

T-12557

T-12557

NOAA FORM 76-35 (3-76)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. T-12557	Edition No. 1
Job No. PH-6402	
Map Classification FINAL FIELD EDITED MAP	
Type of Survey SHORELINE	
LOCALITY	
State HAWAII	
General Locality HAWAII ISLAND, WEST COAST KAILUA TO SOUTH CAPE	
Locality KAKIO	
1963 TO 1979	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY ☒ ORIGINAL ☐ RESURVEY ☐ REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Atlantic Marine Center, Norfolk, VA		SURVEY YN-T-12557 MAP EDITION NO. (1) MAP CLASS Final JOB PH- 6402	
OFFICER-IN-CHARGE R. Matsushige		LAST PRECEDING MAP EDITION TYPE OF SURVEY ☐ ORIGINAL ☐ RESURVEY ☐ REVISED	
JOB PH- _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__			
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Compilation Oct. 28, 1969 Amendment I Jan. 3, 1973 Memo Sept. 1, 1978		Control/field inspection May 8, 1964	
II. DATUMS			
1. HORIZONTAL: ☐ 1927 NORTH AMERICAN		OTHER (Specify) Old Hawaiian	
2. VERTICAL: ☒ MEAN HIGH-WATER ☐ MEAN LOW-WATER ☐ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Polyconic		4. GRID(S) STATE Hawaii ZONE 1	
5. SCALE 1:10,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Stereoplanigraph		BY J. Perrow	June 1969
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat		PLOTTED BY J. Perrow CHECKED BY J. Perrow	June 1969 June 1969
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:10,000		PLANIMETRY BY C. Blood CHECKED BY L. Neterer CONTOURS BY N.A. CHECKED BY N.A.	Jan. 1973 Jan. 1973
4. MANUSCRIPT DELINEATION METHOD: Smooth drafted SCALE: 1:10,000		PLANIMETRY BY C. Blood CHECKED BY L. Neterer CONTOURS BY N.A. CHECKED BY N.A.	Jan. 1973 Feb. 1973
5. OFFICE INSPECTION PRIOR TO FIELD EDIT		BY L. Neterer	Feb. 1973
6. APPLICATION OF FIELD EDIT DATA		BY I. Perkinson / C. Blood CHECKED BY C. Blood / R. Kravitz	Aug. 79 / May 80 Aug. 79 / Jun 80
7. COMPILATION SECTION REVIEW		BY R. Kravitz	June 1980
8. FINAL REVIEW		BY J. Hancock	May 1987
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH		BY J. Hancock	June 1987
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH		BY P. Damsch	Aug. 1987
11. MAP REGISTERED - COASTAL SURVEY SECTION		BY E.L. DAUGHERTY	SET 87

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12557
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8"S", S=152.29mm		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE	
TIDE STAGE REFERENCE ☒ PREDICTED TIDES ☐ REFERENCE STATION RECORDS ☐ TIDE CONTROLLED PHOTOGRAPHY				ZONE Hawaii MERIDIAN 150th	☒ STANDARD ☐ DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
63S(P) 7972-7974*	Aug. 31, 1963	09:39	1:30,000	1.1 FT. above MLLW	
63S(C) 7996-8000**	Aug. 31, 1963	09:57	1:15,000	1.1 FT. above MLLW	
				Mean Tide Range 1.4 FT.	

REMARKS

*Bridging/compilation photographs, **Compilation/hydro support photographs.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was compiled from office interpretation of the compilation photographs using stereo instrument and graphic methods.

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

No mean lower low water line was compiled.

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
H-9812	1979	Registered			

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-12556	T-12558	None	None

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12557
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Newsom	Feb. - Sept. 1964
2. HORIZONTAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY E. Cline	Aug. 1964
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
None2. VERTICAL CONTROL IDENTIFIED
None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

63(S) 7844-7846 (1:30,000 scale matte contacts)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 Project Field Report

T-12557
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION (*Partial- See Item #8)

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	(NOAA Ship FAIRWEATHER) B. Williams	April 1979
2. HORIZONTAL CONTROL	RECOVERED BY None ESTABLISHED BY None PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY None ESTABLISHED BY None PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None LOCATED (Field Methods) BY None IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY BY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY M. Willis	April 1979
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
None		None	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

63S(C) 7996-8000 (Cronapaque ratios, 1:10,000 scale)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 Field Edit Paper Print, 1 Field Edit Report

(* Remaining area for edit was accomplished in Oct. 1979 by NOAA Ship RAINIER)

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12557

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION (*Partial- See Item #8)

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	(NOAA Ship RAINIER) W. Mobley	Oct. 1979
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	T. Clark
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

63S(C) 7998, 7999 (Additional Cronapaque ratios, 1:10,000 scale)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 Field edit paper print, 1 Field edit report
 (*Partial edit performed in April 1979 by NOAA Ship FAIRWEATHER, edit for sheet completed by RAINIER, Oct. 1979)

T-12557
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit	Feb. 1973	Class II manuscript	None	Feb. 1973
Partial field edit applied	Aug. 1979	Class II manuscript with partial field edit	None	Dec. 1979
Field edit completed & applied, compilation complete.	June 1980	Class I manuscript	June 1980	June 1980
Final review	May 1987	Final Map	July 1987	July 1987

II. LANDMARKS AND AIDS TO NAVIGATION None

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: None3. ☐ 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 NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

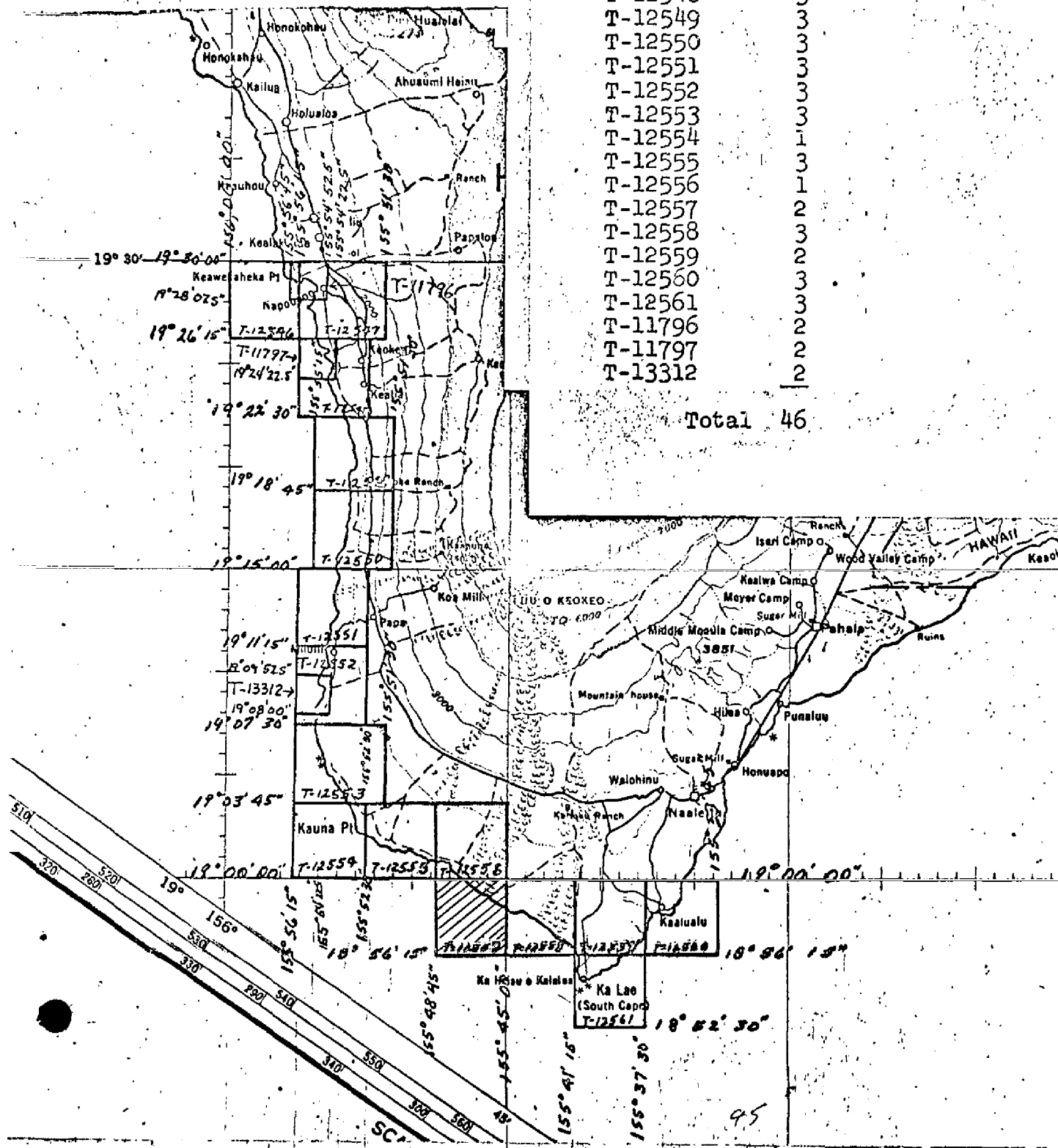
JOB PH-6402
SHORELINE MAPPING
HAWAII IS. WEST COAST
AILUA TO SOUTH CAPE
SCALE 1:10,000

JOB PH-6402
OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Area Sq. Miles
-----------	----------------

T-12546	1
T-12547	3
T-12548	3
T-12549	3
T-12550	3
T-12551	3
T-12552	3
T-12553	3
T-12554	1
T-12555	3
T-12556	1
T-12557	2
T-12558	3
T-12559	2
T-12560	3
T-12561	3
T-11796	2
T-11797	2
T-13312	2

Total 46



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-12557

This 1:10,000 scale Final Field Edited Map is one of nineteen maps that comprise PH-6402, Hawaii Island, West Coast, Kailua to South Cape. The project consists of sixteen 1:10,000 scale maps (T-12546 thru T-12561) and three 1:5,000 scale inset maps (T-11796, T-11797, T-13312).

The purpose of this map was to furnish data in support of hydrographic operations and to provide current shoreline data for marine charts.

This map includes shoreline along the southern coast of Hawaii Island from Longitude 155° 45.0' to Longitude 155° 47.2'.

Photo coverage for the project was adequately provided in August/September 1963 using the Wild RC-8 "S" camera. Photography consisted of 1:30,000 scale panchromatic photographs used for field inspection, aerotriangulation, and compilation. Color photographs at 1:15,000 scale were obtained for compilation and hydro support. Additional color photographs at 1:15,000 scale were obtained in March 1969 with the Wild RC-8 "E" camera. These supplemental photographs were used to compile inset maps T-11796 and T-11797. The stage of tide for all project photographs was based upon predicted tide data. No infrared photographs were provided.

Field work prior to aerotriangulation consisted of the recovery and establishment of horizontal control by photoidentification methods. In addition, a field inspection was performed for the project area utilizing the 1:30,000 scale contact photographs. This activity was conducted in February thru September 1964 in conjunction with adjoining project PH-6401.

Analytic aerotriangulation was adequately provided by the Washington Science Center in June 1969. Tie points from photo strip #4 contained in adjoining project PH-6401 were included in this bridge. Aerotriangulation activity included ruling the base manuscripts and also provided ratio prints for compilation and hydrographic/field edit operations.

Compilation for this map was performed at the Coastal Mapping Section, Atlantic Marine Center in February 1973. Copies of the initial compilation and hydrographic support data were forwarded to the hydrographer for field edit.

Field edit was conducted in conjunction with hydrographic survey H-9812 by NOAA ship FAIRWEATHER personnel in April 1979 and by NOAA ship RAINIER personnel in October 1979.

T-12557

Application of field edit was performed at the original compilation office initially in August 1979 and completed in June 1980. Map copies were submitted to Marine Charts and to the hydrographer for smooth sheet application.

Final review was performed at the Atlantic Marine Center in May 1987. A comparison was made with the common hydrographic survey and nautical chart. The original base manuscript and related data along with a final Chart Maintenance Print and a Hydrographic Print were forwarded to the Washington Science Center for registration and distribution.

FIELD INSPECTION

T-12557

Field activity prior to compilation included a field inspection of the shoreline and the recovery / photoidentification of horizontal control necessary for project aerotriangulation. Results of the 1964 field inspection were submitted on the 1:30,000 scale contact photographs.

UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

40

631W

TO : Chief, Photogrammetric Field Operations
THRU : Honolulu Field Officer *nd*

DATE: August 5, 1964

FROM : Lt(jg) Edward P. Cline

SUBJECT: Control Identification Project No. 21413

No problems were found in the control identification on Project 21413. The following is a list of the stations identified on the various Flight Lines:

FLIGHT STRIP NO. 5

WAIKAKUU, 4, 1951
KAPUKAWAA, 1884
OHEPUUPUU, 1890

FLIGHT STRIP NO. 6

KAMOI, 1948
NA PUU & PELE, 1891
PUU KI, 1914
TANK, 1948

Supplemental Station Pricked:
KAUNA POINT LIGHT, 1948

FLIGHT STRIP NO. 7

KALAE 2, 1948
PALAHEMO 1898
KAMILO, 1898
KIPAEPAE, 1898

Supplemental Stations Pricked:
KALAE LIGHT, 1948
KALAE, 1887
MAHANA, 1898

The ratio prints provided by the Washington Office were of great assistance in the identification of the stations and they were very well placed.

Edward P. Cline
Edward P. Cline

Photogrammetric Plot Report
Hawaii Island, Hawaii
PH-6402

June 10, 1969

21. Area Covered

This project extends along the southwest shore of Hawaii Island. It includes T-sheets 12546 through 12561 at 1:10,000 and T-sheets 11796, 11797 and 13312 at 1:5,000. This project joins PH-6401 which extends along the northwest shore of the island.

22. Method

Strips were bridged on the stereoplanigraph and adjusted by IBM 1620 methods. Strip #4 discussed in the report for PH-6401. Strip #10 was adjusted on five triangulation stations with tie points from Strips #4 and #11 as checks. Strip #11 was adjusted on five stations with one station and tie points as checks. The adjustment of Strip #12 met with considerable problems. These problems were due to control identification on stations KAMILO, KIPAEPAE on the northeast end of the strip. Points were dropped from Strip #11 to enable model 63-S-7964 and 7965 to be set, thus enabling T-sheet 12561 to be completed.

T-sheets 12559 and 12560 must await further field work. Difficulties were also experienced in bridging Strip #13. This problem was resolved by dropping enough points from Strips #4 and #10 to set individual models between 63-S-8080 and 8085. All points between strips were averaged. Points were drilled by using the Wild PUG.

23. Adequacy of Control

Control provided by the field was adequate. The following stations could not be held in the bridging adjustments.

1. KEEI SOUTH BASE, 1948, SS #1 and SS #2, could not be held in Strip #13, as was the case of Strip #4 in PH-6401. No reasons could be determined for the lack of adjustment with other points.

2. KAMILO, 1949 and SS #1 3. KIPAEPAE, 1948
and SS #1. Problems with these two stations could
not be resolved. Re-identification of the stations
is planned at the same time that work continues
to the east.

4. McCANDLESS, 1948 SS #1 and SS #2 although held
in the bridging could be seen on only one photograph
in Strip #10 due to cloud coverage.

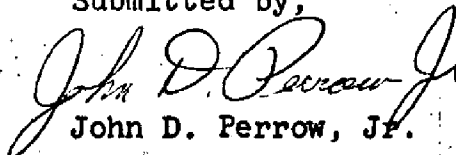
24. Supplemental Data

Ratio prints will be provided to aid in compilation.
Local USGS quads were used to provide vertical points
needed for the strip adjustment program.

25. Photography

Photography was not adequate to provide coverage of
the 1:5,000 scale sheets. This inadequate coverage was
caused by a change in the limits of the 1:5,000 areas
after bridging was nearing completion. Photography was
adequate in regard to definition and overlap.

Submitted by,


John D. Perrow, Jr.

Approved by,



Henry P. Eichert
Chief, Aerotriangulation Section

Notes to Compiler
PH-6402
Hawaii Island, Hawaii

The following points should be used in setting individual models along Strips #12 and #13.

(1) 63-S-7964-7965

Points 68803, 68804, 67100, 67101, 64100, 64101, 64102 and 64103.

(2) 63-S-8080-8081

Points 22330, 23310, 23800, 23801

(3) 63-S-8081-8082

Points 77331, 78333, 22801, 23800, McCANDLESS SS #1 and SS #2

(4) 63-S-8082-8083

Points 76331, 77331, 77333

(5) 63-S-8083-8084

Points 75331 HONAUNAU ST. BENEDICT CATH. CH. SPIRE, 1948 plus points dropped from model 8082-8083.

(6) 63-S-8084-8085

Points 75331, 75333 plus points dropped from model 8083-8084.

Plates 63-S-7821 and 7824 were not used in bridging Strip #10.

Plates 63-S-7976, 7978, 7880, 7982 and 7984 were not used in Strip #11.

SHORELINE MAPPING

JOB PH-6402

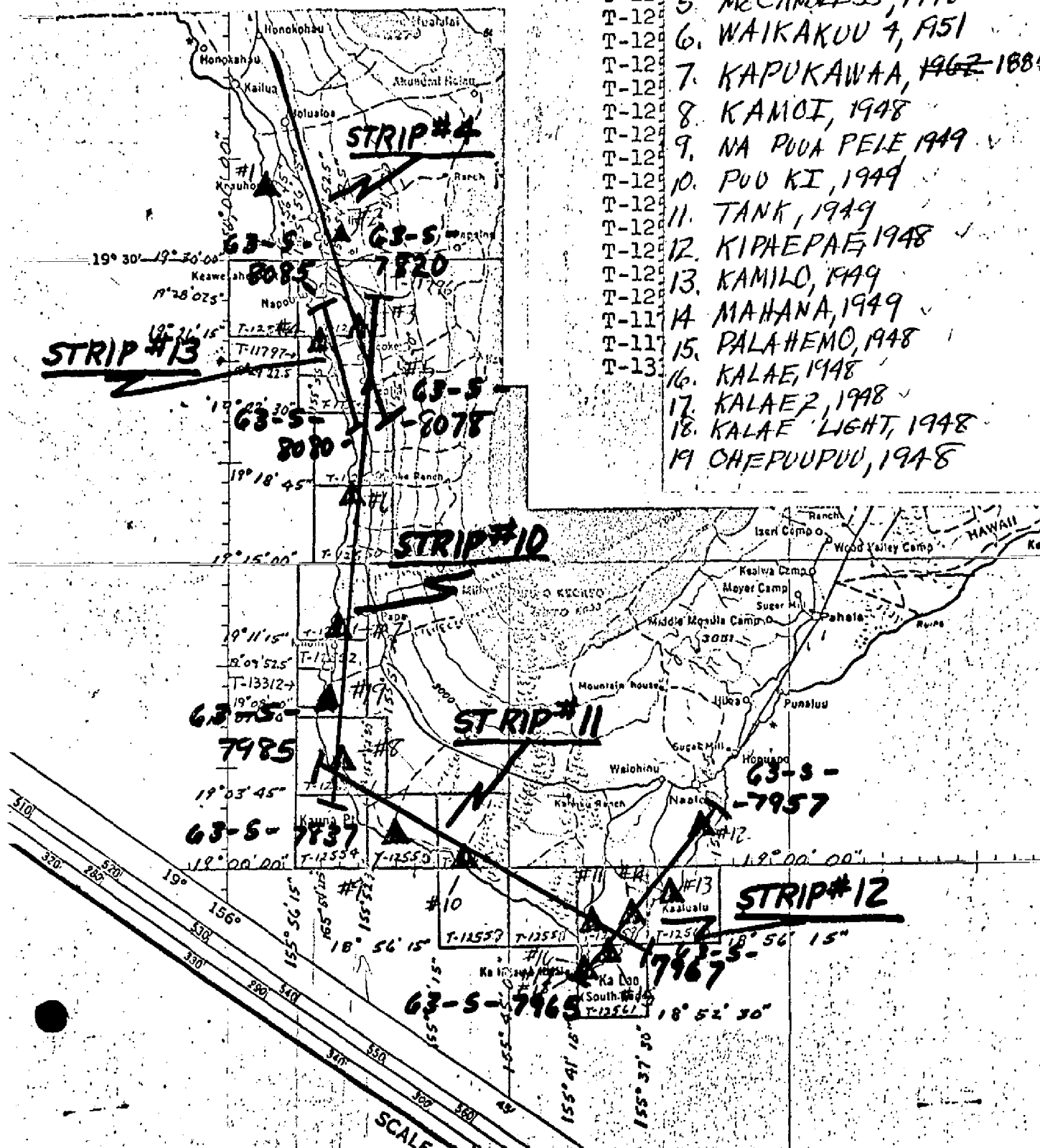
HAWAII IS. WEST COAST
AILUA TO SOUTH CAPE

SCALE 1:10,000

OFFICE

Sheet
No.

1. POINT, 1928
2. KANAKU, 1948
3. HONAUNAU ST. BENEDICT.
CATH. CH. SPIRE, 1948
4. KEEI S. BASE, 1948
5. McCANDLESS, 1948
6. WAIKAKOU 7, 1951
7. KAPUKAWAA, 1962-1884
8. KAMOI, 1948
9. NA POA PELE 1949
10. POO KI, 1949
11. TANK, 1949
12. KIPHEPAE, 1948
13. KAMILO, 1949
14. MAHANA, 1949
15. PALAHEMO, 1948
16. KALAE, 1948
17. KALAE LIGHT, 1948
19. CHEPUUPUU, 1948



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	PH-6402	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODETTIC DATUM		ORIGINATING ACTIVITY	
					Old Hawaiian Datum	Geographic Position	Coastal Mapping Section, AMC	
STATION NAME					COORDINATES IN FEET	ϕ LATITUDE	REMARKS	
					STATE <u>Hawaii</u>	λ LONGITUDE		
					ZONE <u>1</u>			
NONE					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
					X=	ϕ		
					Y=	λ		
COMPUTED BY					COMPUTATION CHECKED BY		DATE	
LISTED BY					LISTING CHECKED BY		DATE	
HAND PLOTTING BY					HAND PLOTTING CHECKED BY		DATE	

COMPILATION REPORT

T-12557

31. DELINEATION:

Delineation was by instrument methods using the Wild B-8 stereoplotter and 1:30,000 scale panchromatic compilation/bridging photographs. Ratio prints of the 1:15,000 scale color photographs were used graphically to supplement the compilation of minor detail and to assist in photo interpretation.

The field inspection supplied on the 1:30,000 scale contact prints was difficult to interpret. Individual rocks that could not be clearly identified during compilation were not compiled.

Photo quality and coverage were adequate.

32. CONTROL:

Refer to the Photogrammetric Plot Report, dated June 10, 1969.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was delineated from the compilation photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline, coral and foul limits were delineated from office interpretation of the photographs and from the annotated photographs resulting from the precompilation field inspection. Because of the small tide range, no mean lower low water line was compiled.

36. OFFSHORE DETAILS:

Compilation of offshore detail was performed as described in Item #31.

37. LANDMARKS AND AIDS:

There were no charted fixed aids or landmarks within the limits of this manuscript.

T-12557

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Refer to the Data Record Form 76-36B, Item 5.

40. HORIZONTAL AND VERTICAL ACCURACY:

Refer to the Photogrammetric Plot Report dated June 10, 1969.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS quadrangle Puu Hou, Hawaii, scale 1:24,000, dated 1962.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with C. & G.S. Chart 4115, scale 1:250,000, 8th edition, dated September 9, 1963, revised January 1, 1967.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

for *Geny L. Hancock*
C. Blood
Cartographic Technician
February 1973

Approved:

for *Geny L. Hancock*
Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

ADDENDUM TO THE COMPILATION REPORT

T-12557

Field edit for the majority of the sheet was performed in April 1979 by NOAA ship FAIRWEATHER personnel. The remaining area, between Kakio and Kahakahakea Point was field edited by NOAA ship RAINIER personnel in October 1979. Field edit data from the combined activities was adequate to advance the manuscript to Class I.

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6402 Hawaii

T-12557

Haliipalala

Island of Hawaii

Kahakahakea Point

Kahiola

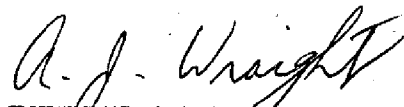
Kaimuuwala

Kakio

Kalepe a Moa

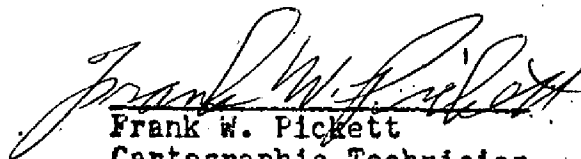
Pacific Ocean

Approved by:



A. Joseph Wright
Chief Geographer

Prepared by:



Frank W. Pickett
Cartographic Technician

T-12557
OPR-T126-FA-79
KAKIO

Description

Jagged lava flow cliffs and lava rubble ranging from 5 to 30 ft in height above the MHWL, were predominant in this area. The northern half of the sheet was characterized by ledges and submerged ledges protruding from the MHWL seaward. The southern half was characterized more by individual foul areas and isolated rocks and boulders. Depths greater than 4 to 5 fms are common immediately adjacent to the MHWL.

Method

Due to the irregular shoreline and extreme surf all field edit was done on foot. Existing features were compared with the discrepancy print and the color photographs. Changes and additions were depicted on the color photographs. Rock heights, deletions, and answers to questions posed by the stereo compiler, were indicated on the discrepancy print. Submerged offshore features were noted on the boatsheets so that the hydrographer could prove or disprove them. All discrepancies between the field edit and hydrographic data have been resolved.

Field edit was not done on a section of coastline from latitude 19°59'28" to 19°59'12" due to inaccessibility by foot.

Adequacy And Completeness Of Compilation

The compilation of the manuscript was very good.

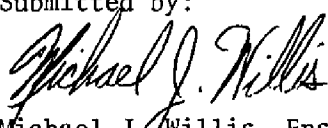
Manuscript Accuracy

The manuscript, as compiled, compared quite well with the features inspected. The extremely jagged coastline did not allow for measurements to the MHWL from photoidentifiable points.

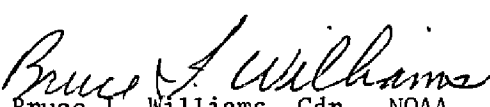
Recommendations

This manuscript should be accepted for charting purposes after the corrections have been applied.

Submitted by:


Michael J. Willis, Ens., NOAA

Approved by:


Bruce I. Williams, Cdr., NOAA
Commanding Officer
NOAA Ship FAIRWEATHER
April 1979

FIELD EDIT REPORT

OPR-T126-RA-79
CM-7713
T-12557

HAWAII
Hawaii, West Coast
KAKIO
(Portion of Sheet between 155° 46' 27"W
and 155° 46' 06"W)

1 Field Edit

3 October 1979 - 8 October 1979
(J.D. 276 - J.D. 281)

METHODS

Field edit operations on T-12557 began 3 October 1979 (J.D. 276) and ended 8 October 1979 (J.D. 281). Ship's time (GMT-9) was used to reference shoreline features in the field, but conversion was made to GMT (Ship's time + 9) on the field edit sheet and final discrepancy print. Notes on the field edit sheet and discrepancy print were made using colors with the following acceptable meanings: green-deletion of features; red-answers to specific questions on the sheets; violet-verification or additions.

Most features were verified on foot. Submerged rocks on photo 7998 and 7999 were sounded using small boat and leadline. Additions of rocks were photo-pricked and referenced on the discrepancy print.

Color photographs 7998, 7999, the discrepancy print, and the field edit sheet were used to record and present data.

This field edit survey complied with Chapter 11, Manual of Coastal Mapping Field Procedures and the project instructions.

ADEQUACY AND COMPLETENESS

The only area field edited on this manuscript was between 155° 46' 27"W and 155° 46' 06" per instructions on the field edit sheet. Within these limits the manuscript, as amended by the field edit survey, is adequate and complete.

GEOGRAPHICAL NAMES

There was no investigation of geographical names.

Manuscript Accuracy

Accuracy was determined by direct comparison of shoreline features with discrepancy print and photos. Agreement was excellent.

Recommendations

This corrected manuscript should supersede all previous shoreline compilations.

Respectfully Submitted,

Thomas G. Clark
Thomas G. Clark
Lieutenant, NOAA

Approved and Forwarded

Wayne L. Mobley
Wayne L. Mobley
Captain, NOAA
Commanding

REVIEW REPORT
SHORELINE
T-12557

61. GENERAL STATEMENT:

Final review for this Final Field Edited Map was accomplished at the Atlantic Marine Center in May 1987. For a schedule of the office and field operations, refer to the Summary included with this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with USGS quadrangle Puu Hou, Hawaii, scale 1:24,000, dated 1962.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a registered copy of hydrographic survey H-9812, FA-10-3-79, surveyed 1979, scale 1:10,000. No significant differences were noted.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS Chart 19320, 13th edition, scale 1:250,000, July 10, 1982.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the Project Instructions, and meets the requirements for National Standards of Map Accuracy.

Submitted by:

Jerry L. Hancock

Jerry L. Hancock
Final Reviewer

Approved for forwarding:

Billy H. Barnes

Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved:

July O. Rohorn
Chief, Photogrammetric Production Sec.

A. Y. Bryson
Chief, Photogrammetry Branch

