

T-12533

T-12533

NOAA FORM 76-35 (6-80)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. T-12533	Edition No. 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 KAWAIHAE BAY	
19 63 TO 19 68	
REGISTERED 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 Unit, Atlantic Marine Center, Norfolk, Virginia		SURVEY TR. <u>12533</u> MAP EDITION NO. (1) MAP CLASS Final JOB PH. <u>6401</u>	
OFFICER-IN-CHARGE Richard Houlder		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 September 12, 1968 Supplement No. 1 February 11, 1969 Compilation March 11, 1969 Supplement No. 2 December 11, 1969		Control/Field Inspection April 29, 1964	
II. DATUMS			
1. HORIZONTAL: ☐ 1927 NORTH AMERICAN		OTHER (Specify) Old Hawaiian Datum	
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 BY METHOD: Stereoplanigraph LANDMARKS AND AIDS BY		P. Hawkins Jun 1966 J. Perrow Jun 1966	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		P. Hawkins Jun 1966 J. Perrow Jun 1966	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild B-8 SCALE: 1:10,000 CONTOURS BY CHECKED BY		J. Minton Oct 1968 L. Neterer Oct 1968 N.A. N.A.	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smooth drafted CONTOURS BY CHECKED BY SCALE: 1:10,000 HYDRO SUPPORT DATA BY CHECKED BY		J. Minton Oct 1968 C. Bishop Oct 1968 N.A. N.A. J. Minton Oct 1968 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	
7. COMPILATION SECTION REVIEW BY		L. Graves Feb 1973	
8. FINAL REVIEW BY		L. Graves Feb 1973	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		J. Hancock Oct 1986	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		J. Hancock Mar 1987	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		P. Dempsey May 1987 E. L. DAUGHERTY MAY 1987	

T-12533

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8"S" S=152.29 mm		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE ☒ PREDICTED TIDES ☐ REFERENCE STATION RECORDS ☐ TIDE CONTROLLED PHOTOGRAPHY		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE Yukon	☒ STANDARD
				MERIDIAN 135th	☐ DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
63S(P) 7812-7814*	Aug. 27, 1963	11:00	1:30,000	1.8 ft. above MLLW	
63S(C) 7780-7781**	Aug. 27, 1963	10:16	1:20,000	1.9 ft. above MLLW	
63S(C) 7783-7786**	Aug. 27, 1963	10:22	1:20,000	1.9 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 LINE 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-9018	Surveyed 1969 & 1970	Registered	H-0917	Surveyed 1968	Registered

5. FINAL JUNCTIONS

NORTH T-12532 (1:10,000)	EAST	SOUTH T-12535 (1:10,000)	WEST
*T-13132 (1:5,000)	No survey	T-13131 (1:5,000)	No survey

REMARKS

*Map T-13132 is an inset map within the limits of this sheet.

NOAA FORM 76-36C (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
T-12533			
HISTORY OF FIELD OPERATIONS			
I. ☒ FIELD INSPECTION OPERATION ☐ FIELD EDIT OPERATION			
OPERATION	NAME	DATE	
1. CHIEF OF FIELD PARTY	R. Newsom	Jun 1964	
2. HORIZONTAL CONTROL	RECOVERED BY E. Cline	Jun-1964	
	ESTABLISHED BY E. Cline	Jun 1964	
	PRE-MARKED OR IDENTIFIED BY E. Cline	Jun 1964	
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 E. Cline	Jun 1964	
	LOCATED (Field Methods) BY None		
	IDENTIFIED BY E. Cline	Jun 1964	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY BY ☒ NO INVESTIGATION		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY E. Cline	Jun 1964	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None		
II. SOURCE DATA			
1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
		None	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
63(S)7812*	Puu Kamalii 2, 1928 (Direct & Sub. Pt.)		
63(S)7812*	Kawaihae Light, 1928 (Direct - light was misidentified on photo)		
	*Section of ratio photo submitted		
3. PHOTO NUMBERS (Clarification of details)			
63S7811-7814 (Matte Contacts)			
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE		6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE	
7. SUPPLEMENTAL MAPS AND PLANS			
Portion of Chart 4167			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)			
1 Form 152 (CSI Card)			

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

T-12533

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 68/Apr 69
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: R. Newsom	Dec 68/Apr 69
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY: None	

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) 63(S) 7813 Matte Ratio			
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 Report 1 Field Edit Print			

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

T-12533

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	Nov. 1968	Nov. 1968 Dec. 1969
Field edit applied, pending office review.	Aug. 1969	Class I Unreviewed Manuscript		Nov. 1970 Jul. 1971 Oct. 1971
Field edit application, office reviewed; data from inset map T-13132 added	Feb. 1973	Class I Manuscript	Mar. 1977	
Final Reviewed	Oct. 1986	Final Map	mar 1987	mar 1987

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

(NUMBER Pages)	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		mar 1987	Navigational Aids for Charts

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 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)

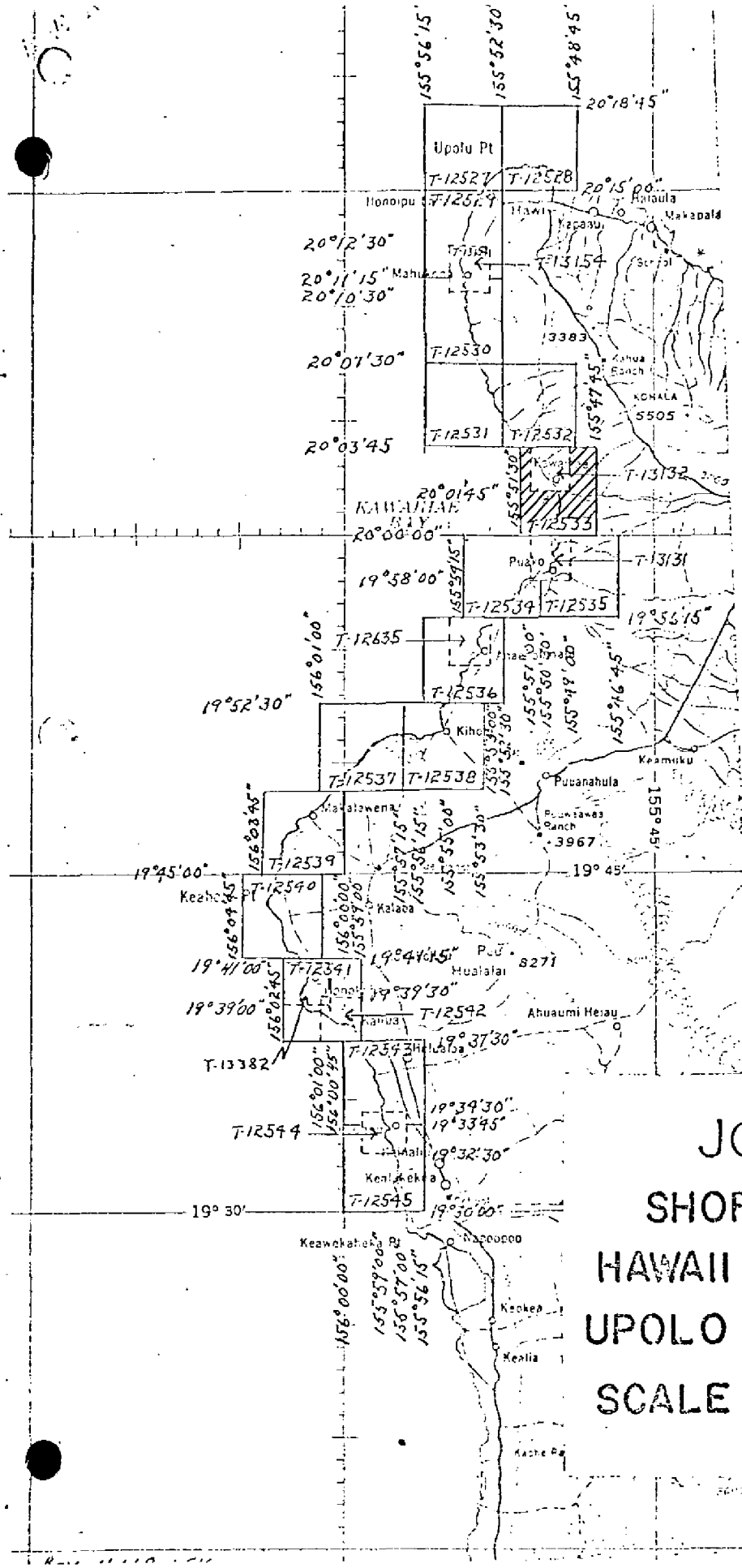
SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II.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

Official Mileage
For
Cost Accounts

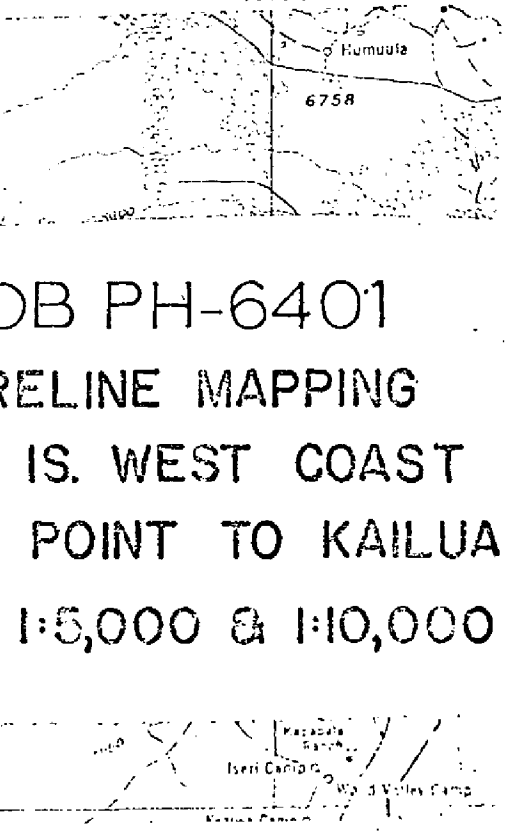
Area
Sq. Mi.

Sheet No.

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



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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-12533

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° 00' 00" to Lat. 20° 03' 45". Inset map T-13132 duplicates the coastal area of Kawaihae Harbor at 1:5,000 scale.

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-12533

Field edit for the northern portion of this map was conducted in conjunction with hydrographic survey H-9017 by USC&GS Ship McARTHUR personnel in December 1968. South of Lat. 20° 03.0', field edit was performed during hydrographic survey H-9018 by USC&GS Ship McARTHUR personnel in April 1969.

Application of field edit data was accomplished at the Atlantic Marine Center in August 1969 and the manuscript was advanced to Class I. Though the Class I map had not been officially reviewed, copies of the manuscript were submitted to the Hydrographic Surveys Branch. Additional data was delineated on the manuscript in February 1973 after the common inset map, T-13132, was compiled from 1969 photography. This data primarily consisted of roads and alongshore cultural detail within Kawaihae Bay. A copy of the revised Class I manuscript was submitted to Marine Charts.

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-12533

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.

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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.

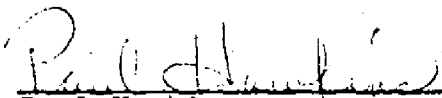
24. Supplemental Data

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

25. Photography

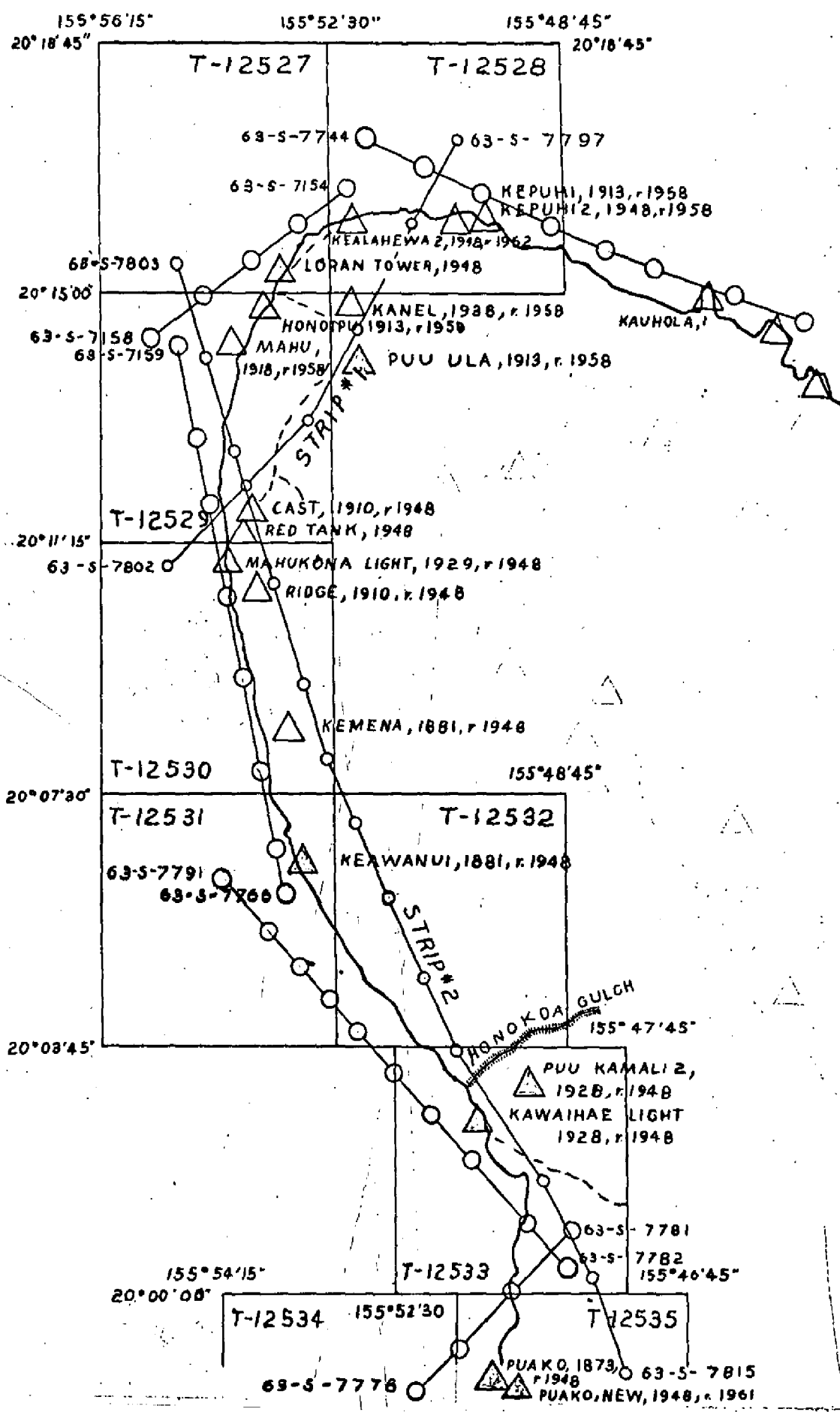
Photography was adequate as to coverage, overlap, definition and quality of diapositives.

Submitted by:


Paul Hawkins

Approved by:


John D. Perrow, Jr.



DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	GEODETTIC DATUM		ORIGINATING ACTIVITY	
				Old Hawaiian Datum	Geographic Position	Unit, Norfolk, VA	Coastal Mapping
T-12533	PH-6401			COORDINATES IN FEET STATE <u>Hawaii</u> ZONE <u>1</u>	ϕ LATITUDE λ LONGITUDE	REMARKS	
PUU KAMALII 2 (H.T.S., 1924) 1928	G.P. pg. 31			X=	ϕ 20 03 09.003		
				Y=	λ 155 49 26.223		
KAWAIHAE LIGHT,, 1928	G.P. pg. 38			X=	ϕ 20 02 40.133		
				Y=	λ 155 50 08.225		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
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				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
				X=	ϕ		
				Y=	λ		
COMPUTED BY A. C. Rauck, Jr.			DATE 8/29/68	COMPUTATION CHECKED BY C. Blood		DATE 8/30/68	
LISTED BY			DATE	LISTING CHECKED BY		DATE	
HAND PLOTTING BY			DATE	HAND PLOTTING CHECKED BY		DATE	

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COMPILATION REPORT
T-12533

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

Offshore details were delineated from office interpretation of the mapping photographs.

37 - LANDMARKS AND AIDS

Four charted navigational aids were either located or verified during compilation. There were no charted landmarks.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

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

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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, Kawaihae, Hawaii, dated 1956, 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
4167, scale 1:10,000, 3rd edition, dated Jun. 26, 1967.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by

Jerry L. Hancock
for J. R. Minton
Cartographic Aid
October 1968

Approved

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

ADDENDUM TO THE COMPILATION REPORT

T-12533

Field edit was performed concurrent with hydrographic survey H-9017 in December 1968 and H-9018 in April 1969. 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-12533

Honokoa Gulch

Kaaha Point

Kaluhikaa Beach

Kaunaoa Beach

Kawaihae

Kawaihae Bay

Kawaihae Light

Kawaihae Pier

Kawaihae Waimea Road

Keawehala Point

Kukui Point

Makahuna Gulch

Makeahua Gulch

Mauumae Beach

Ohaiula Beach

Pacific Ocean

Palihae Gulch-Not compiled *WJH*Puu Kamalii----Not compiled *WJH*Puu Kanane-----Not compiled *WJH*

Puu Kohola Heiau

Spencer Park--Not compiled *WJH*

Waikui

Waikui Beach

Waiulaula Gulch

Waiulaula Point

Approved by:

*A. J. Wright*A. Joseph Wright
Chief Geographer

Prepared by:

*Frank W. Pickett*Frank W. Pickett
Cartographic Technician

Field Edit Report
to Accompany T12533

USC&GSS McARTHUR

Ronald L. Newsom
CDR, USESSA
Commanding Officer

51 METHODS

Manuscript T 12533 was field edited by personnel aboard the USC&GSS McARTHUR in conjunction with hydrography on boatsheets AR 10-6-68, H-9017 and AR 10-7-68, H-9018. Manuscript 12533 was field edited from launches AR-1 and AR-2. The portion of T 12533 covering boat sheet AR 10-6-68 was done on December 12, 1968 and the portion covered by AR 10-7-68 was done on April 25, 1969. Shoreline was verified visually due to extensive foul areas. Field edit was shown on photo 63 S 7813 and on the field edit ozalid in blue and violet ink.

52 ADEQUACY OF COMPILATION

Manuscript T 12533^{was} adequate for hydrography but, the accompanying photos were not completely adequate for locating photo-hydro signals. Several foul and rock awash areas were shown inaccurately.

54 RECOMMENDATIONS

Photography for this area should be taken in the late afternoon. Possibly infrared photography might give better contrast between the black lava rock and the water. Also the shoreline should be more towards the center of the photograph where the resolution is better and distortion less.

REVIEW REPORT
T-12533

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 Kawaihae, Hawaii, dated 1956, scale 1:24,000.

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with a registered copy of hydrographic surveys H-9017, AR-10-6-68, 1:10,000 scale, field surveyed 1968 and H-9018, AR-10-7-68, PF-10-1-70, 1:10,000 scale, field surveyed 1969/1970. There were no significant discrepancies.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with NOS charts:
19327, scale 1:80,000, 8th edition, Sept. 5, 1981
19330, scale 1:10,000, 7th edition, Oct. 15, 1983.

Three of the four navigational lights originally compiled have structurally been relocated since the 1963 compilation photographs.

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-12533

Submitted by

Jerry L. Hancock

Jerry L. Hancock
Final Reviewer

Approved for forwarding

Billy H. Barnes

Billy H. Barnes
Chief, Photogrammetric Section, AMC

Approved

Jerry O. Kohn

Chief, Photogrammetric Production Sec.

Ray Bryan

Chief, Photogrammetry Branch

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	R. Newsom
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify) FIELD ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE ☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions* require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

