casualties on this A/B.

THE CASUALTIES: 3 missing; 2 wounded.

THE DAMAGE: Minor to 4 A/B.

OBSERVATIONS: Many aircraft identified as B-25s observed
 landing at 7 degrees 15 minutes N., 171 degrees 15 minutes E.,
 landing 200 degrees true. Probably patrol planes. Three B-25s (prob-
 ably B-25s) observed at 7 degrees 15 minutes N. at west end of Koh
 runway. One B-25 damaged and one probably destroyed. Three new
 heavy B-25s (B-25s) observed on southwest end
 of runway. Bright orange flashes from point of intersection of
 roads north of damaged buildings in north central part of island.

L-SEARCH: 14-48 Bullfinch between 1400Z and 1900Z. One seen
 down near target. One seen water landing 20 miles south of target
 at 1900Z and one seen belly landing 11 miles at 1900Z.

REPORTS: Scattered showers 100 miles south of HILLS. Scattered 600
 feet, wind from 60 to 90 degrees at 10 to 15 knots. DRY near
 target. Weather clear towards end of run.

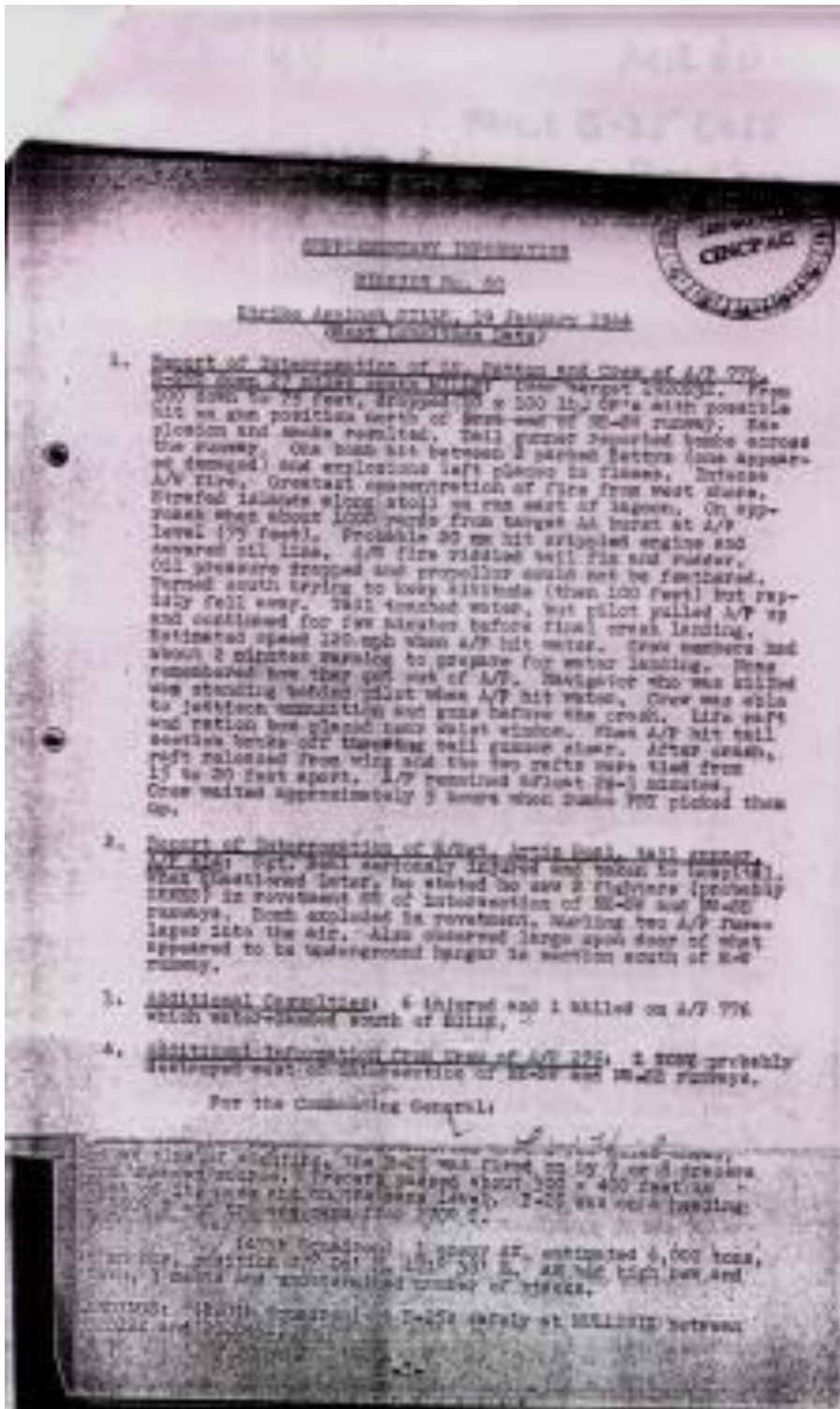
PROBLEMS: 30 with fuel systems.

DISTANCE FROM: Approximately 700 statute miles.

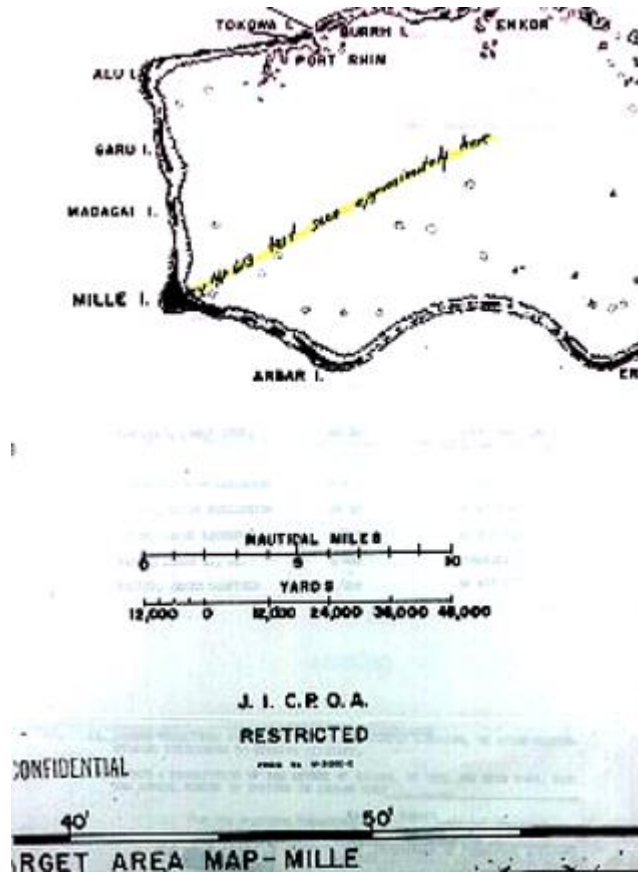
For the Commanding General:
 L. W. Higgins
 Major W. Higgins,
 1st Lt., Air Corps,
 Intelligence Officer.

DISTRIBUTION:
 - 1st CG,
 - 2nd CG,
 - 3rd CG,
 - 4th CG,
 - 5th CG,
 - 6th CG,
 - 7th CG,
 - 8th CG,
 - 9th CG,
 - 10th CG,
 - 11th CG,
 - 12th CG,
 - 13th CG,
 - 14th CG,
 - 15th CG,
 - 16th CG,
 - 17th CG,
 - 18th CG,
 - 19th CG,
 - 20th CG,
 - 21st CG,
 - 22nd CG,
 - 23rd CG,
 - 24th CG,
 - 25th CG,
 - 26th CG,
 - 27th CG,
 - 28th CG,
 - 29th CG,
 - 30th CG,
 - 31st CG,
 - 32nd CG,
 - 33rd CG,
 - 34th CG,
 - 35th CG,
 - 36th CG,
 - 37th CG,
 - 38th CG,
 - 39th CG,
 - 40th CG,
 - 41st CG,
 - 42nd CG,
 - 43rd CG,
 - 44th CG,
 - 45th CG,
 - 46th CG,
 - 47th CG,
 - 48th CG,
 - 49th CG,
 - 50th CG,
 - 51st CG,
 - 52nd CG,
 - 53rd CG,
 - 54th CG,
 - 55th CG,
 - 56th CG,
 - 57th CG,
 - 58th CG,
 - 59th CG,
 - 60th CG,
 - 61st CG,
 - 62nd CG,
 - 63rd CG,
 - 64th CG,
 - 65th CG,
 - 66th CG,
 - 67th CG,
 - 68th CG,
 - 69th CG,
 - 70th CG,
 - 71st CG,
 - 72nd CG,
 - 73rd CG,
 - 74th CG,
 - 75th CG,
 - 76th CG,
 - 77th CG,
 - 78th CG,
 - 79th CG,
 - 80th CG,
 - 81st CG,
 - 82nd CG,
 - 83rd CG,
 - 84th CG,
 - 85th CG,
 - 86th CG,
 - 87th CG,
 - 88th CG,
 - 89th CG,
 - 90th CG,
 - 91st CG,
 - 92nd CG,
 - 93rd CG,
 - 94th CG,
 - 95th CG,
 - 96th CG,
 - 97th CG,
 - 98th CG,
 - 99th CG,
 - 100th CG.

CONFIDENTIAL



Document 8 Page 2 of 2 of Missing Aircrew Report No. 1900. Loss of B-25 Aircraft, now Site Number MI-Mi-Lg-010.



APPENDIX 2

LIST OF JAPANESE WW2 ERA VESSELS KNOWN TO BE ATTACHED TO, TRANSITING OR VISITING MILI ATOLL AND POSSIBLY LOST THERE DURING WW2.

JAPANESE VESSELS

Japanese Cargo or Fishing Boats, generally less than 500 GRT (Gross Revenue Tons), were converted for military duty. They were then called "Special Duty Sub-Chasers", "Patrol Vessels", "Converted Picket Boats", "Picket Boats", or "Guard Ships" depending on the author and text.

1. Special Duty Sub Chaser Number 14.
2. Special Duty Sub Chaser Number 19. (Possible destroyed at Kwajalein).
3. Converted Picket Boat Number 204 (Possible error, and is number 402).

The names on the above list were taken from research documents quoted from *Christiansen, 1994:21*, citing an intercepted Japanese radio message translated and listed as the "*Marshall Area Defense Force Secret Operational Order # 3-44*", from Jan 5, 1944. (*JICPOA "Joint Intelligence Central Pacific Operational Area" translation #5757, US National Archives, record group 38. Entry POA, box 61*).

VISITING CARGO VESSEL

1. Nankai Maru (Nankai Maru No. 2) RMI HPO Site Number MI Mi Lg 009.

SUMMARY OF KNOWN MILI VESSELS

After collecting information from all sources, it appears that Mili had 3 vessels attached to its garrison and 1 other larger vessel visiting the atoll unloading cargo during the war, totaling 4 vessels as potential sites. Two vessels were located in Mili Lagoon during this survey with 1 identified, at Site 9. One more was listed as attacked off the east end of the runway in the anchorage, with unknown results, and may have been the vessel located at Site 6. This leaves 2 vessels not located by site or research from the total of 4.

It is also possible there were more vessels visiting Mili, more losses in Mili than listed, or even none of the remaining vessels sunk in Mili atoll. Some or all of the missing vessels may have been sunk at Kwajalein or in other places during the pre-invasion attacks, as many vessels damaged in the war went to Kwajalein for repairs.

This list does not include the 1 archaic wreck ocean-side of Ejowa Island, nor the modern wreck of Molik ocean-side of Mili, Mili, nor any other rumored sites not surveyed.

APPENDIX 3

LIST OF AMERICAN AIRCRAFT KNOWN OR SUSPECTED TO BE LOST AT OR IN MILI AREA DURING WW2.

DATE OF LOSS, WITH ALL KNOWN DETAILS.

- 1. 2ND LT. JOHN G. RATTIGAN** 18DEC43 P-39Q of 46th Fighter Squadron, then 15th Fighter Group. Bailed out due to engine trouble 65 miles NW of Makin, safely entered raft and was lost at sea while swimming to a PBY crew in a raft. The PBY-5A of Navy Patrol Squadron 53 crashed and sunk while attempting to pick him up, piloted by Lt. JG Charles B. Bremer. PBY crew rescued.
- 2. 2ND LT. JOHN W. STARMANN** 19DEC43 P-39Q of 72nd Fighter Squadron, 318th Fighter Group. Service number 0-681731. AGRS-PAZ Case No. 359. Plane shot down by anti-aircraft fire over Mili airfield. This was the second day of attacks against Mili. Another pilot, possibly 1st LT. James H. Carlyle (who later shot down 2 Japanese Val s) reported the tail shot off just behind the star when the aircraft was about 50 feet above the ground. The aircraft snap-rolled to the right and went in just northeast of the E/W and N/S runways. Remains were searched for in 1949 by the 604th Quartermaster Graves Registration Company without results. They did locate **ERDMAN'S** plane, but without finding his remains during their search. His remains were therefore declared un-recoverable. Starman's remains were found by Matt Holly on June 5, 1994, and buried at the site with permission from the local mayor, and marked with a cross inscribed "Unknown Pilot, Northern P-39, U.S. Army Air Corp, 1943. The remains were later removed by the US Army, positive identification made by CID Lab Hawaii, then escorted to and buried at Arlington National Cemetery on September 20, 1995. Main airframe, propeller, and tail were located and their locations on Mili verify the crash story. Aircraft serial number 42-19548, Engine serial number 42-97348, Weapons installed include 4 Browning A.C.M.G.M2, Numbers 419827, 555896, 556071, 556513, and 1 37mm Cannon No. 2569 M4.
- 3. 2ND LT. CHARLES R. MERTZ** 19NOV43 P-39Q of 72nd Fighter Squadron, 318th Fighter Group. On same flight of 10 attacking P-39Qs as **STARMANN'S** flight. Mertz' plane was damaged by Zeros and trailed smoke until midway between Mili and Makin, when the engine caught fire and he safely bailed out. He was seen getting into a life-raft by 1st Lt. Ivan Veirs, who waved at him, but was never found, even with an extensive search by PBYS.
- 4. CAPT. CLIFFORD G. ERDMAN** 03JAN44 P-39Q of 46th Fighter Squadron, 15th Fighter Group. AGRS-PAZ Case No. 328. ERDMAN was listed as diving towards Mili at over 550 MPH on the target, and possibly crashing, but he was also listed as strafing the target. I have viewed the aircraft on the ground, and it is intact, although partially burned, with its wheels up. Burning may have happened after the crash, as the

tail light was found apx. where the tail would have ended. It is on the south side of the E/W runway, and east of the N/S runway. The nose was smashed slightly to the left but only 1 propeller blade damaged, and the right wing-tip is folded under the right wing. I feel the pilot made a landing with a dead engine, wheels up. Local stories abound with versions of his death, but most claim he was dead or near death on landing, and was buried in the vicinity of his aircraft. (Near a rock pile) An Army search in both 1949, 1995 and 1997 failed to find remains positively identifying Capt. ERDMAN, although the rock pile site provided a archaic Marshallese gravesite underneath, which, by local custom, may have been why he would have been buried in that area, being buried in a Marshallese family plot by Marshallese on Mili at that time. Local stories also claim he was of a darker skin completion, possibly from Hawaii, but dark skinned aviator stories exist in other atolls, and may have been copied. There are no known ethnic Black aviators in the 7th Air Force at this time.

5. 1ST LT. WESLEY B. EMPRY 17JAN44 P-39Q of the 72nd Fighter Squadron, 318th Fighter Group. Empry was killed strafing Mili, when his aircraft was seen veering out of formation and crashing into the ocean off the west shore. He was listed as killed instantly.

APPENDEX 4

UNDERWATER VIDEO RAW FOOTAGE OF ALL SITES WITH TITLES FOR IDENTIFICATION

SITE NUMBER	TIME	TOTAL
Site Number 3. Unknown Vessel Wreckage near Ejowa Island.	1:38 Minutes	
0:00 to	1:38	1:38
Site Number 4. Japanese Aircraft Wreckage at Nar Island.	3:00 Minutes	
1:39 to	4:38	4:38
Site Number 6 Japanese Patrol Boat Wreckage at Melka Island	21:01 Minutes	
4:39 to	24:40	24:40
Site Number 7 American A-24 Aircraft Wreckage.	15:52 Minutes	
24:42 to	40:34	40:34
Site Number 9 Wreckage of Nankai Maru	32:06 Minutes	
40:34 to	1:12:40	1:12:40
Site Number 10 American B-25 Wreckage.	25:04 Minutes	
1:12:40 to	1:37:44	1:37:40

* Unlisted Site Numbers either weren't found, didn't exist, or had no video taken.

Total Time of Raw Video Footage of Mili Sites Surveyed: 1 Hour 37:40 Minutes

APPENDIX 5

LIST OF STILL PHOTOS OF MILI SITES

ROLL 1

ID Number 33969243

Site MI Mi Lg 001, 002, 003. Torpedo Area, Aircraft Area, Ejowa Island Wreckage.
Starts with number 1.

1. No. 1. "Betty" example on shore. Shows same panel visible on Site 11.
2. No. 2. "Betty" example on shore.
3. No. 3. "Betty" example on shore. Local guide Handletion Chutaro.
4. N/A
5. N/A
6. N/A
7. N/A
8. Site 1, No. 1. Boat Trip.
9. Site 1, No. 2. Boat Trip.
10. Site 1, No. 3. Boat Trip.
11. Site 1, No. 4. Enerik Island. Alleged initial torpedo location.
12. Site 1, No. 5. Enerik Island. Alleged initial torpedo location.
13. Site 3, No. 1. Porthole, Inside.
14. Site 3, No. 2. Porthole, Top.
15. Site 3, No. 3. Porthole, Outside.
16. Tokewa Island.
17. 23 N/A

ROLL 2

ID Number 33969244

Site MI Mi Lg 004, 005, 006,011. Japanese Aircraft, Japanese LCU, Japanese Patrol Boat, Japanese "Betty" Bomber.
Starts with number 1.

1. Site 11, No. 1.
2. Site 11, No. 2.
3. Site 11, No. 3.
4. Site 11, No. 4.
5. Site 11, No. 5.
6. Site 4, No. 1. Pieces in dumpsite.
7. Site 4, No. 2. Pieces in dumpsite.
8. Site 4, No. 3. Pieces in dumpsite.
9. Site 4, No. 4. Pieces in dumpsite.
10. Site 4, No. 5. Pieces in dumpsite.
11. Site 4, No. 6. Pieces in dumpsite.

12. Site 6, No. 1.
13. Site 6, No. 2.
14. Site 6, No. 3. Tail-shaft.
15. Site 6, No. 4. Tail-shaft with hand.
16. Site 6, No. 5.
17. Site 6, No. 6.
18. Site 6, No. 7.
19. Site 6, No. 8. Cylinders.
20. Site 6, No. 9.
21. Site 5, No. 1. Bow winch.
22. Site 5, No. 2. Steering.
23. Site 5, No. 3.
24. Site 5, No. 4. Green bushes.

ROLL 3

ID Number 33969249

Site MI Mi Lg 007. American A-24 Aircraft.

Starts with number 1.

1. Site 7, No. 1. Misc. debris on bottom.
2. Site 7, No. 2.
3. Site 7, No. 3.
4. Site 7, No. 4.
5. Site 7, No. 5.
6. Site 7, No. 6.
7. Site 7, No. 7.
8. Site 7, No. 8.
9. Site 7, No. 9.
10. Site 7, No. 10.
11. Site 7, No. 11.
12. Site 7, No. 12.
13. Site 7, No. 13.
14. Site 7, No. 14.
15. Site 7, No. 15. Pilot armor.
16. Site 7, No. 16.
17. Site 7, No. 17. Machine gun.
18. Site 7, No. 18. Ammo box left.
19. Site 7, No. 19.
20. Site 7, No. 20. Inner-cooler.
21. Site 7, No. 21. Engine with cylinders.
22. Site 7, No. 22. Cylinder Head.
23. Site 7, No. 23. Machine guns.
24. Site 7, No. 24.
25. Site 7, No. 25.

ROLL 4

ID Number 33969245

Site MI Mi Lg 009. Japanese Vessel Nankai Maru.

Starts with number 3.

1. N/A
2. Site 9, No. 1. Stern at low water.
3. Site 9, No. 2. Towards thin spot in island.
4. Site 9, No. 3. Cement cargo.
5. Site 9, No. 4. Cement cargo.
6. Site 9, No. 5. Jack-knife fish.
7. Site 9, No. 6.
8. Site 9, No. 7.
9. Site 9, No. 8.
10. Site 9, No. 9. Steam boilers.
11. Site 9, No. 10.
12. Site 9, No. 11. Jack-knife fish.
13. Site 9, No. 12.
14. Site 9, No. 13.
15. Site 9, No. 14.
16. Site 9, No. 15. Accommodations portholes.
17. Site 9, No. 16.
18. Site 9, No. 17. Propeller.
19. Site 9, No. 18. Bollards.
20. Site 9, No. 19.
21. Site 9, No. 20.
22. Site 9, No. 21. Bulkhead.

ROLL 5

ID Number 33969246

Site MI Mi Lg 010. American B-25 Site.

Starts with number 1.

1. Site 10, No. 1. Top Turret.
2. Site 10, No. 2. Top of Aircraft.
3. Site 10, No. 3. Right wing decay.
4. Site 10, No. 4. Pilot area.
5. Site 10, No. 5. Throttle quadrant.
6. Site 10, No. 6. Loose ammunition.
7. Site 10, No. 7. Top.
8. Site 10, No. 8. Right wing.
9. Site 10, No. 9. Left waist gun.
10. Site 10, No. 10. Cockpit.
11. Site 10, No. 11. Top rear turret.

12. Site 10, No. 12. Waist gun.
13. Site 10, No. 13. Top rear turret.
14. Site 10, No. 14. Left waist gun.
15. Site 10, No. 15. Left waist gun.
16. Site 10, No. 16. Left waist gun.
17. Site 10, No. 17. Life raft compartment.
18. Site 10, No. 18. Right wing.
19. Site 10, No. 19. Dimple in front of aircraft.
20. Site 10, No. 20. ??
21. Site 10, No. 21. Right wing top.
22. Site 10, No. 22. Top of aircraft.
23. Site 10, No. 23. Top of left wing.
24. Site 10, No. 24. Top rear.

ROLL 6

ID Number 33969249

Site MI Mi Lg 011. Japanese Betty Bomber. Mili Beach.

Starts with number 1.

1. 14. N/A
15. Site 8, No. 1. Beach at Japanese dock.
16. Site 8, No. 2. Beach at Japanese dock.
17. Site 8, No. 3. Beach at Japanese dock.
18. Site 8, No. 4. Beach at Japanese dock.
19. Site 11, No. 1. Beach at "Betty" debris.
20. Site 11, No. 2. Beach at "Betty" debris.
21. Site 11, No. 3. "Betty" debris.
22. Site 11, No. 4. "Betty" debris.
23. Site 11, No. 5. "Betty" debris.

3

ROLL 7

ID Number 33969247

Site MI Mi Lg 011, 009, Other Site. Author, Jinna Lantok, Japanese Aircraft ashore.

Starts with number 1.

1. 8. N/A
9. Other Sites, No. 1. Beach debris.
10. Other Sites, No. 2. Beach debris.
11. Other Sites, No. 3. Beach debris.
12. Other Sites, No. 4. Beach debris.
13. 17. Un-happy pilot "Zero".
18. Local boat.
19. Local guide Jinna Lantok.
20. Author Matt Holly

21. Site 9, No. 1. Surface photo.
22. Site 9, No. 2. Surface photo.
23. Site 9, No. 3. Surface photo.

APPENDIX 6

CONTRACTOR'S CURRICULUM VITAE

The contractor for this report, Matthew B. Holly, became a N.A.U.I. (National Association of Underwater Instructors) SCUBA Instructor (No. 5074), in May 1978, in San Diego, California. He graduated in 1979 with a B.S. Degree in Accounting from San Diego State University.

While working for The Diving Locker, a prominent San Diego SCUBA business, he met and was hired by businessmen interested in developing a Yacht Charter and SCUBA Diving business in the Marshall Islands, and moved to Majuro, Marshall Islands, in June 1979. The business failed, he stayed, and started his own business, called Marshall Islands Aquatics.

During the next 21 years, he has made over 3000 SCUBA dives around the Marshall Islands, for SCUBA training, tourism, commercial work, and for fun.

His first charter was to attempt to locate the crash site of Amelia Earhart in Mili for author Vincent Loomis in 1979. Research into World War Two history began in 1983 after he found a Martin PBM-3 Mariner aircraft in Majuro lagoon. Since then he has found or re-discovered over 100 historic underwater sites, primarily WW2 ships and aircraft, and found the remains of a U.S. Army WW2 aviator and his aircraft lost in the jungle of Mili in 1994. He recently located a Grumman F6F "Hellcat" in Majuro lagoon, plus the two new aircraft located in Mili atoll for this report.

Matt also found that tourists provided with complete information on historical sites were much happier visitors. So he now has an extensive library of marine and WWII era books, and writes articles on military history for numerous publications. He has researched virtually every known Marshall's aviation and shipping loss during World War II, and currently has over 700 entries with stories, and a database of losses of both US and Japanese vessels, aircraft, and causality information. He also does scientific work, primarily for the RMI EPA, has visited the majority of the Marshall Islands, and Mili over 20 times since his first visit.

He currently is an underwater jack-of-all-trades. Matt has been involved in aquaculture projects, underwater bathometric surveys, private reports for marinas, and underwater construction and design. Commercial work has included salvage, ship repairs, re-floating a 1,200 ton vessel, and sinking a 400 ton vessel for an artificial reef. He has produced underwater videos on pollution and tourism, and has a collection of underwater videos of his work.

This report, like his prior HPO reports on Kwajalein, Majuro and Wotje, continue his work in listing underwater assets in the Republic of the Marshall Islands.