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-12533	1
Job No.		
	PH-6401	
Map Classi	fication	
	FINAL, FIELD EDITED M	AP
Type of Su	rvey	
	SHORELINE	
	LOCALITY	1
State		**************************************
	HAWAII	
General Lo HAWAII IS	oc <i>ality</i> LAND, WEST COAST UPOLO POINT TO KAILUA	
Locality	KAWAIHAE BAY	
	19 ⁶³ TO 19) 68
	REGISTERED IN A	RCHIVES
DATE		

NOAA FORM 76-36A (3-72) NATIONA	U. S. DEPARTMENT OF COMMERCE L OCEANIC AND ATMOSPHERIC ADMIN.	TYPE OF SURVEY	SURVEY T#. 12533
		13 ORIGINAL	MAP EDITION NO. (1)
DESCRIPTIVE RE	PORT - DATA RECORD	☐ RESURVEY	MAP CLASS Final
		REVISED	јов РН- <u>6401</u>
PHOTOGRAMMETRIC OFFICE		LAST PRECEE	DING MAP EDITION
Coastal Mapping Unit	t, Atlantic Marine Center,	TYPE OF SURVEY	JOB PH-
Norfolk, Virginia		ORIGINAL	MAP CLASS
OFFICER-IN-CHARGE		RESURVEY	SURVEY DATES:
Richard Houlder		REVISED	19TO 19
I. INSTRUCTIONS DATED		<u> </u>	
	, OFFICE		. FIELD
Compilation	September 12, 1968	Control/Field In	spection 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 OTHER (Specify)	Datum
	MEAN HIGH-WATER	OTHER (Spacity)	
2. VERTICAL:	MEAN LOW-WATER MEAN LOWER LOW-WATER		
	MEAN SEA LEVEL		
3. MAP PROJECTION		 	. GR(D(S)
Polyconic		STATE Hawaii	ZONE].
5. SCALE 1:10,000		STATE	ZONE
III. HISTORY OF OFFICE OPE	RATIONS		
OP	PERATIONS	NAME	DATE
1. AEROTRIANGULATION	вү	P. Hawkins	Jun 1966
METHOD: Stereoplani	graph LANDMARKS AND AIDS BY	J. Perrow	Jun 1966
2. CONTROL AND BRIDGE POI		P. Hawkins	Jun 1966
METHOD: Coradomat	CHECKED BY	J. Perrow	Jun 1966 Oct 1968
3. STEREOSCOPIC INSTRUMEN COMPILATION		J. Minton L. Neterer	Oct 1968
INSTRUMENT: Wild B=8	CONTOURS BY	N.A.	000 1300
SCALE: 1:10,000		N.A.	
4. MANUSCRIPT DELINEATION		J. Minton	Oct 1968
	CHECKED BY	C. Bishop	Oct 1968
метноо: Smooth dra	ofted contours by	N.A.	
METHOD. BROOTH GEG	CHECKED BY	N.A.	
scale: 1:10,000	HYDRO SUPPORT DATA BY	J. Minton	Oct 1968
	CHECKED BY	C. Bishop	Oct 1968
5. OFFICE INSPECTION PRIOR		C. Bishop A. Shands	Oct 1968 Aug 1969
6. APPLICATION OF FIELD ED	BY DIT DATA CHECKED BY	L. Graves	Feb 1973
7. COMPILATION SECTION RE		L. Graves	Feb 1973
8. FINAL REVIEW	ВУ	J. Hancock	Oct 1986
9. DATA FORWARDED TO PHO	TOGRAMMETRIC BRANCH BY	J. Hancock	Mar 1987
10. DATA EXAMINED IN PHOTO	GRAMMETRIC BRANCH BY	P. Dempsey	may 1987
11. MAP REGISTERED - COASTA	AL SURVEY SECTION 59	EL NAUGHED	

NOAA FORM 76-36B (3-72)	СОМІ	T-12533		U.S. DEPARTME IC AND ATMOSPHERIC NATIONA	
1. COMPILATION PHOTOGRAPHY CAMERA(S) Wild RC-8"S" S=1:	52.29 mm	TYPES OF PI	HOTOGRAPHY	TIME REFE	ERENCE
TIDE STAGE REFERENCE XX PREDICTED TIDES REFERENCE STATION RECORD TIDE CONTROLLED PHOTOGR	os	(C) COLOR (P) PANCHRON (I) INFRARED	AATIC	zone Yukon MERIDIAN 135th	XXSTANDARD
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF	TIDE
63\$ (P) 7812~7814* 63\$ (C) 7780~7781** 63\$ (C) 7783~7786**	Aug.27,1963 Aug.27,1963 Aug.27,1963	11:00 10:16 10:22	1:30,000 1:20,000 1:20,000	1.8 ft. above 1.9 ft. above 1.9 ft. above	e MLLW
REMARKS *Bridging, photo	ographs, **Comg	Dilation pho	tographs	Mean tide rand	ge=1.4 ft.
2. SOURCE OF MEAN HIGH-WATE The mean high the compilation pho	water line was				of ¿
3. SOURCE OF MEAN KOW WATER No mean lower	low water line		ed.		

4. CONTEMPORARY	HYDROGRAPHIC SU	RVEYS (List only those so	urveys that are sources	for photogrammetric	survey information.)
SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY US

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

5. FINAL JUNCTIONS

NORTH T-12532 (1:10,000) EAST

*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_36((3—72)	T-12533 History of Field	NATIONAL OCEANIC AND	S. DEPARTMENT OF COMMERCE ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY			
I. XXX FIELD INSP	ECTION OPERATION FIEL	D EDIT OPERATION				
	OPERATION	NAME	DATE			
- CUITE OF FIEL						
1. CHIEF OF FIEL		R. Newsom	Jun 1964			
	RECOVERED BY	E. Cline	Jun=1964			
2. HORIZONTAL C		E. Cline	Jun 1964			
-	PRE-MARKED OR IDENTIFIED BY RECOVERED BY	E. Cline None	Jun 1964			
3. VERTICAL CON		None				
3) ************************************	PRE-MARKED OR IDENTIFIED BY	None				
<u> </u>	RECOVERED (Triangulation Stations) BY	E. Cline	Jun 1964			
4. LANDMARKS AT	· · · · · · · · · · · · · · · · · · ·	None				
AIDS TO NAVIG	ATION IDENTIFIED BY	E. Cline	Jun 1964			
	TYPE OF INVESTIGATION	† 				
5, GEOGRAPHIC N						
INVESTIGATION	N SPECIFIC NAMES ONLY					
	XX NO INVESTIGATION					
6. PHOTO INSPEC	TION CLARIFICATION OF DETAILS BY	E. Cline	Jun 1964			
7. BOUNDARIES A	NO LIMITS SURVEYED OR IDENTIFIED BY	None				
II. SOURCE DATA	·					
I. HORIZONTAL C	CONTROL IDENTIFIED	2. VERTICAL CONTROL ID	ENTIFIED			
		None				
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION			
63(S)7812*	Puu Kamalii 2, 1928	1				
62 (C) 7012*	(Direct & Sub. Pt.) 7812* Kawaihae Light. 1928 (Direct -					
63(S)7812* Kawaihae Light, 1928 (Direct - light was misidentified on photo)						
	light was misidentailed on bhock	² /				
	*Section of ratio photo submitte	e E E				
3. PHOTO NUMBE	RS (Clarification of details)					
6357811-78	14 (Matte Contacts)					
	ND AIDS TO NAVIGATION IDENTIFIED					
	<u></u>					
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME			
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	I	1				
		1				
5. GEOGRAPHIC N	NAMES: TREPORT XX NONE	6. BOUNDARY AND LIMITS:	HEPORT V NONE			
	L MAPS AND PLANS					
Portion	of Chart 4167					
8. OTHER FIELD	RECORDS (Sketch books, etc. DO NOT list data submit	tted to the Geodesy Division)				
l Form l	52 (CSI Card)					

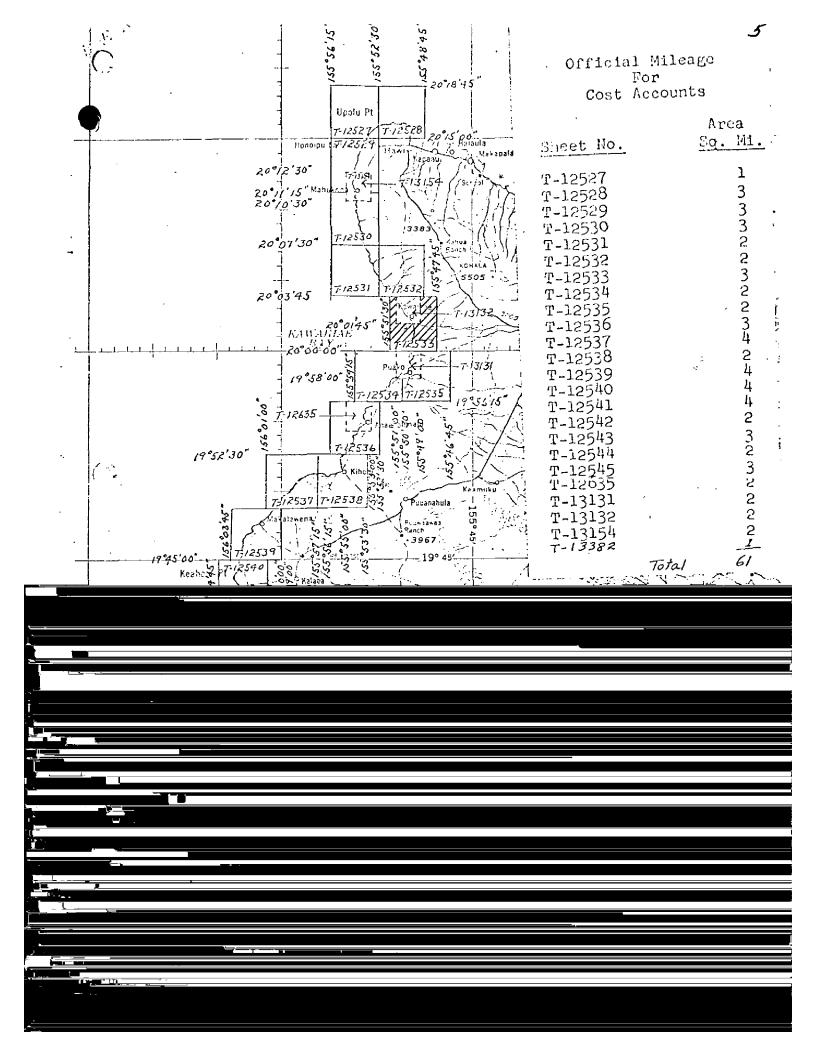
NOAA FORM 76_36 (3_72)	C	т-12533	NATIONAL OCEA	NIC AND ATMOSPHERI	ENT OF COMMERCE C ADMINISTRATION AL OCEAN SURVEY
		HISTORY OF FIELD	OPERATIONS		
I. T FIELD INSP	ECTION OPER	RATION XX FIEL	D EDIT OPERATION		
	190	ERATION		NAME	DATE
1 cure of the	D D B BTV		(USC & GS.Sh	ip, McARTHUR)	}
1. CHIEF OF FIEL	- PARIT		R. Newsom		Dec 68/Apr69
		RECOVERED BY	None		-
2. HORIZONTAL	CONTROL	ESTABLISHED BY	None		
		PRE-MARKED OR IDENTIFIED BY	None		
1 VERTICAL CO.		RECOVERED BY	None		
3. VERTICAL CO	NITROL	ESTABLISHED BY	None		
	 -	PRE-MARKED OR IDENTIFIED BY	None		
4		ECOVERED (Triangulation Stations) BY	None		
4. LANDMARKS AT AIDS TO NAVIG		LOCATED (Field Methods) BY	None		
		TYPE OF INVESTIGATION	None		
f arecovering		COMPLETE			ļ
5. GEOGRAPHIC N		SPECIFIC NAMES ONLY			
		NO INVESTIGATION	j		
4 PHOTO INCORP	TION		D		1
7. BOUNDARIES A		CLARIFICATION OF DETAILS BY	R. Newsom		<u>Pec 68/Apr69</u>
II. SOURCE DATA		SURVEYED OR IDENTIFIED BY	None		<u> </u>
1. HORIZONTAL		NTIFIED	2. VERTICAL CON	TROL IDENTIFIED	
None			None _		
		ET A TION NAME	PHOTO NUMBER	STATION DE	SIGNATION
PHOTO NUMBER		STATION NAME	PHOTO NOMBER	STATION DE.	SIGNATION
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3. PHOTO NUMBE	RS (Clarification	on of details)	<u> </u>		
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	;	63(S)7813 Ma	atte Ratio		
	ND AIDS TO N	AVIGATION IDENTIFIED	14410_		<u> </u>
None					
PHOTO NUMBER		OBJECT NAME	PHOTO NUMBER	OBJECT	NAME
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	l]		
5. GEOGRAPHIC	IAMES:	REPORT XXNONE	6. BOUNDARY AN	D LIMITS: REPO	RT [X]XNОNE
7. SUPPLEMENTA	L MAPS AND	PLANS			
Mana					
None					
		tch books, etc. DO NOT list data submit	ted to the Geodesy D.	ivision)	,
	Edit Repo				'
т гтета	mart Pri				ĺ
					

NOAA FORM 76-36D (3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
T-12533

RECORD OF SURVEY USE

I. MANUSCR		IMPILATION STAGE				DATE MA	MUSCRI	et for	WARDED
D.	ATA COMPILED	DATE	T	EMARKS					SUPPORT
Compilat	tion complete field edit	Oct 1968	Class III			Nov. 1		Nov.	1968 1969
Field ed	dit applied, office review.	Aug. 1969	Class I Un Manuscript	nreviewed	-			Jul.	1970 ⁻ 1971 ⁻ 1971 ⁻
Field ed	dit application, reviewed; data fro ap T-13132 added	om	Class I Ma			Mar. 1	977 -		
Final Re	eviewed RKS AND AIDS TO NAVIGA	Oct. 1986	Final Map			mar 1°	147	mar	1987
	RTS TO MARINE CHART DI		DATA BRANCH						
(Pages)	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED			REMA	RKS			
1		mar 1987	Navigation	nal Aids	for C	harts_			
ļ			 						
ļ									
	EPORT TO MARINE CHART								
	EPORT TO AERONAUTICAL AL RECORDS CENTER DAT		, AERONAUTICAL	DATA SECT	TON. DA	TE FORWA	RDED:		
2. ฐฐ c 3. ☐ se	RIDGING PHOTOGRAPHS; CONTROL STATION IDENT! OURCE DATA (except for G CCOUNT FOR EXCEPTION	FICATION CARDS; eographic Names Re	FORM NOS	5 567 SUBMIT	TTED BY		ARTIES.		
4. 🗆 D	ATA TO FEDERAL RECOR	RDS CENTER. DAT	E FORWARDED:					-	
IV. SURVEY	EDITIONS (This section s			p edition is re					
SECOND	TP -	(2) PH -		<u> </u>		TYPE OF S (ISED MAP CL	RES	URVEY	
EDITION					□ III.	□iv.	v.		NAL
THIRD EDITION	TP - DATE OF PHOTOGRAPH					YPE OF SI ISED MAP CL	RES	URVEY	
				n.	□лі.	□ıv.	□v.	□ FI	NAL
FOURTH	TP	JOB NUMBEI _ (4) PH -	R		_	YPE OF SU	_	ĴRVĖY	
EDITION	DATE OF PHOTOGRAPH		ELD EDIT	□	<u> Пи.</u>	MAP CL	ASS	□ FII	NAL .



SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

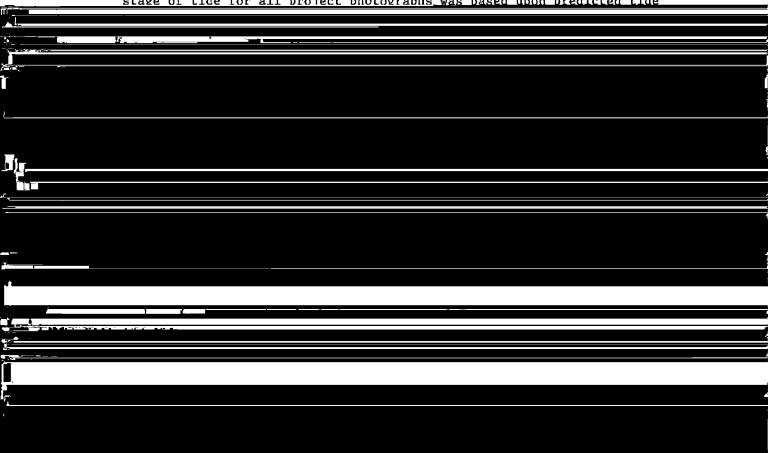
T-12533

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



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°03.0¹, 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 officed 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.

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

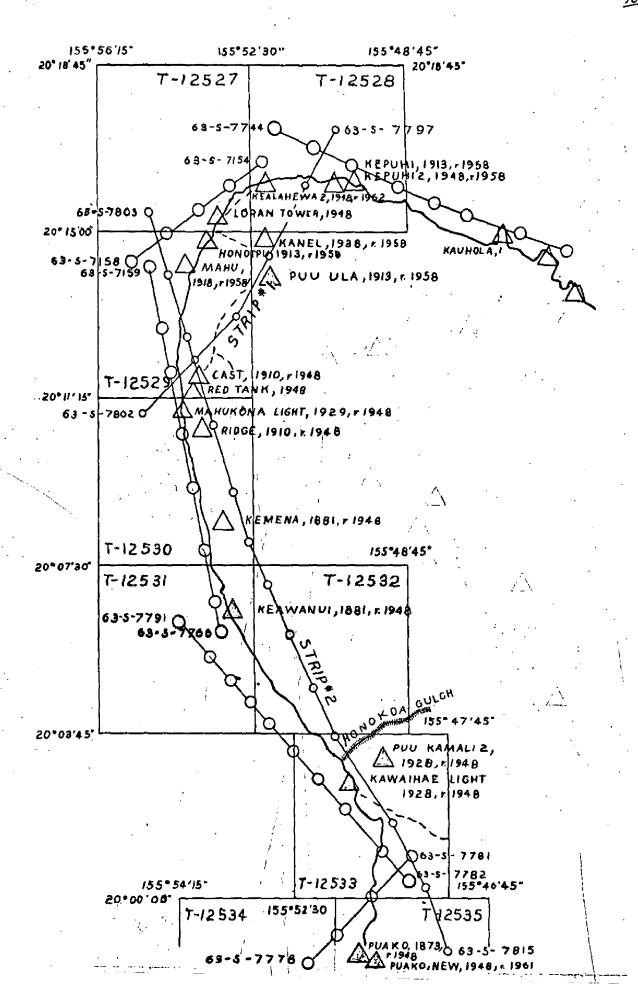
Photography was adequate as to coverage, overlap, definition and quality of diapositives.

Submitted by:

Paul Hawkins

Approved by:

John D. Perrow, Jr.



NOAA FORM 41				U.S.	U.S. DEPARTMENT O DAMMERCE
		DESCRIPTIV	DESCRIPTIVE REPORT CONTROL RECORD		
MAP NO.	JOB NO.		GEODETIC DATUM	ORIGINATING ACTIVITY Coastal	ITY Coastal Mapping
T-12533	PH-6401		Old Hawaiian Datum		VA
	ŗ—	AEROTRI-	COORDINATES IN FEET HAWAII	GEOGRAPHIC POSITION	
SIALION NAME	INFORMATION (Index)	POINT NUMBER	zone 1	γ LAINTODE λ LONGITUDE	KEMAKKS
PUU KAMALII 2	G.P.		χ=	φ 20 03 09 003	
(H.T.S., 1924) 1928	pg. 31		y=	λ 155 49 26.223	
	ţ			φ 20 02 40.133 ⁷	
KAWAIHAE LIGHT,	G.P. pq. 38		η=		
			χ=		
			- h	۲	
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			<i>y=</i>	γ	
			χ=	φ	
			y=	۲	
COMPUTED BY A. C. Rauck. Jr.		DATE 8/29/68	COMPUTATION CHECKED BY C. Blood	pd	DATE 8/30/68
		DATE	!		DATE
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE
		SUPERSEDES NO	SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE	H IS OBSOLETE.	

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. Photocoverage 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.

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

J. R. Minton
Cartographic Aid
October 1968

Approved

for Albert C. Rauck, Jr.

Jany I. Harrowh

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

Puu Kamalii----Notcompiled

Puu Kanane----Not compiled

Puu Kohola Heiau

Spencer Park -- Not compiled

Waikui

Waikui Beach

Waiulaula Gulch

Waiulaula Point

Approved by:

A. Joseph Wraight Chief Geographer Prepared by:

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



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

Jan J. Hancock Jerry L. Hancock Final Reviewer

Approved for forwarding

Billy H. Barnes

Chief, Photogrammetric Section, AMC

Approved

Chief, Photogrammetric Production Sec.

Ory Chief, Photogrammetry Branch

TYPE OF ACTION OBJECTS INSPECTED FROM SEAWARD FORMS DETERMINED AND/OR VERIFIED FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	RESPONSIBLE PERSONNEL NAME R. Newsom INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE O (Consult Photogrammetric Instructions No. 64,	THOD AND DATE OF LOCATION'	ORIGINATOR PHOTO FIELD PARTY MAY HYDROGRAPHIC PARTY GEODETIC PARTY OTHER (Specify) FIELD ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		7	FIELD ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE REVIEWER QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
	NSTRUCTIONS FOR ENTRIES UNDER METHOD AND DATE O (Consult Photogrammetric Instructions No. 64,	THOD AND DATE OF LOCATION' Instructions No. 64,	
OFFICE 1. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the bject. EXAMPLE: 75E(C)6042 8-12-75	nonth,	FIELD (Cont'd) B. Photogrammetric field positions** entry of method of location or ver date of field work and number of a graph used to locate or identify a EXAMPLE: P-8-V 8-12-75 74L(C)2982	<pre>mmetric field positions** require method of location or verification, field work and number of the photo- ed to locate or identify the object. P-8-V 8-12-75 74L(C)2982</pre>
is dat	ED OR VERIFIED lata by symbols as follows: - Photogrammetric ls - Visually - Field identified - Theodolite	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is angulation station is recovered Rec. with date of recovery. EXAMPLE: Triang. Rec. 8-12-75	ON STATION RECOVERED mark or aid which is also a tri-station is recovered, enter 'Triang. date of recovery. Friang. Rec. 12-75
ction on sitions*	7 - Planetable 8 - Sextant require entry of method of e of field work.	II. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V+Vis.' and date. EXAMPLE: V-Vis. 8-12-75	UALLY ON PHOTOGRAPH
*FIELD POSITIONS are determined by field observations based entirely upon ground survey meth	ods.	**PHOTOGRAMMETRIC FIELD POSIT entirely, or in part, upon by photogrammetric methods.	(IC FIELD POSITIONS are dependent in part, upon control established metric methods.

NOAA FORM 76-40 (8-74)

SUPERSEDES NOAA FORM 76-40 (2-71) WHICH IS OBSOLETE, AND EXISTING STOCK SHOULD BE DESTROYED UPON RECEIPT OF REVISION.

☆ U.S.GPO:1975-0-865-080/1155

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T12533, PH-6401

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.

In "Remarks" column cross out words that do not apply.
 Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Revie

CHART	DATE	CARTOGRAPHER	REMARKS
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