

ARCHAEOLOGICAL RECONNAISSANCE SURVEY
PROPOSED TA'Ū HARBOR AT FUSI AND QUARRY SITE
BETWEEN FUSI AND FAGAMALO
TA'Ū ISLAND, MANU'A GROUP, AMERICAN SAMOA

by

William K. Pila Kikuchi

Stephen L. Palama

Thomas E. Silva

Prepared by

ARCHAEOLOGICAL RESEARCH CENTER HAWAII, INC.
Project 14-48

for the

UNITED STATES ARMY CORPS OF ENGINEERS
PACIFIC OCEAN DIVISION, FORT SHAFTER

Contract #DACW 84-75-C-0007

Lawa'i

March 1975

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the United States Army Corps of Engineers.

ACKNOWLEDGEMENTS

Archaeological Research Center Hawaii, Inc. would like to acknowledge the aid and advice of the following individuals and institutions which made the survey and its completion both enjoyable and successful: Dr. John Belshe' of the U.S. Army Corps of Engineers, who accompanied and paved the way for the survey and accommodations in American Samoa; Mr. Frank C. Mockler, the Acting Governor of American Samoa, and his staff; Mr. Robert Page of the Department of Public Works and his staff members, Bill Wigheman and Eugene Marquardt; and Puailoa, Mayor and Chief of Nu'u'uli Village. We are further indebted to Commissioner of Public Safety and High Chief of Ta'ū Village, Tufele Li'a, and to Talking Chiefs Nua and Niumata from the island of Ta'ū. Our stay on Tutuila was made most enjoyable by Fa'ivae, Director of Tourism and High Chief of Leone; Amos Galea'i; and Mr. and Mrs. Matthew Iuli.

We would also like to acknowledge Dolores Kikuchi, Andre McIntosh, and John Malina for their assistance in the preparation of the final report.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
LIST OF ILLUSTRATIONS	v
INTRODUCTION	1
Background	1
Previous Work	1
Field Team	3
CALENDAR OF FIELD WORK	4
RECONNAISSANCE SURVEY	5
Methodology	5
Harbor Site Survey	7
Quarry Site Survey	14
CONCLUSIONS AND RECOMMENDATIONS	17
GLOSSARY	18
BIBLIOGRAPHY	19

LIST OF ILLUSTRATIONS

Figure	Page
1. American Samoa	2
2. Ta'ū Island	2
3. Proposed Harbor and Quarry Site Ta'ū Island	8
4. Archaeological Feature Location Map	In pocket

Plates

1. Harbor Site	6
2. Beach and Inland Area from Matavai Point	6
3. Inland Area	10
4. Site A	10
5. Barringtonia Forest at Matavai Point	13
6. Site J	13
7. Quarry Site and Fagamalo Cove	15

INTRODUCTION

Background Information

The U.S. Army Corps of Engineers has proposed that (1) a boat harbor be constructed on the Island of Ta'ū, Manu'a Group, American Samoa and that (2) the rock for the construction be obtained from a nearby cliff area (Figs. 1, 2, 3). The job contract from the U.S. Army Corps of Engineers to Archaeological Research Center Hawaii, Inc. called for a reconnaissance survey of the harbor and quarry sites to determine the possible archaeological, historical, and cultural significance in those areas. This reconnaissance survey was conducted to locate, identify, record, and evaluate any sites within and surrounding the harbor and quarry areas. The necessity for another, more detailed archaeological, historical, or cultural investigation prior to construction of the harbor and quarry is to be determined by this study.

Previous Work

A considerable amount of scholarly literature exists for the Samoan Islands, the majority dealing with the prehistory, history, and culture of politically independent Western Samoa. Information on American Samoa is centered principally on the Manu'a Group, for it was from those islands (Ta'ū, 'Ofu, and 'Olosega) that the original Samoan culture is said to be derived.

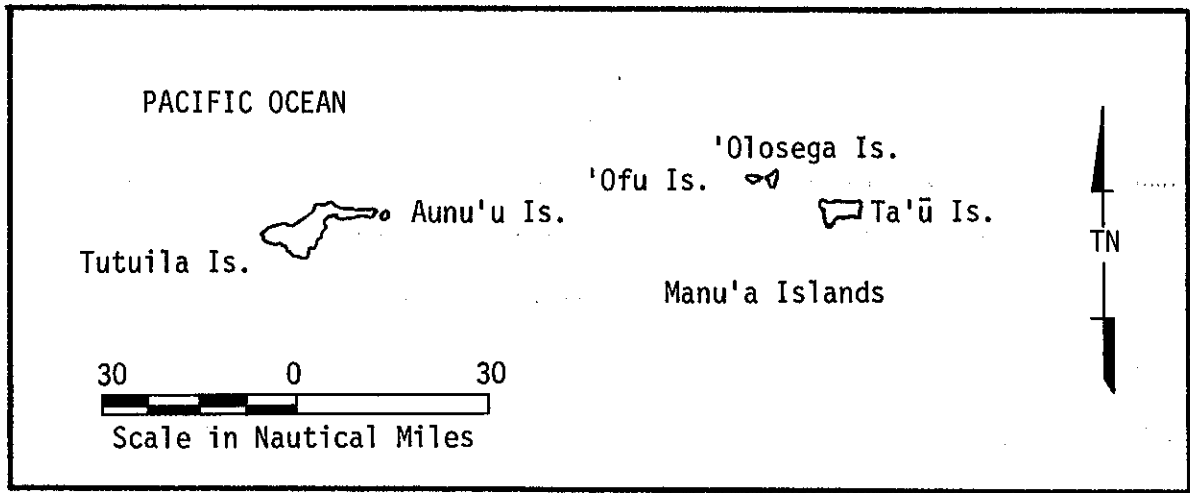


Fig. 1
AMERICAN SAMOA

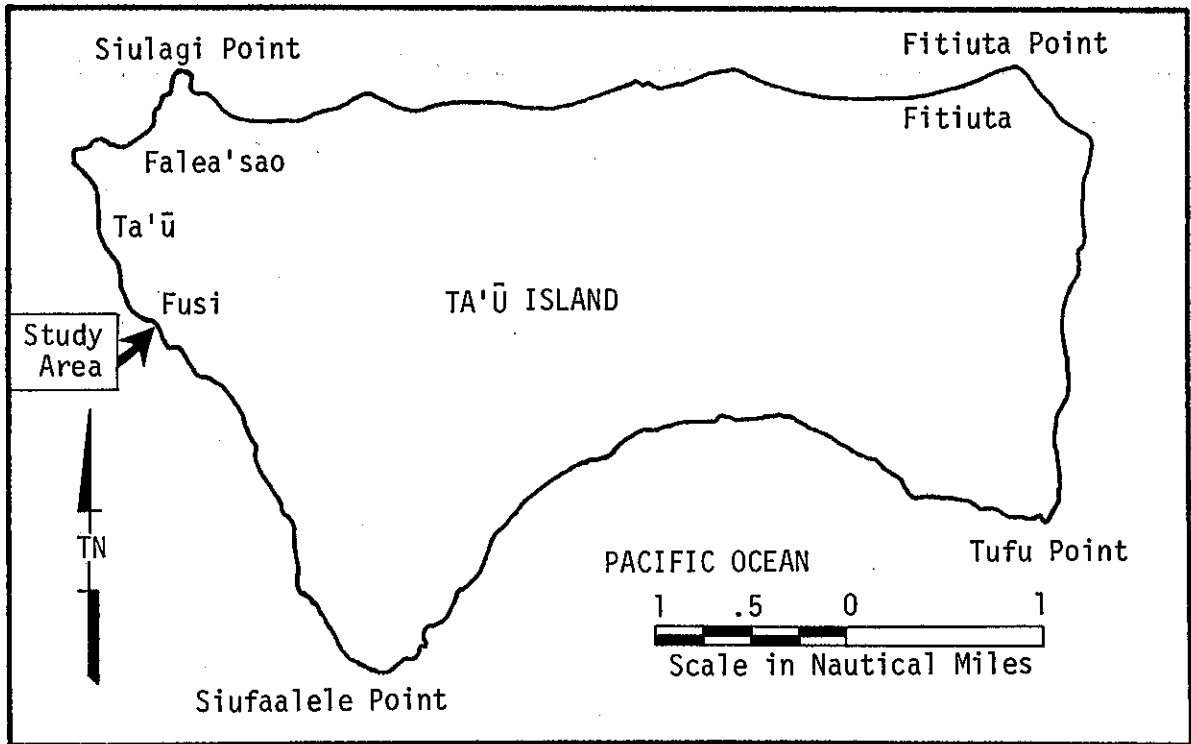


Fig. 2
TA'Ū ISLAND

Augustin Krämer (1903), a member of the German *Kulturkreis* school of anthropology, worked on a most detailed analysis of Manu'a. He was followed in the late 1920's by Peter H. Buck (1930) of the Bishop Museum, who studied the material culture of Samoa, and in 1929 by Margaret Mead (1930), who lived in Manu'a and wrote a psychological and ethnographic thesis on its inhabitants. In the 1950's, Lowell Holmes (1958) described the political and family systems of Manu'a. William Kikuchi (1963) worked on his Master's thesis in American Samoa in 1960-61, and in 1962 he worked with Yosihiko Sinoto of the Bishop Museum to complete the first archaeological test excavation in Ta'u. Although other scholarly works have since been completed, the above contain the ethnographic, archaeological, cultural, and historical information with which this report is concerned.

Field Team

The field team was composed of Dr. William K. Pila Kikuchi, Archaeologist at Kauai Community College and Research Associate of Archaeological Research Center Hawaii, Inc. and Stephen L. Palama and Thomas E. Silva of the Archaeological Research Center Hawaii, Inc. Dr. John Belshe' of the U.S. Army Corps of Engineers accompanied the field team to Samoa.

CALENDAR OF FIELD WORK

- January 6, 1975 Kikuchi, Palama, Silva, and Belshe' arrived at Tutuila, American Samoa.
Met with Acting Governor Frank C. Mockler.
Examined road sections from Amanave to Pago Pago.
Examined beach erosion at Nu'u'uli Village.
- January 7, 1975 Departed for Ta'ū Island, Manu'a Group, American Samoa.
Examined proposed harbor site at Fusi, observed the quarry site by Fagamalo Cove, and visited the village of Falea'sao.
- January 8, 1975 Examined the harbor and borrow sites with Belshe' and Marquardt.
Belshe' departed for Tutuila and Honolulu.
Walked through the harbor site and did final examination of the quarry area.
- January 9, 1975 Examined for the last time the harbor site at Fusi.
Departed Ta'ū early for Tutuila due to change in airline maintenance schedule.
- January 10, 1975 Examined road sections in Pago Pago area.
Met with Director of Tourism, Fa'ivae.
- January 11, 1975 Undertook research at the museum in Pago Pago and reviewed notes.
- January 12, 1975 Departed Tutuila and arrived in Honolulu.

RECONNAISSANCE SURVEY

Methodology

Prior to any field work, a search was made through literary sources for references to any archaeological, historic, or legendary sites or events in or pertaining to the geographical area of Fusi and Fagamalo, Ta'ū Island. No references were found.

The principal methodology used in this study was the simplest of the many types of archaeological surveys, a reconnaissance survey. This involves a simple walk-through search for any sites, including those which might be of archaeological, historical, or cultural value, and then to physically locate all sites found on a base map. Reconnaissance surveys do not require detailed site clearing or test excavation of any sites.

The actual field survey was aided by previous cadastral surveys of the proposed harbor site by the U.S. Army Corps of Engineers. Several locational stakes had been laid out to define the construction area; however, the blue survey tapes used by the Engineers were difficult to find, as they blended into the lush green vegetation which had nearly covered the stakes. The field team added bright orange engineering flagging tape to the blue flagged stakes in order to make them more visible.

The harbor site at Fusi was adequately marked except for its southern boundary, while the entire quarry site from Fusi to Fagamalo was



Plate 1
HARBOR SITE



Plate 2
BEACH AND INLAND AREA FROM MATAVAI POINT

poorly delineated (Fig. 3). Even though the quarry area did not require a cadastral survey, more professional effort should have been made to note its limits.

Harbor Site Survey

For survey convenience, the proposed harbor site was divided into three sections: (1) the inland areas, or the lands east of the road running inland as far as the survey borrow areas, as delineated both by survey flags and by a line 60 feet (18.29 m.) further east and parallel to the survey flags; (2) surrounding bush lands, or the area adjacent to and surrounding the proposed construction site, i.e., the reef, swamp, cliff, and areas covered by dense *Barringtonia* trees (*Barringtonia asiatica*); and (3) the beach area west of the road (Fig. 4, insert on inside of back cover). Each of the three members of the field team trekked through the areas, hacking through dense vegetation. Upon finding probable structures, they conducted minimal clearing in order to determine the nature of the site by measurement and for photographic records.

Inland Area

Several sites, all in deteriorated condition, were found within this area. These are identified by capital letters A, B, C, etc. (Fig. 4).

Site A. This flattened area of land extends from the coral road to a row of large, eroded coral blocks. These coral blocks form a poorly faced terrace. Standing only 0.20 m. (7.80 in.) high, about 8 m. (26.25 ft.) wide, and approximately 12 m. (39.37 ft.) long, this area of land is

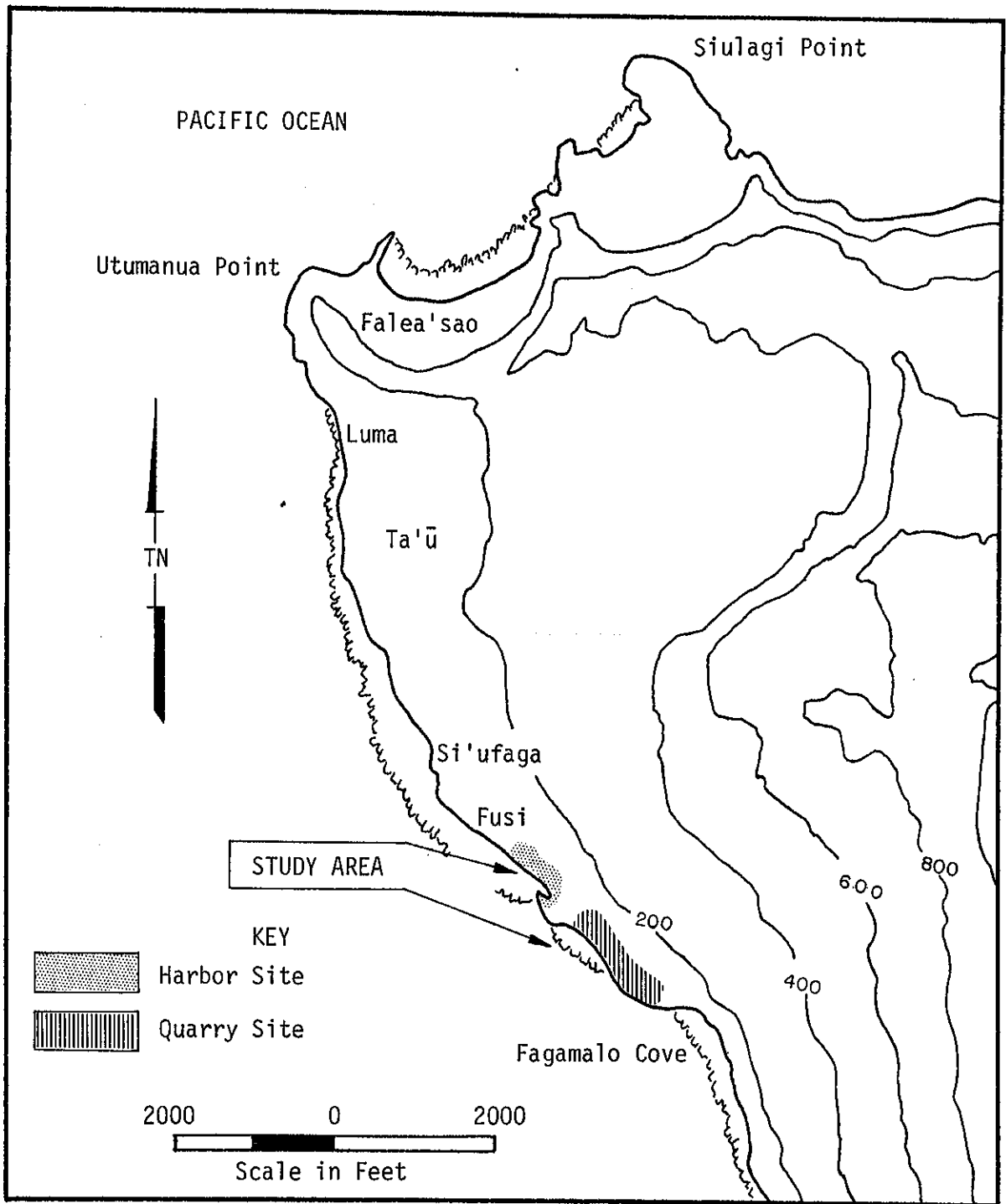


Fig. 3
 PROPOSED HARBOR AND QUARRY SITE
 TA'Ū ISLAND

crossed by a well-beaten path and, upon inspection, was found to be composed of beach detritus, i.e., sand, shell, and coral blocks. The site appears to have been flattened for agricultural purposes, as indicated by pits left by decaying coconut stumps.

Site B. Nearly parallel to the low terrace and adjacent to it, is a crudely built wall of large, eroded coral blocks. The wall averages 0.90 m. (2.93 ft.) in height and 1 m. (3.28 ft.) in width. The extent of the site can be determined on the U.S. Army Corps of Engineers survey map. Within the walls are kept many pigs which have extensively rooted the ground within. The evident function of the site is to serve as a pig pen.

Site C. Site C lies on the edge of the swamp in the general area indicated on Fig. 4. This small, but well-drained agricultural plot was probably formed either (1) by digging ditches or canals into the swamp level or possibly (2) by elevating the section of land and facing its sides with large, eroded coral blocks. The two ditches, measuring approximately 1-2 m. (3.28-6.56 ft.) wide, nearly 1 m. (3.28 ft.) high, and 4 m. (13.12 ft.) long, intersect to form a "T", and the facing of the platform is 3-4 stones high and neatly constructed. The site does not resemble a house or habitation foundation, and the use of the swamp land to this extent has not been noted for other swampy areas of Fusi or for Ta'ū Village.

Site D. A pit, 5 m. (16.40 ft.) in diameter and 1 m. (3.28 ft.) in depth, was seen 60 m. (196.85 ft.) from Site A and running along the survey



Plate 3
INLAND AREA



Plate 4
SITE A
10

flagging line that denotes the inland boundary of construction. Margaret Mead, who worked in Ta'ū Village in 1962, commented that *masi* (pounded and fermented staple items such as breadfruit and banana) was not made on Ta'ū Island and that it played only a very slight role in Samoan food preparations (Mead 1930:69-70). She, however, commented that the effect of the hurricane of 1926 brought famine to the island and that pits were excavated for the baking of *ti* (*Cordyline terminalis*) as a source of food. Kikuchi (1963:89-90) noted that in prehistoric times in the Manu'a Group of Islands, *masi* was made from the banana and that the pits were called *lua'i*. No cultural artifacts were found in Site D, and since it is located close to habitation sites, it could have served either as a food pit or a trash pit.

Site E. Ninety meters (295.20 ft.) from Site A and 3-4 m. (9.85-13.12 ft.) toward the road is a series of coral and lava blocks. After this overgrown area was cleared of brush, a disturbed house foundation could be seen. The coral and lava blocks form a platform which is approximately 10 cm (3.90 in.) high with a longitudinal compass bearing of 203°. This indicated that the structure once stood with its long axis running perpendicular to the beach. In contrast, most house plans in Ta'ū and Falea'sao Villages run parallel to the beach. Evidently, the laying of a water pipeline has disturbed the structure.

Site F. A single small pit was found about 120 m (393.70 ft.) from Site A, 15 m. (49.21 ft.) from the survey boundary line, and with a bearing of 188°. Situated 2 m. (6.56 ft.) from the edge of a terraced

area which marks the beginning of the swamp region, the pit is 20 cm. (7.80 in.) deep and approximately 1-1.5 m. (3.28-4.92 ft.) in diameter. As in Site D, no signs of any recent or purposeful historical use of the depression as a firepit were noted, and the pit could have been either a food or a trash pit.

Site G. Bearing 115° and 5.1 m. (16.73 ft.) from Site F is a remarkably well preserved house foundation, or *paepae*. This structure has a length bearing 120° and measuring 8 m. (26.25 ft) and a width bearing 220° and measuring 6 m. (19.69 ft.). The platform is elevated with lava and coral blocks to a height of 0.30 m. (11.70 in.) and is well paved with beach detritus of small shells, sand, coral pieces, etc. The *paepae* is most remarkable as its postholes can still easily be seen because of their depression marks. Five meters (16.40 ft.) from the *paepae* is a terraced area which marks the land slope to the swampy ground.

Site H. This is the zone which probably ran along the entire edge of the terraced swamp. The inhabitants of the area evidently laid large lava and coral blocks along the edges of the swamp to form a visible and ambulatory barrier both for humans and for pigs.

Surrounding Bush Lands

Site I. The boundary area south of Site A, though mapped and supposedly flagged by the U.S. Army Corps of Engineers, was most difficult to determine because of the paucity of survey flags. Only one such flag was seen by the field team while trekking through this area. Many walls,



Plate 5
BARRINGTONIA FOREST AT MATAVAI POINT

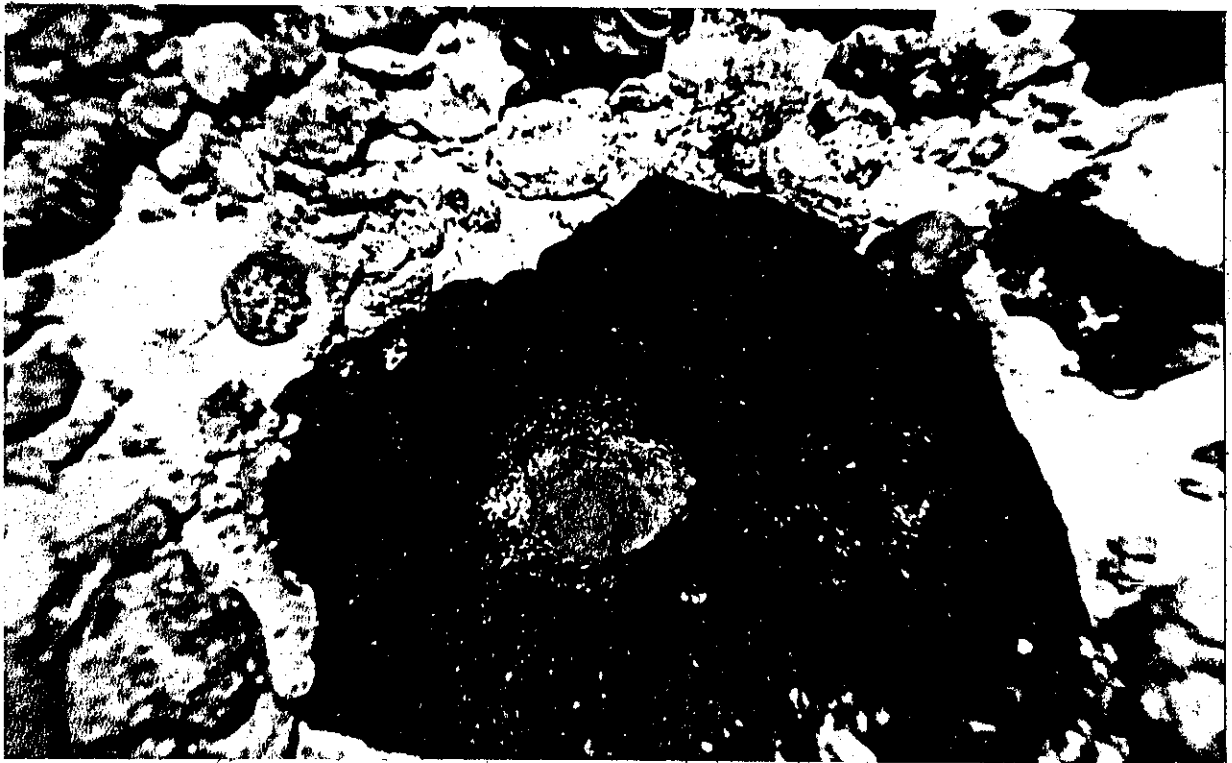


Plate 6
SITE J
13

some of poor and marginal construction, were noted, but only a minimal attempt was made to locate the exact bearing of each of them because of the extreme overgrowth. Our archaeological survey notes and the U.S. Army's maps do not agree on the length, bearing, or location of these walls. However, since all of them are found outside the area of construction, their presence does not affect the project. Some of the walls appear to have been built as pig pens, while others seem to have served to keep pigs out of agricultural plots. All walls noted are similar to those found elsewhere in Samoa.

Beach Area

Site J. The inspection of the rocky shore at Fusi near Matavai Point did not reveal any obvious archaeological features. However, two suspicious depressions in the bedrock could have been bait cups. Bait cups are shallows in which bait was ground to be used for fishing. Similar cups, as well as whetstones, were found in 1962 by Sinoto and Kikuchi (Kikuchi 1963:91; Emory & Sinoto 1965:45-48). These were located along the lava bedrock projecting out from the shore fronting Ta'ū Village. Although Site J may have been bait cups, it is more likely that these depressions were naturally formed by surf action and, therefore, served no function.

Quarry Site Survey

Because of its cliff-like characteristics, the quarry site could be only minimally surveyed (Fig. 3). The reconnaissance survey was conducted in the area beginning approximately 340 yards (310.90 m.) south of

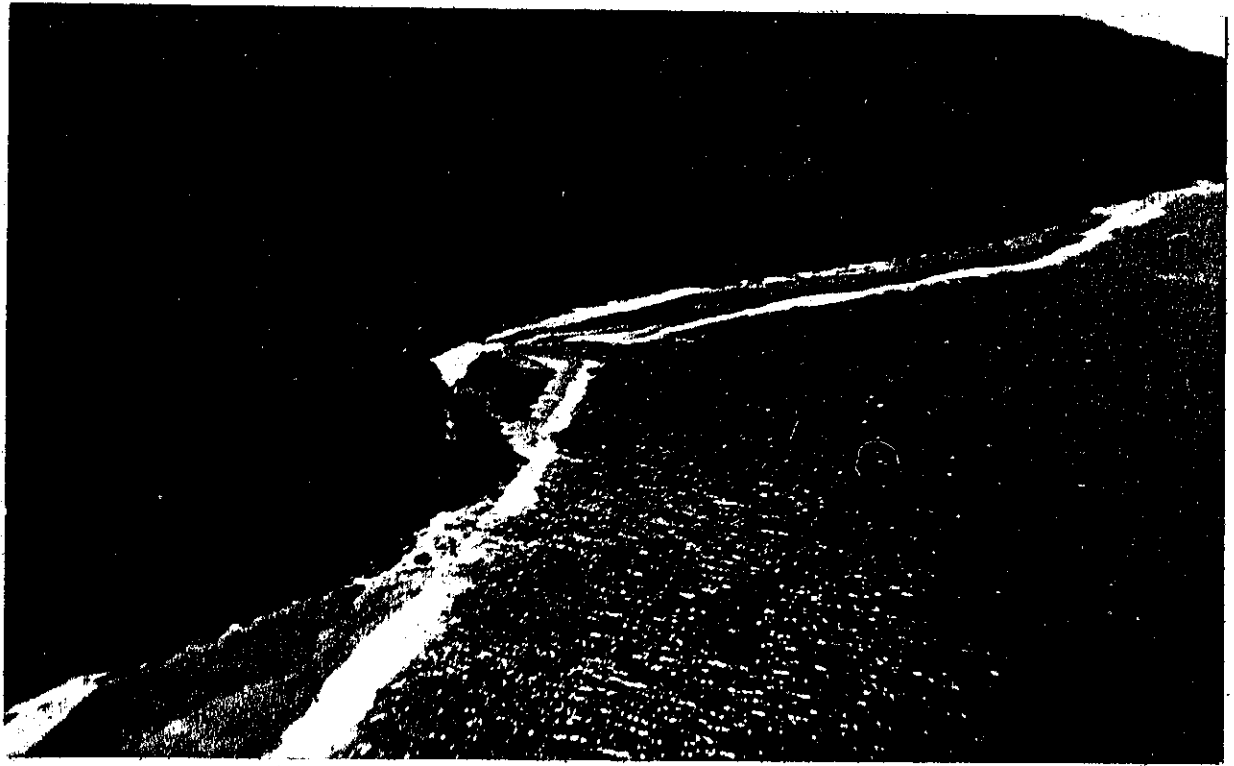





Plate 7
QUARRY SITE AND FAGAMALO COVE




Matavai Point and extending to the northern edge of Fagamalo Cove. Visual inspection of the steep cliffside was the most effective survey method available. Where suspicious rock formations were seen above the road, one of the field team members climbed to more closely inspect the area. Dense growth of ferns, shrubs, and trees effectively serve to hide any lowlying sites or cultural materials. Lava tubes of small size seen occurring on the road cut were inspected, but these proved to be of purely geological interest. Culturally, the area may contain caves which could have been used for shelter. Brother Herman (1970:59,72) recorded in the Legend of Tautunu and the Legend of the Cannibal Ma'ava the use of upland areas for caves and of springs for bathing pools, respectively, but both tales concern lands that are quite removed physically from the quarry area. Neither informants nor legends were found for the quarry site, and no archaeological sites were noted in the survey.



CONCLUSIONS AND RECOMMENDATIONS

The only sites found during the course of the Boat Harbor and Quarry Site surveys were Sites E and G. All others are of marginal value, that is, they are of little or no archaeological or cultural significance. Sites E and G are both house sites with undisturbed subsurface features. Both are common *paepae* foundations, seen in Ta'ū Village as elsewhere in Samoa. What makes both sites valuable is that informants claim that for as far back as anyone can remember, the Fusi area was uninhabited. Perhaps a wider sampling of informants would yield different results. A modern concrete base house and a smaller shed stand close to, but outside the survey area; this would indicate that the foundations in the bush are likely to have belonged to the house and shed owners or to their extended family. Holmes (1958) recorded a variety of Ta'ū house foundations, and his records would suggest that Sites E and G are typical Samoan houses and that Site E probably represents the *fale o'o*, sleeping house, and Site G the *fale afolau*, meeting house. Since house foundations were usually constructed over, near, or, in some cases, overlapping older foundations, the two sites would prove of archaeological value and would provide cultural and historical data on population movements in Samoa.

We recommend that salvage archaeology be undertaken at Sites E and G.



GLOSSARY

Amanave	Village in western Tutuila.
Fagamalo	Bay in west-central Ta'ū.
<i>fale afolau</i>	Meeting house.
Falea'sao	Village in northwest Ta'ū.
<i>fale o'o</i>	Sleeping house.
Fusi	Site of proposed small boat harbor on Ta'ū.
Leone	Village in western Tutuila.
<i>lua'i</i>	Pits used for storage of banana.
Luma	Village in northwest Ta'ū.
Manu'a	Group of islands and district of American Samoa.
<i>masi</i>	Pounded and fermented breadfruit or banana.
Matavai	Point of land south of Fusi, Ta'ū.
Nu'u'uli	Village in southern Tutuila.
'Ofu	Island in Manu'a Group, American Samoa.
'Olosega	Island in Manu'a Group, American Samoa.
<i>paepae</i>	House foundation.
Pago Pago	Village in central Tutuila; name of harbor on Tutuila; international airport on Tutuila.
Si'ufaga	Village in western Ta'ū.
Ta'ū	Principle island, county, and village in the Manu'a Group, American Samoa.
<i>ti</i>	A woody plant (<i>Cordyline terminalis</i>) in the lily family.
Tutuila	Largest island in American Samoa.
Vai-o-tuli	Spring at Si'ufaga village.

BIBLIOGRAPHY

- Bryan, Edwin H., Jr.
1935 Samoan and Scientific Names of Plants Found in Samoa. Mimeographed Report by Bernice P. Bishop Museum for the Government of American Samoa, Honolulu.
- Buck, Peter H.
1930 Samoan Material Culture. Bernice P. Bishop Museum Bulletin 75. Honolulu.
- Coulter, John W.
1941 Land Utilization in American Samoa. Bernice P. Bishop Museum Bulletin 170. Honolulu.
- Daly, Reginald
1942 Geology of American Samoa. Carnegie Institute of Washington Publication 20. Washington, D.C.
- Emory, Kenneth P. and Yoshihiko H. Sinoto
1965 Preliminary Report on the Archaeological Investigations in Polynesia: Field Work in the Society and Tuamotu Islands, French Polynesia, and American Samoa in 1962, 1963, 1964. Mimeographed Report in Bernice P. Bishop Museum, Honolulu.
- Gray, J.A.C.
1960 Amerika Samoa: A History of American Samoa and Its United States Naval Administration. Annapolis: U.S. Naval Institute.
- Handy, E. S. Craighill and Willowdean C. Handy
1924 Samoan House Building, Cooking, and Tattooing. Bernice P. Bishop Museum Bulletin 15. Honolulu.
- Herman, Brother, Editor
1970 Tales of Ancient Samoa. 5th ed. Pago Pago: The Book Shop, Samoan Church.
- Holmes, Lowell D.
1958 Ta'ū, Stability and Change in a Samoan Village. The Polynesian Society Reprint 7. Wellington.

- Kikuchi, William Kenji
1963 Archaeological Surface Ruins in American Samoa. Master's Thesis in University of Hawaii Library, Honolulu.
- Krämer, Augustin
1903 Die Samoa-Inseln. 2 vols. Stuttgart: E. Schweizerbartsche Verlagsbuchhandlung.
- Mead, Margaret
1930 Social Organization in Manu'a. Bernice P. Bishop Museum Bulletin 76. Honolulu.
- Stair, Rev. John B.
1897 Old Samoa or Flotsam and Jetsam from the Pacific Ocean. London: The Religious Tract Society.
- Stice, Gary Dennis
1966 The Petrology of the Manu'a Islands, American Samoa. Doctoral Dissertation in University of Hawaii Library. Honolulu.
- Turner, George
1884 Samoa, A Hundred Years ago and Long Before. London: MacMillian and Co.
- U.S. Army Corps of Engineers
1974 Detailed Project Report, Ta'ū Harbor, For Light-Draft Vessels, Ta'ū Island, American Samoa. Honolulu.
- Whistler, W. Arthur
1974 Botanical Survey of Fusi, Ta'ū Island, American Samoa. Mimeographed Report for U.S. Army Corps of Engineers.
- Yuncker, T. G.
1945 Plants of the Manu'a Islands. Bernice P. Bishop Museum Bulletin 184. Honolulu.