T-12531

T-12531

NOAA FORM 76-35
(6-80)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Map No.	*Edition No.*
T-12531	1

Job No.
PH-6401

Map Classification
FINAL, FIELD EDITED MAP

Type of Survey
SHORELINE

LOCALITY

State
HAWAII

General Locality
HAWAII ISLAND, WEST COAST
UPOLO POINT TO KAILUA

Locality
KEAWANUI BAY

19 63 TO 19 68

REGISTERED IN ARCHIVES

DATE

U.S. GOVERNMENT PRINTING OFFICE: 1980-665-115

NOAA FORM 76-36A (3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY
- [x] ORIGINAL
- [ ] RESURVEY
- [ ] REVISED

SURVEY TR. 12531
MAP EDITION NO. (1)
MAP CLASS Final
JOB PH- 6401

PHOTOGRAMMETRIC OFFICE
Coastal Mapping Unit, Atlantic Marine Center, Norfolk, Virginia

OFFICER-IN-CHARGE
Richard Houlder

LAST PRECEEDING 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	September 12, 1968	Control/Field Inspection	April 29,1964
Supplement No. 1	February 11, 1969		
Compilation	March 11, 1969		
Supplement No. 2	December 11, 1969		

II. DATUMS

1. HORIZONTAL: [ ] 1927 NORTH AMERICAN — OTHER (Specify): Old Hawaiian

2. VERTICAL: [x] 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; STATE: ; ZONE:

5. SCALE: 1:10,000

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	P. Hawkins	Jun 1966
METHOD: Stereoplanigraph	LANDMARKS AND AIDS BY	J. Perrow	Jun 1966
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	P. Hawkins	Jun 1966
METHOD: Coradomat	CHECKED BY	J. Perrow	Jun 1966
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	R. White	Sept 1968
	CHECKED BY	A. Shands	Sept 1968
INSTRUMENT: Wild B-8	CONTOURS BY	N.A.	
SCALE: 1:10,000	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	R. White	Sept 1968
	CHECKED BY	C. Bishop	Oct 1968
METHOD: Smooth drafted	CONTOURS BY	N.A.	
	CHECKED BY	N.A.	
SCALE: 1:10,000	HYDRO SUPPORT DATA BY	R. White	Sept 1968
	CHECKED BY	C. Bishop	Oct 1968
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	C. Bishop	Oct 1968
6. APPLICATION OF FIELD EDIT DATA	BY	A. Shands	Aug 1969
	CHECKED BY	R. Smith	Jan 1970
7. COMPILATION SECTION REVIEW	BY	R. Smith	Jan 1970
8. FINAL REVIEW	BY	J. Hancock	Oct 1986
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY	J. Hancock	Mar 1987
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	P. Dempsey	May 1987
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	E.L. DAUGHERTY	MAY 1987

NOAA FORM 76-36A SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12531

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S): Wild R.C-8"S" S=152.29 mm

TIDE STAGE REFERENCE
- [x] PREDICTED TIDES
- [ ] REFERENCE STATION RECORDS
- [ ] TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE
ZONE: Yukon
MERIDIAN: 135th
- [x] STANDARD
- [ ] DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
63S(C)7765-7766**	Aug.27,1963	09:57	1:20,000	1.8 ft. above MLLW
63S(C)7788-7791**	Aug.27,1963	10:22	1:20,000	1.9 ft. above MLLW
63S(P)7809-7810*	Aug.27,1963	11:00	1:30,000	1.8 ft. above MLLW
				Mean Tide Range=1.4 ft.

REMARKS
*Bridging photographs, **Compilation 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 methods.

3. SOURCE OF ~~MEAN LOW-WATER~~ 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-9017	Surveyed 1968	Registered			

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-12530	T-12532	No Survey	No Survey

REMARKS

☆U.S.GOVERNMENT PRINTING OFFICE: 1985-564-007

NOAA FORM 76-36C
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12531

HISTORY OF FIELD OPERATIONS

I. [XX] FIELD INSPECTION OPERATION [ ] FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R. Newsom	May/Jun1964
2. HORIZONTAL CONTROL	RECOVERED BY	E. Cline	May/Jun1964
	ESTABLISHED BY	E. Cline	May/Jun1964
	PRE-MARKED OR IDENTIFIED BY	E. Cline	May/Jun1964
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 [XX] NO INVESTIGATION BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	E. Cline	May/Jun1964
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME
63(S)7809*	KEAWANUI, 1881 (Direct & Sub.pt)
	*Section of ratio photo submitted.

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

63(S)7808, 7809 and 7811 (Matte Contacts)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: [ ] REPORT [XX] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [XX] NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

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

1 - Form 152 (CSI)

☆ U.S. GPO: 1977-765-092/1105 Region 6

3A

NOAA FORM 76-36C
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12531

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		(USC&GS Ship McARTHUR) R. Newsom	Dec 1968
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 BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE

6. 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

☆ U.S. GPO: 1977-765-092/1105 Region 6

NOAA FORM 76-36D
(3-72)

T-12531

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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	Oct.1968	Class III Manuscript (Includes field inspection)	Oct.1968	Oct.1968 Dec.1969
Field edit applied, compilation complete	Jan.1970	Class I Manuscript	Mar.1977	Nov.1970
Final Review	Oct.1986	Final Map	mar 1987	mar 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: None
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

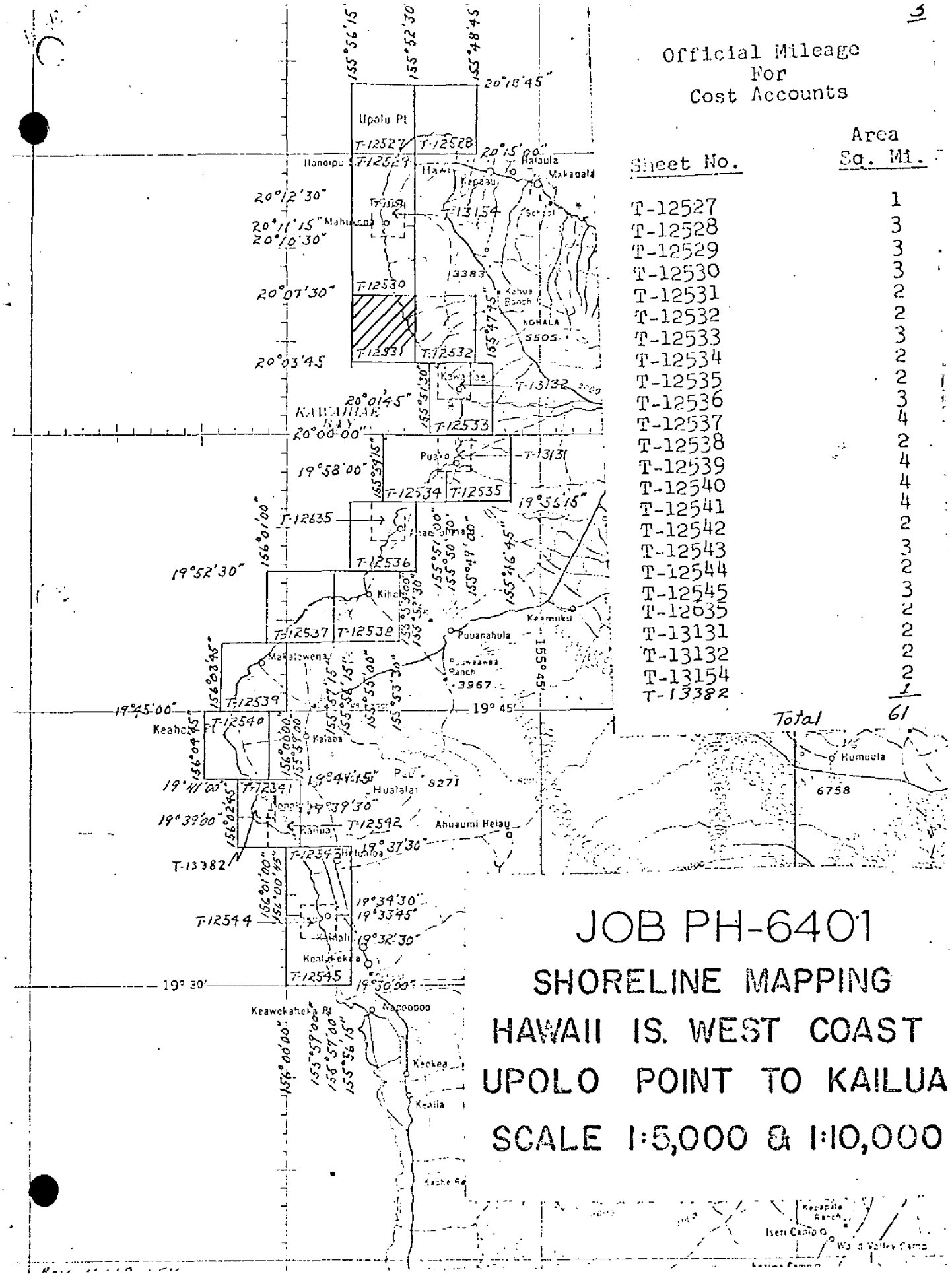
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM 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)*

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

☆ U.S. GPO: 1977-765-092/1106 Region 6



Official Mileage
For
Cost Accounts

Sheet No.	Area Sq. Mi.
T-12527	1
T-12528	3
T-12529	3
T-12530	3
T-12531	2
T-12532	2
T-12533	3
T-12534	2
T-12535	2
T-12536	3
T-12537	4
T-12538	2
T-12539	4
T-12540	4
T-12541	4
T-12542	2
T-12543	3
T-12544	2
T-12545	3
T-12635	2
T-13131	2
T-13132	2
T-13154	2
T-13382	1
Total	61

JOB PH-6401

SHORELINE MAPPING

HAWAII IS. WEST COAST

UPOLO POINT TO KAILUA

SCALE 1:5,000 & 1:10,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-12531

This 1:10,000 scale final shoreline map is one of twenty-three maps that comprise PH-6401, Hawaii Island, Hawaii, West Coast, Upolo Point to Kailua. The project consists of seventeen 1:10,000 scale maps (T-12527 thru T-12541, T-12543, T-12545) and six 1:5,000 scale inset maps (T-12542, T-12544, T-12635, T-13131, T-13132, T-13382).

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 portrays a portion of shoreline along the northwest coast of Hawaii Island from Lat. 20° 05.5' to Lat. 20° 07.5'.

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 and aerotriangulation. The 1:20,000 and 1:15,000 scale color photographs were used for compilation and hydro support. The 1:20,000 scale photo coverage was obtained for the 1:10,000 scale maps and the 1:15,000 scale photographs provided coverage of the 1:5,000 scale inset maps. Additional color photographs at 1:15,000 scale were obtained in February 1969 with the Wild RC-8"E" camera. These photographs were bridged and a supplemental plot report was prepared in order to compile three 1:5,000 scale inset maps (T-13131, T-13132 and T-12635). 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 photographs. This activity was conducted in May/June 1964.

Analytic aerotriangulation was adequately provided by the Washington Science Center in three phases. Initial bridging activity was accomplished for seven of the northern project maps in June 1966. The second phase was conducted for the remaining project maps in February 1969. A final bridge was provided in October 1971 for the 1969 photo coverage of three 1:5,000 scale inset maps. Aerotriangulation activity included ruling the base manuscripts and also provided ratio photographs for the compilation and hydrographic/field edit operations.

Compilation for this map was performed at the Coastal Mapping Section, Atlantic Marine Center in October 1968. Copies of the manuscript and hydrographic support data were forwarded to the hydrographer for field edit. A copy of the manuscript was also submitted to the Marine Charts Section.

T-12531

Field edit for this map was conducted in conjunction with hydrographic survey H-9017 by USC&GS Ship McARTHUR personnel in December 1968.

Application of field edit data was accomplished at the Atlantic Marine Center in January 1970 and the manuscript was advanced to Class I. A copy of the Class I manuscript was forwarded to the Hydrographic Surveys Branch.

Final review was performed at the Atlantic Marine Center in October 1986. A comparison was made with the common nautical chart(s) and hydrographic survey(s). 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-12531

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.

PHOTOGRAMMETRIC BRIDGE REPORT
Hawaii Island, Hawaii
Job PH-6401

June, 1966

21. Area Covered

This report covers only Strip #1 and Strip #2 which fall along the northwestern tip of Hawaii Island. T-sheets in this area are numbered 12527 through T-12533.

22. Method

Both strips were bridged on the stereoplanigraph and were adjusted by IBM 1620 methods. Strip #1 was adjusted on five control stations with four additional stations as checks. Strip #2 was adjusted on four control stations with two additional stations as checks. All tie points between strips were averaged.

23. Adequacy of Control

The control provided by the field was adequate but did not comply with project instructions in that many stations were identified directly with no substation. The following stations could not be held in the bridging adjustments.

1. KAWAIHAE LIGHT 1948. The field misidentified this station by some 1,500 feet. The description places this station to the southeast of where it was pricked.

2. KEPUHI 2, 1948, SS #1. The substation was misidentified during bridging operations; however, the home station held in the bridge.

3 & 4. MAHUKONA HARBOR SOUTH DAY BEACON 1910 and MAHUKONA NORTH DAY BEACON 1910. These two stations were identified directly. No Form 152's were provided by the field. The identification seems to fit the descriptions; however, the two stations could not be held in either bridge by same amounts (30' to 35'). In view of the bridging results, using the other control stations, and the good junction between strips, the two stations were disregarded. It is recommended that a field check of these stations be made during hydro operations.

24. Supplemental Data

Local Geological Survey Quads of the area were used to establish rough elevations for bridging.

25. Photography

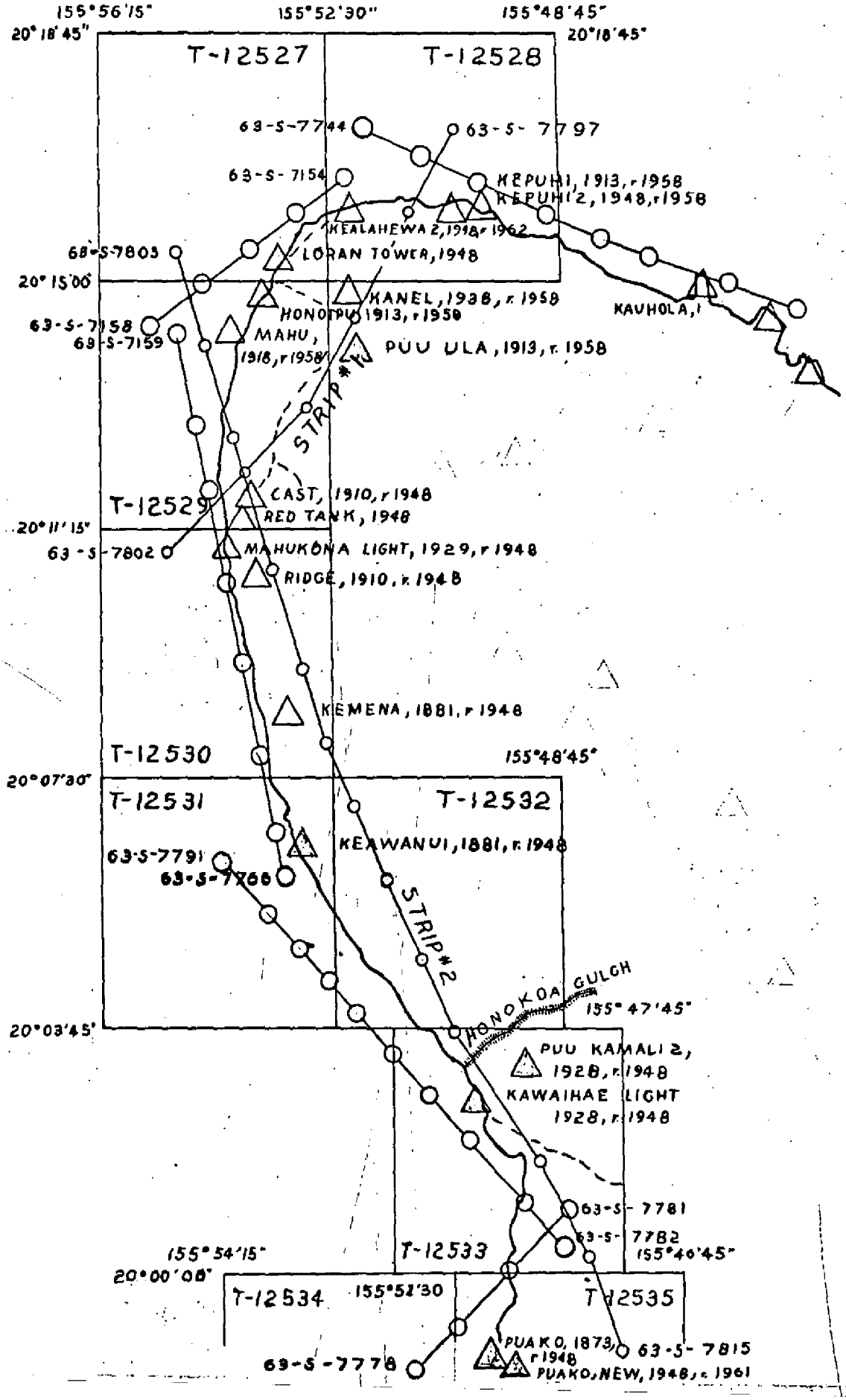
Photography was adequate as to coverage, overlap, definition and quality of diapositives.

Submitted by:

Paul Hawkins

Approved by:

John D. Perrow, Jr.


155°56'15"
155°52'30"
155°48'45"
20°18'45"
20°18'45"
T-12527
T-12528
63-S-7744
63-S-7797
63-S-7154
KEPUHI 1, 1913, r 1958
KEPUHI 2, 1948, r 1958
KEALAHEWA 2, 1948, r 1962
63-S-7803
LORAN TOWER, 1948
20°15'00"
KANEL, 1938, r 1958
HONOPU 1913, r 1958
KAUHOLA, 1
63-S-7158
63-S-7159
MAHU, 1918, r 1958
PUU ULA, 1913, r 1958
STRIP #1
T-12529
CAST, 1910, r 1948
RED TANK, 1948
20°11'15"
63-S-7802
MAHUKONA LIGHT, 1929, r 1948
RIDGE, 1910, r 1948
KEMENA, 1881, r 1948
T-12530
155°48'45"
20°07'30"
T-12531
T-12532
KEAWANUI, 1881, r 1948
63-S-7791
63-S-7766
STRIP #2
HONOKOA GULCH
155°47'45"
20°03'45"
PUU KAMALI 2, 1928, r 1948
KAWAIHAE LIGHT 1928, r 1948
63-S-7781
63-S-7782
155°54'15"
T-12533
155°46'45"
20°00'00"
T-12534
155°52'30
T-12535
PUAKO, 1873, r 1948
63-S-7815
63-S-7778
PUAKO, NEW, 1948, r 1961

NOAA FORM 76-41
(6-75)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
T-12531	PH-6401	Old Hawaiian	Coastal Mapping Section, AMC, Norfolk, VA

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE Hawaii ZONE 1	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS
KEAWANUI (HGS) & (USGS 1913), 1881	G-556 pg. 69		x=	φ 20 06 34.701	
			y=	λ 155 53 00.813	
			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	DATE	COMPUTATION CHECKED BY	DATE
R. White	9/68	A. Rauck	9/68
LISTED BY	**DATE**	**LISTING CHECKED BY**	**DATE**
R. White	9/68	A. Rauck	9/68
HAND PLOTTING BY	**DATE**	**HAND PLOTTING CHECKED BY**	**DATE**

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT
T-12531

31 - DELINEATION

Delineation was by instrument methods using the Wild B-8 stereoplotter and 1:20,000 scale color photographs. The 1:30,000 scale panchromatic field inspection photographs were used during compilation; however, many of the field identified rocks were not discernible when viewing the 1:20,000 scale color compilation photographs. Rocks that were not clearly identifiable were not compiled.

Compilation ratio photographs were processed for hydro support and were used graphically to assist in delineation of minor details. Photo coverage and quality were adequate.

32 - CONTROL

Refer to the Photogrammetric Plot Report, dated June 1966.

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 was delineated from office interpretation of the mapping 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

There were no significant offshore details.

37 - LANDMARKS AND AIDS

There were no landmarks or aids within the limits of this map.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

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

T-12531

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Report dated June 1966.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S Quadrangle, Keawanui Bay, Hawaii, dated 1957, scale 1:24,000.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with USC&GS Chart 4140, scale 1:80,000, 3rd edition, dated Jan. 24, 1966.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by

Jerry L. Hancock
for R. R. White
Cartographic Aid
September 1968

Approved

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

ADDENDUM TO THE COMPILATION REPORT

T-12531

Field edit was performed concurrent with hydrographic survey H-9017. Adequate field data was furnished in order to advance the manuscript to Class I status.

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6401 (Hawaii, West Coast I. of Hawaii)

T-12531

Keawanui Bay

Keawaula Bay

Malae Point

Pacific Ocean

Wawahonu Bay

Approved by:

A. J. Wraight

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

Field Edit Report
to Accompany T12531

USC&GSS McARTHUR

Ronald L. Newsom
CDR, USESSA
Commanding Officer

51 METHODS

Manuscript T 12531 was field edited by personnel aboard the USC&GSS McARTHUR in conjunction with the hydrography on boatsheet AR 10-6-68 (H9017). Shoreline inspection and all other acquisition of field edit material was accomplished from Launch AR-1. The delineation of the MLLW line was rendered impossible by the rocky, jagged shoreline. The steep bottom contour and small range of tides indicated that the MLLW line should approximately coincide with the MHWL. Additions and corrections to the manuscript have been noted on the field edit ozalid provided for T 12531 in blue pencil. No cross references to photos were necessary. No deletions on the field edit ozalid were made.

52 ADEQUACEY OF COMPILATION

Manuscript T 12531 is complete and adequate for use in conjunction with this hydrographic survey. The area of this manuscript from the shoreline seaward, was field edited.

54 RECOMMENDATIONS

None

REVIEW REPORT
T-12531

SHORELINE

61 - GENERAL STATEMENT

Final review for this final field edited map was accomplished at the Atlantic Marine Center in October 1986. 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 U.S.G.S quadrangle Keawanui Bay, Hawaii, dated 1957, scale 1:24,000.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with a portion of hydrographic survey H-9017, AR-10-6-68, 1:10,000 scale, field surveyed 1968. The comparison did not reveal any significant discrepancies; however, it was noted that several alongshore foul limits delineated on the map were not transferred to the hydrographic survey. It appears that alongshore sounding development took precedence over the foul limits.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with NOS chart 19327, scale 1:80,000, 8th edition, Sept. 5, 1981.

66 - ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

T-12531

Submitted by

Jerry L. Hancock

Jerry L. Hancock
Final Reviewer

Approved for forwarding

Billy H. Barnes

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Chief, Photogrammetric Section, AMC

Approved

Chief, Photogrammetric Production Sec.

Chief, Photogrammetry Branch

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-12531, PH-6401

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Revie

CHART	DATE	CARTOGRAPHER	REMARKS
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

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