

13418

13418

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Field No. PH-6911	Office No. T-13418
LOCALITY	
State	SAMOA
General locality	Tutuila Island
Locality	Pago Pago Harbor
<u>1947</u>	
CHIEF OF PARTY	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

☐ ORIGINAL☒ REVISED

SURVEY TP - 13418

JOB PH - 6911

PHOTOGRAMMETRIC OFFICE

Rockville, Maryland

OFFICER-IN-CHARGE

Jack E. Guth

FOR REVISED SURVEY USE ONLY

ORIGINAL
SURVEY DATA:

BP-75226

JOB PH - 6806

DATES:

19 62 TO 19 68

I. INSTRUCTIONS DATED

1. OFFICE

Aerotriangulation - April 8, 1969
Preparation of Hydro
Support Data - July 31, 1970

2. FIELD

August 6, 1970

II. DATUMS

1. HORIZONTAL:

☐ 1927 NORTH AMERICAN

OTHER (Specify)

Geological Survey Datum 1962

2. VERTICAL:

☐ MEAN HIGH-WATER☒ MEAN LOW-WATER☐ MEAN LOWER LOW-WATER☐ MEAN SEA LEVEL

OTHER (Specify)

3. MAP PROJECTION

Lambert

4. GRID(S)

STATE

ZONE

5. SCALE

1:5,000

STATE

ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	W. Heinbaugh	12/70
METHOD: A-7 stereo	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	K. N. Maki	12/70
METHOD:	CHECKED BY		
3. STEREOSCOPIC INSTRUMENT	PLANIMETRY BY	NONE	
COMPILATION	CHECKED BY		
INSTRUMENT:	CONTOURS BY		
SCALE:	CHECKED BY		
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	NONE	
	CHECKED BY		
METHOD:	CONTOURS BY		
	CHECKED BY		
SCALE:	HYDRO SUPPORT DATA BY		
	CHECKED BY		
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY		
6. APPLICATION OF FIELD EDIT DATA	BY	J. C. Richter	8/70
	CHECKED BY		
7. COMPILATION SECTION REVIEW	BY		
8. FINAL REVIEW	BY	J. C. Richter	8/70
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY		
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY		

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) "W"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		(C) <u>COLOR</u> (P) <u>PANCHROMATIC</u> (I) <u>INFRARED</u>		ZONE	<input type="checkbox"/> STANDARD
				MERIDIAN	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
61-W(C)-544-548 61-W-554-556 61-W-593-595 61W 553 - 3 copies 61W(C) 634 2 copies 61W 635-636	9/14/61 11		1:10,000 1:20,000 1:10,000		

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Survey OPR SU-10-1-71
Aerial photographs 1961
Field Edit of 1971

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

Survey OPR SU-10-1-71

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No contemporary surveys			

REMARKS

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	Norman L. Lovelace	April 1971
2. HORIZONTAL CONTROL		
RECOVERED BY		
ESTABLISHED BY		
PRE-MARKED OR IDENTIFIED BY	W.T. Johnson	June 1971
3. VERTICAL CONTROL		
RECOVERED BY		
ESTABLISHED BY		
PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION		
RECOVERED (Triangulation Stations) BY		
LOCATED (Field Methods) BY	W.T. Johnson	1968
IDENTIFIED BY		
5. GEOGRAPHIC NAMES INVESTIGATION		
TYPE OF INVESTIGATION		
<input type="checkbox"/> COMPLETE		
<input type="checkbox"/> SPECIFIC NAMES ONLY		
<input checked="" type="checkbox"/> NO INVESTIGATION		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED 1 Vol Vol 1 1968	2. VERTICAL CONTROL IDENTIFIED
--	--------------------------------

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
61W553	VAILLOA		
61W554	MARIST		
61W635	LEASI		
61W636	FAALUA		
	UTULAINA		
	NUUULI		

3. PHOTO NUMBERS (Clarification of details) 61W634

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED Revised in 1968

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input type="checkbox"/> NONE	6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input type="checkbox"/> NONE
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7. SUPPLEMENTAL MAPS AND PLANS 1 Discrepancy print and 122 x 112 with field edit corrections. 4 Planetable sheets SW-A-B-C-D-E were submitted to Marine charts Hydrographic Data Section
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8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)
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RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Field edit of 1971 shoreline & foreshore	8/71			

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM C&GS 567 SUBMITTED BY FIELD PARTIES. 1968 Forms
3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, ESSA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS: All field edit data except the 4 planetable sheets SU-A-B-C-D-E 1971 which were submitted to Marine Charts Hydrographic section.
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY REVISION (This section shall be completed when a revised survey is registered.)

FIRST REVISION	SURVEY NUMBER TP - (2)	JOB NUMBER PH -	REMARKS
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
SECOND REVISION	SURVEY NUMBER TP - (3)	JOB NUMBER PH -	REMARKS
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD REVISION	SURVEY NUMBER TP - (4)	JOB NUMBER PH -	REMARKS
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

SUMMARY
T-13418

Map T-13418, scale 1:5,000, and three blueprints, Nos. 81277, 81278 and 81279, scale 1:10,000, comprise Job PH-6911. Project mapping covers Tutuila Island, American Samoa. No basic mapping was done. Copies of USGS quadrangle sheets were revised and field edited.

This map covers Pago Pago Harbor. The USGS quadrangle sheet (#2) covering this area was revised and field edited in 1968 under Job PH-6806 for use in the construction of nautical chart 4190. A copy of the blueprint (75226) produced in 1968 was used as the compilation base for T-13418.

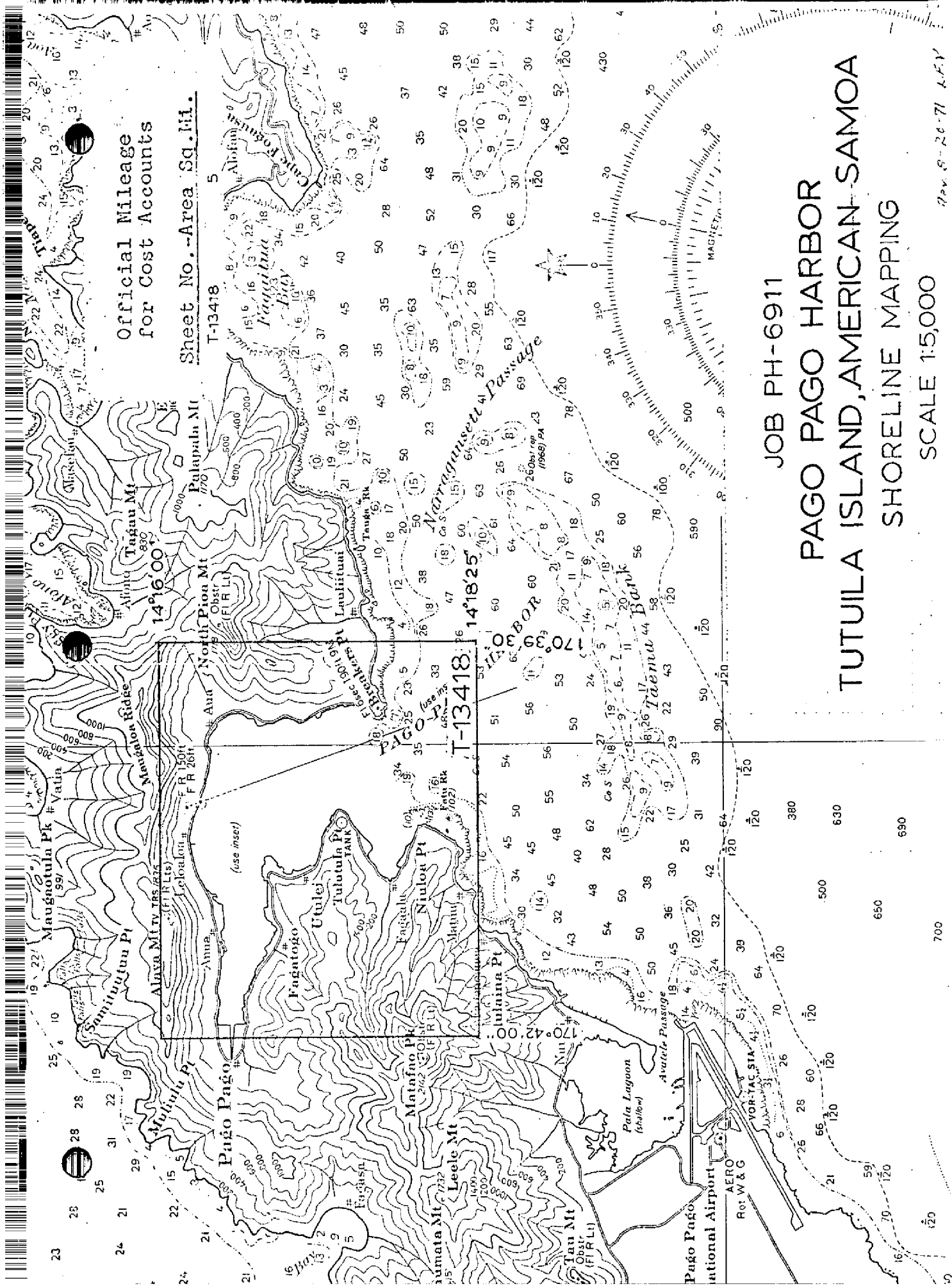
The area covered by T-13418 was bridged in 1970 to provide hydro signals for use in hydrographic operations. The signal sites were plotted on T-13418 and the map and related hydro support data were furnished to OPR-497, hydro survey of Pago Pago Harbor. The hydrographer was also furnished revised copies of the two USGS quadrangle covering the remainder of Tutuila Island.

Map T-13418 and blueprints 81277 and 81279 were field edited * in 1971 by the hydrographer -- blueprint 81278 is a 1:10,000 scale copy of T-13418, scale 1:5,000.

Photography used in the various operational phases consisted of color and panchromatic at scale of 1:10,000 and 1:20,000, respectively, taken in 1961.

T-13418 will be registered in the Bureau Archives. The blueprints will be filed in the Marine Chart Division.

** Field edit was restricted to features required for charting.
Landmarks and Aids to Navigation were not investigated during the 1971 edit. They were ~~not~~ investigated in 1968 (PH-6806). Forms 567 were submitted to the Marine Chart Division in 1968. These forms rather than the map (T-13418) or the Blue Print of 1968 (75226) should be used for landmarks and aids to navigation data.
SGS*



JOB PH-6911

PAGO PAGO HARBOR

TUTUILA ISLAND, AMERICAN SAMOA

SHORELINE MAPPING

SCALE 1:5,000

Rev. 8-26-71 A.F.V.

FIELD EDIT REPORT

T-13418

1:5000 Scale

Pago Pago Harbor American Samoa

This sheet T-13418 was inspected as per project instructions OPR 497 during the SURVEYOR's survey of Pago Pago Harbor in the spring of 1971.

Methods:

In all areas where possible (i.e. areas without heavy surf) the reef line was verified or delineated by plotting sextant fixes taken from a skiff lying immediately alongside the reef. These fixes were plotted on the boat sheet (SU-5-1-71); the reef where differing from that depicted on the T-sheet was sketched between the fix points; changes from the T-sheet were transferred to the field edit ozalid.

The distance to the high and low water lines was measured from each hydrographic signal or other control point which lie along the shore. Field photographs and a copy of the T-sheet were carried along the entire shoreline, and a comparison was made between the shoreline apparently identified by the compiler and that which could be identified in the field with the aid of reference objects. A single case where the compiler incorrectly identified the shoreline became apparent. At Matautulua Point the true shoreline (high and low water lines indistinguishable at scale of sheet) is that outlined by dashed lines on field photograph 61W 634. This was verified by a tape measurement from triangulation station Faalua.

In addition to the single area of incorrect identification there

are three areas where substantial changes have been made in the ten years spanning the dates of photography and inspection. Areas of change are as follows:

1. The inner harbor west of 170° 41' 15" W.
2. Fagaalu Bay.
3. The eastern shore of the harbor between Anasosopo and Tafagamanu Point.

The above changes in shoreline were delineated by planetable surveys on topo sheets SU-D-71 and SU-E-71.

A field inspection was made comparing major buildings with those shown on the T-sheet. There were a number of small structures that had been destroyed or changed. These changes were found by field checking the field ozalid, in most cases just a visual check was made. However, two new major structures were located by planetable surveys. These changes and locations were then transferred to the field edit ozalid.

A legend describing the symbols used is included on the field edit ozalid.

Recommendations:

The obvious recommendation is that if possible more recent photography should be used. Local authorities should be requested to inform the appropriate offices of shoreline changes. There are areas where dredging and filling are currently taking place, resulting in major shoreline changes over relatively short periods of time.

Descriptive Report of Planetable Surveys, OPR 497

(Sheets SU-D-71 & SU-E-71, 1:5000 scale)

Pago Pago Harbor, American Samoa

Project: This project consists of 3 planetable surveys made under the provisions of Project OPR 497, hydrographic survey of Pago Pago Harbor, American Samoa, project instructions issued by Director, Pacific Marine Center and dated December 18, 1970.

Purpose and Area Surveyed: The purpose of these surveys was to delineate portions of the shoreline (within the project limits) that differed substantially from the shoreline shown on topographic sheet #T-13418. The following areas were surveyed:

1. Inner harbor west of $170^{\circ} 41' 15''$ W longitude.
2. Fagaalu Bay.
3. Eastern shore of the harbor between Anasosopo and Tafagamanu Points.

Party Personnel and Equipment:

Personnel: LTJG Normal L. Lovelace ; In charge, observer
Mr. Leonard Webb ; Recorder
Mr. John McQuillan ; Rodman

Equipment: Alidade (#49570)
Planetable
Tripod
Stadia Rod (meters)
Aluminum mounted, standard planetable sheet (31" x 24")
(#'s SU-D-71 (side one) SU-E-71 (side two))
Misc.

Methods: These surveys were done by planetable traverses. The surveys were started and ended on existing control stations (triangulation stations and/or hydrographic control signals). Sufficient points were observed along the shoreline to ensure accurate definition of the shoreline. The high water line was used as the shoreline boundary in these surveys. Following are the control stations for each survey and the corresponding closures:

Survey 1 SU-D-71 (Inner harbor west of $170^{\circ} 41' 15''$ W)
Start FOSTER
End PULE GAS closure: 4 meters

Survey 2 SU-E-71 (Anasosopo to Tafugamanu Points)

Start SOSOPO

End SOSOPO closure: 5 meters

Survey 3 SU-E-71 (Fagaalu Bay) ~~and~~ ~~and~~ ~~and~~

Start Hydro Signal #28

End Hydro Siglan #28 closure: 6 meters

Remarks: These surveys are considered to be adequate for defining the shoreline in these areas.

Norman J. Fouelare

500000

Notes to the Hydrographer

PH-6811
Tutuila Island, Samoa
Scale 1:5,000
December 1970

The topographic map, scale 1:5,000, furnished as a base for hydrographic operations is a section from an original U.S. Geological Survey manuscript of Tutuila Island, Samoa, Sheet No. 2, compiled at a scale of 1:12,000. Field edit of July, 1968, restricted to the Pago Pago Harbor area, was applied to Sheet No. 2 in November 1968 and is reflected in the map section furnished the hydrographer.

Office selection of potential hydro signal sites was done during the aerotriangulation or bridging operation as a possible aid in reducing the amount of graphic resection required for signal location during the hydrographic survey. These photogrammetrically located signals are primarily gables, piers, poles, stacks, spires, etc.

Eight color ratio photographs, 61-W(C)-544 thru 548 and 61-W(C)-554 thru 556 and three black-and-white panchromatic ratio photographs, 61-W-593 thru 595, at the 1:5,000 map scale, were prepared. Photo centers are shown by a large double circle and potential hydrographic signal points are shown by a 4 millimeter circle. These latter points are shown by a $2\frac{1}{2}$ millimeter circle on the map manuscript. Radial lines have been drawn through all bridge points and many of the hydro points to aid in resection.

The small circles shown on the map, approximately $1\frac{1}{2}$ millimeters in diameter, are not usable for graphic resection. They are merely random points defining reef limits and the location of four small islets off Point Distress.

There are a number of differences in building locations and land fill along the shoreline between the USGS map and the 1961 photography and 1968 field edit. The major differences are identified on a discrepancy print.

The following excerpt taken from the aerotriangulation report is brought to the attention of the hydrographer:

"As a note of caution to the hydro party the most southerly of three stacks at the tuna processing plant located on the north shore of the harbor is not the intersection station ANUA STAR KIST CO. STACK."

Subject: Aerotriangulation - Job PH-6911, Pago Pago Harbor, Samoa Islands

Three strips of photography were bridged to provide hydro signal sites for use in developing hydrographic information in Pago Pago Harbor and vicinity. One of these strips of photography (61-W(C)-543-548) was in color at a scale of 1:10,000 and the other two (61-W-635-637) and (61-W-592-595) were black and white at a scale of 1:20,000.

Where coverage of these strips provided common imagery both control and selected hydro signal locations were bridged independently of the other strips. Comparison of common points was made and, where necessary, the values obtained were averaged.

Selection of hydro signal sites was made during aerotriangulation there being no previous site selection as indicated in the project instructions. Spacing, location and nature of the signal sites were evaluated where possible alternatives were available. All selected sites were annotated on the pertinent photographs indicating the site number and an identifying label of its nature. In some instances power (or telephone) poles were selected on the assumption that banners could be attached during field operations to provide ideal targets.

As additional assistance to the hydro party selected points along the perimeter of the reef flanking the entrance to the harbor were included in the bridging operations. No adjustment was made on the photogrammetrically determined depths for the influence of refraction of image rays through the medium of water and, therefore, these depths should be ignored.

As a note of caution to the hydro party the most southerly of three stacks at the tuna processing plant located on the north shore of the harbor is not the intersection station ANUA STAR KIST CO. STACK - see hydro station site #94536 for its position as determined during this bridge.

Since the 1961 photography used in aerotriangulation indicated much man-made changes in the delineation of the shoreline east of the location of the airport and west of the entrance to the harbor (dredging and construction) it was assumed that considerable revision of the existing chart in that area would be required. Accordingly, sufficient and suitable pass points were included in the bridge to permit use of later photography for compilation purposes without the necessity of establishing field control for such compilation.

The positions for the north and south towers supporting the overhead tramway within the harbor were determined by the field photo party and those computed positions are a part of this report.

The positions of FAGATOGO GOVERNOR'S MANSION FLAG POLE and BREAKERS POINT LIGHTHOUSE were determined during this bridging and the resultant check on published positions substantiated the accuracy of the aerotriangulation bridge.

Because clouds screened the area of the front and rear range lights it was not possible to include these facilities into the bridge. The same problem precluded incorporating Whale Rock and its navigational facility into the bridge.

All field identified control held except LIGIAU, 1968 SS #1 and SS #2. The two substations were eliminated because of poor identification. The points were selected on another strip of photography than was used for bridging, and in the case of SS #1 the point was covered by breakers in the bridging photography.

Submitted by,

Wallace Heinbaugh
Wallace Heinbaugh

Dec, 1970

Approved by,
Henry P. Eichert
Henry P. Eichert
Chief, Aerotriangulation
Section

COMPILATION REPORT
Job PH-6911
T-13418
Pago Pago Harbor

Job PH-6911, T-13418, is the old PH-6806, 1:5,000 scale section of Pago Pago Harbor, Samoa, reproduced from 1:12,000 scale, USGS map Tutuila Island, Samoa, Sheet No. 2. This USGS map base is an unedited copy of an original manuscript including field additions made by USGS in 1962, followed by field edit of the Pago Pago Harbor area by C&GS in July 1968 and applied in November 1968.

31. Delineation

Instructions, dated July 31, 1970, for preparation of hydro support data, American Samoa, PH-6811, were issued to prepare T-13418 from a 1:5,000 scale reproduction of the 1:12,000 scale USGS map Tutuila Island covering the area of Pago Pago Harbor. Aerotriangulation was completed by bridging three strips of 1961 photography to provide hydro signal sights for use in developing hydrographic information. These photogrammetrically located signals are primarily gables, piers, poles, stacks, spires, etc. The points were then plotted on the 1:5,000 cronaflex vase map. Cronaflex and ozalid copies were furnished for hydro work.

Field edit corrections were applied to the 1:5,000 scale ozalid copies from boatsheet (SU-5-1-71) topo sheets (SU-D-71 and SU-E-71) and field photograph 61-W-634. The corrections were then applied to the cronaflex copy in red ink.

Landmarks and aids were not investigated. Field edit indicates a structure at approximately latitude $14^{\circ}16'31''S$ and longitude $170^{\circ}41'34''$, but does not give size or shape; it also indicates a drydock at approximate latitude $14^{\circ}16'31''S$ and longitude $170^{\circ}41'29''$, but does not indicate size or location; and a house under construction at approximately latitude $14^{\circ}17'28''S$, longitude $170^{\circ}40'00''$ with no reference to size or shape. OPR-497, Survey SU 10-1-71 was not in the office for comparison.

32. Control

Refer to Aerotriangulation Report, Job PH-6911.

33. Supplemental Data

None

34. Contours and Drainage

Inapplicable

35. Shoreline and Alongshore Details

All changes on this manuscript were furnished by the hydro party on the boat sheet (SU-5-1-71) and topo sheets (SU-D-71 and SU-E-71) and field photograph 61-W-634, then applied to 1:5,000 ozalid copy for office use.

Two new structures were indicated on the ozalid copy but were not positioned and no size or shape given. A drydock was indicated on the ozalid but the position is doubtful and from verbal source of one of the men on the party it is located at the marine railway entrance. The field party indicates the reef covering 1 to 2 feet but did not indicate it means it covers 1 to 2 feet MHW.

36. Offshore Details

Completed by hydrographic party.

37. Landmarks and Aids

Not investigated at this survey; investigated in 1968.

38. Control for Future Surveys

None

39. Junctions

No contemporary surveys.

40. Horizontal and Vertical Accuracy

No comment.

41. thru 45.

Inapplicable

46. Comparison with Nautical Charts

Comparison was made with Nautical Chart No. 4190, 4th edition, dated February 28, 1970, corrected thru N.M. 9/70.

3

Chart 4190 projection has been corrected to the North American 1927 datum and the T-sheet remains at 1962 Geological Survey datum. To correct to 1927 N.A. datum, subtract 7.88" from latitude and add 0.48" in longitude, CL 714/69, CL 1716/68.

Items to be applied to Nautical Charts immediately: None

Items to be carried forward: None

Respectfully submitted:

J. C. Richter

J. C. Richter
(Cartographer)

Approved and forwarded:

REVIEW REPORT
T-13418
Shoreline Manuscript

61. General Statement

See Summary

62. Comparison with Registered Topographic Surveys

No prior registered surveys cover the Pago Pago Harbor area. T-13418 is a revision of B.P. No. 75226(1968). Refer to the Summary, page 6.

63. Comparison with Maps of Other Agencies

U.S. Geological Survey quadrangle Tutuila Island, Samoa, Sheet No. 2. Refer to Summary, page 6.

64. Comparison with Contemporary Hydrographic Surveys

The contemporary hydrographic survey sheet was not available at the time of final review.

65. Comparison with Nautical Charts

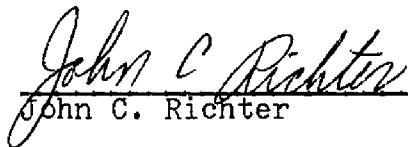
Comparison was made with Nautical Chart No. 4190, 4th edition, February 28, 1970, corrected through N.M. 9/70.


66. Adequacy of Results and Future Surveys

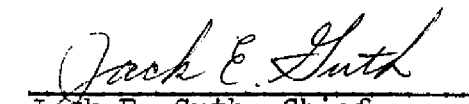
This survey complied with the project instructions in every respect and meets the National Standards of Map Accuracy.

Reviewed by:

Approved by:


John C. Richter


Charles Theurer, Chief
Photogrammetric Branch


Jack E. Guth, Chief
Coastal Mapping Division

August 27, 1971

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6911 (Samoa)

T-13418

Afuelo Stream	Breakers Point
Afu Stream	Fagaalu
Agapei Cove	Fagaalu Stream
Agasavili Point	Fagale'a
Aga Stream	Faganeanea
Alava Mountain	Fagatogo
Amano Stream	Fagatu'itu'i Cove
Amu 'ula Rock	Faiga Ridge
Anape 'ape'a Point	Fatifati Mountain
Anasosopo	Fatunafuti
Anasosopo Point	Fatu Rock (Tower Rock)
Anasosopo Stream	Fatuto'aga Point
Anua	Filitau
Aua	Fitiuli Stream
Autapini	Fusi
Ava Point	Futi Rock

Continued

T-13418 (Continued)

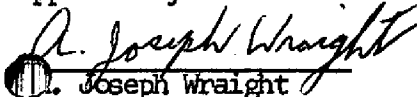
Gagamoe Stream	Malaloa
Goat Island Point	Matafao
Happy Valley	Matafaofafine Peak
Lalolamauta Stream	Matafao Stream
Lalopua	Matai Mountain
Laolao Stream	Matautuloa Point
Lauuli'ifou	Matautu Point
Leasi Point	Mata'utu Ridge
Lea'u Stream (1)	Matu'u
Lea'u Stream (2)	Maugaloa Ridge
Le'ele Stream (1)	Maugaoali'i Ridge
Le'ele Stream (2)	Muliulu Point (Southworth Point)
Le'ele Mountain	Mulivaisigana Point
Leemo Ridge	Niuloa Point
Leloalca	North Pico Mountain
Le'olo Ridge	Oil Wharf
Lepua	Paga'ituu Point
Lesina Stream	Pagatatua Ridge
Maavea	Pago Pago
Maga Stream	Pago Pago Harbor
Main Wharf	Pago Stream

Continued

T-13418 (Continued)

Palapalaloa Mountain	Togotogo Ridge
Papatele Ridge	Trading Point
Penua Point	Tulutulu Point
Puafotu Point	Tutuila Island
Puna Spring	Ululoloa Stream
Punatoa Valley	Utulei
Satala	Utumoa Stream
Sina Ridge	Ututafa Point
Sina Stream	Vailoa Stream
Siona Mountain	Vaima
Siufaga	Vaipito
South Pico Mountain	Vaipito Stream
Suaia Stream	Vaisina Stream
Tafagamanu Point	Vaitanoa Pool
Tafananai	Vaitele Stream
Tagapofu	Vasa'aiga
Talitoelau Spring	Whale Rock
Tepatasi Mountain	
Tialeogaumu Ridge	
Tialiufau Ridge	
Toasa Rock	

Approved by:


A. Joseph Wraight
Chief Geographer

Prepared by:


Frank W. Pickett
Cartographic Technician

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by Elwyn J. Leachman

Division 2. Job

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

♦ TABULATE SECONDS AND METERS

USCOM-DC 10234-P01

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE REVISED
~~TO BE DELETED~~

STRIKE OUT TWO

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by William T. Johnson

William J. Flannery
Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

USCOMM-DC 10234-P01

U.S. DEPARTMENT OF COMMERCE
COAST GEODETIC SURVEY

Coast Pilot Section

NONFLOATING AIDS ~~FOR CHARTS~~ FOR CHARTS

TO BE CHARTED
~~FOR CHARTS~~

STRIKE OUT TWO

Portsmouth, Va. 30 Aug. 1968

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by E.J. [signature]

Chief of Party

STATE American Samoa			POSITION										METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	BARGE CHART	BARGE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE*		LONGITUDE*		DATUM										
			° ' "	° ' "													
			° ' "	° ' "	° ' "	° ' "											
LT	Front range light with orange day marker		14-16	26.14	170-40	22.73	Am. Samoa	June 8								4190	
LT	Rear range light with orange day marker		14-16	20.16	170-40	24.73											
LT	Green light atop single concrete pile		14-16	34.45	170-40	41.34											
AERO			14-16	16.73.4	170-40	12.39.1											
LT	Alt. Fl. W & G 105		14-20	05.55	170-42	42.31											
BN	Black, lattice day marker on single wooden pile #2		14-16	51.97	170-40	44.30	Rectabolic										
BN	Black, lattice day marker on single wooden pile #3		14-16	51.08	170-41	20.70	Th680C										
LT	Light atop battery house		14-19	04.66	170-43	40.11											
LT	Light atop battery house		14-17	52.41	170-42	08.47											
LT	Light atop battery house		14-16	34.00	170-45	10.23											
LT	Light atop battery house		14-22	40.09	170-45	30.59											
LT	Light atop battery house		14-17	12.52.0	170-39	44.70											
LT	Light atop battery house		14-17	01.39	170-32	52.05											
LT	Light atop battery house		14-17	22.7.1	170-32	15.60.1											

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

Coast Pilot Section

STRIKE OUT TWO

NEW! FLOATING AIDS ~~CONSTRUCTION~~ FOR CHARTS

Pocksmouth, Va. 30 Aug. 1968

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by E. J. J. J. J.

William J. Johnson

Chief of Party

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

Coast Pilot Section

STRIKE OUT TWO

Portsmouth, Va. 30 Aug. 1968

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by E. J. B. ...

William J. Harrison
Chief of Party

STATE	CHARTING NAME		DESCRIPTION	SIGNAL NAME	POSITION					METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	NEAREST CHART	OTHER CHART	CHARTS AFFECTED
					LATITUDE		LONGITUDE		DATUM						
					°	'	°	'							
American Samoa	HO	SPIRE	White, Cone shaped building (VORTAC) (45') Elevated, unpainted wooden Tank (188')		14-20	15.16	170-42	25.42	Am.	Triangulation 121202912 WELLS 12	June 8	-	-	-	4190
		TANK			14-21	12.46	170-46	46.71	"	"	"	-	-	-	"
		MAST	Aluamiti KVZK SW Mast (1831')		14-16	382.9	170-41	327.3	"	"	"	-	-	-	"
		MAST	Aluamiti KVZK NE Mast (1825')		14-16	11.75	170-41	10.05	"	"	"	-	-	-	"
		TANK	Non elevated, green steel Water tank (226')		14-17	25.55	170-40	31.54	"	"	"	-	-	-	"
		TANK	Non elevated, green steel Water tank (227')		14-17	795.2	170-41	945.3	"	"	"	-	-	-	"
		HOUSE	Large white house (122')		14-16	00.40	170-41	84.8	"	"	"	-	-	-	"
		STACK	Black metal stack (Taller of three) (85')		14-16	1717.9	170-40	1623.7	"	"	"	-	-	-	"
						32.73		13.22	"	"	"	-	-	-	"
						1003.9	170-41	396.3	"	"	"	-	-	-	"

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.7, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and ~~nonfloating~~ aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

EXTRAPOLATE SECONDS AND METERS

USCOM-DC 10334-P81