NOAA FORM 76—35 (3—76)					
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY					
DESCRIPTIVE	REPORT				
Mor No	Edition No.				
Мар No. T-12547	Lattion No.				
Job No. PH-6402					
Map Classification FINAL FIELD EDITED	МАР				
Type of Survey SHORELINE					
LOCALITY					
State HAWAII					
General Locality HAWAII ISLAND, WEST COAST KAILUA TO SOUTH CAPE					
Locality PALEMANO POINT					
19 63 TO 19 73					
REGISTRY IN ARCHIVES					
DATE					

\*U. S. GOVERNMENT PRINTING OFFICE:1976-669-246

NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	TYPE OF SURVEY	SURVEY X .T-12547
The same and armost field admits	ORIGINAL	MAP EDITION NO. (1)
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS FINAL
DESCRIPTIVE REPORT PAIR RESSRE	REVISED	JOB <b>PH-</b> 6402 <
PHOTOGRAMMETRIC OFFICE		ING MAP EDITION
Coastal Mapping Div.	TYPE OF SURVEY	JOB PH-
Atlantic Marine Center, Norfolk, VA	ORIGINAL	MAP CLASS
OFFICER-IN-CHARGE	RESURVEY	SURVEY DATES:
R. Matsushige	REVISED	19TO 19
I. INSTRUCTIONS DATED		
1, OFFICE	2.	FIELD
Compilation Oct. 28, 1969 Amendment 1 Jan. 3, 1973 Memo Sept. 1, 1978	Control/Field Ins	pection May 8, 1964
II. DATUMS		
1. HORIZONTAL: 1927 NORTH AMERICAN	OTHER (Specify)	
I TORIZONIAL. ISZ/ NORTH AMERICAN	Old Hawaiian	
MEAN HIGH-WATER  MEAN LOW-WATER  MEAN LOWER LOW-WATER  MEAN SEA LEVEL	OTHER (Specify)	
3. MAP PROJECTION	4.	GRID(S)
Polyconic	state Hawaii	ZONE 1
5. SCALE	STATE	ZONE
1:10,000		
III. HISTORY OF OFFICE OPERATIONS		<del></del>
OPERATIONS  1. AEROTRIANGULATION BY	J. Perrow	June 1969
AEROTRIANGULATION     BY     METHOD: Stereoplanigraph LANDMARKS AND AIDS BY		Salle 1909
2. CONTROL AND BRIDGE POINTS PLOTTED BY	T	June 1969
METHOD: Coradomat CHECKED BY		June 1969
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	T. Makanan	Oct. 1969
COMPILATION CHECKED BY		Oct. 1969
INSTRUMENT: Wild B-8 CONTOURS BY	N.A.	
SCALE: 1:10,000 CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION PLANIMETRY BY	A. Shands	Dec. 1969
CHECKED BY	R. Pate	Mar. 1972
сонтоияs ву метноо: Smooth drafted		
CHECKED BY HYDRO SUPPORT DATA BY	N.A. A. Shands	Dec. 1969
scale: 1:10,000 CHECKED BY	R. Pate	Mar. 1972
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	R. Pate	Mar. 1972
ву	J. Minton	May 1974
6. APPLICATION OF FIELD EDIT DATA CHECKED BY	G. Vanderhaven	May: 1974
7. COMPILATION SECTION REVIEW BY	G. Vanderhaven	May 1974_
8. FINAL REVIEW SY	J. Hancock	Apr. 198 <u>7</u>
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	J. Hancock	<u>June 1987</u>
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	P. Dempsey	Aug 1987

NOAA FORM 76-36B				N.	ATIONAL OCE				OF COMMERCE MINISTRATION
			T-12547	7					CEAN SURVE
		CON	PILATIO	M 200F	CE2				
1. COMPILATION PHO	OTOGRAPHY					<del></del>	· · · · · · · · · · · · · · · · · · ·	-	. <u> </u>
Wild RC-8"S"	', S=152.2	9mm	TYPE	S OF PHO LEGE	OTOGRAPHY ND	1	TIME	REFERE	INCE
TIDE STAGE REFERE			(C) COLOR		ZONE				
PREDICTED TIDE				CHROM	ATIC	Ha	waii_		XXSTANDARD
TIDE CONTROLLE			(I) INF	RARED			Oth		DAYLIGHT
NUMBER AND	TYPE	DATE	TIME		SCALE		STA	GE OF T	IDE
63S(P) 8073-	·8074*	Sept.1,1963	09:1	.3	1:30,000	0.4	FT. a	above	MLLW
63S(P) 8084-		Sept.1,1963			1:30,000		Ft. a		
63S(C) 8031-		Aug. 31,1963			1:15,000	T.	FT. a		
├ 63s(c) 8134-	·8138** /	Sept.1,1963	10:2	24	1:15,000	1.0	FT. a	above	MLLW
		1		- {		1	m. 1.	- n - 1 -	1 / pm:
REMARKS						Mea	n Tide	e kang	e=1.4 FT:
1		photographs,	**Como	.41.44.	on/hyrdma		nhata	. awaah	
"Bridging/co	ombhrar fou	pnotographs,	, ^^Comp	) T T # f T :	on/nydro	support	photo	grapu	.s.
2. SOURCE OF MEAN	HIGH-WATER	LINE:							
101	1 1 -	•		c c			£	<b></b>	
		ine was compi reo instrumer					on or	the c	ошъттатто
photographs	abing bee	ico insciunci	ic ana 6	,rup	e mernous	•			
3. SOURCE OF MEAN	LOW-WATER C	R MEAN LOWER LO	OW-WATER L					-	<u> </u>
٠									•
No mean lowe	r low wate	er line was o	ompiled	•					
		•							
			· · · · · · · · · · · · · · · · · · ·						
4. CONTEMPORARY	HYDROGRAPHI	C SURVEYS (List o	nly those su	rveys tha	at are sources f	or photogran	nmetric s	urvey info	ormation.)
SURVEY NUMBER	DATE(S)	SURVEY COF			YNUMBER	DATE(S)			COPY USED
н-9346	1972	Register	ed.			'-'			
						<u></u>			
5. FINAL JUNCTION:		<b>AST</b>		SOUTH		<u> </u>	WEST		
None	.   .	ione	,	ſ	797 (1:5,0	000)		46,T-	11796*
REMARKS *Inset	map T-117	796 (1:5,000)	scale)	lies	within th	he norti	hwest	porti	on
	s manuscri		ŕ					-	
•									

NOAA FORM 76_360 (3_72)		T-12547 History of Field (		Z AND ATMOSPHERI	ENT OF COMMERCE C ADMINISTRATION AL OCEAN SURVEY
I. 🗓 FIELD INSPI	ECTION OPER	ATION FIELI	D EDIT OPERATION		
<del></del>	OPE	ERATION	NAM		DATE
1. CHIEF OF FIEL			R. Newson		FebSept.
		RECOVERED BY	E. Cline		May 1964
2. HORIZONTAL C	CONTROL	ESTABLISHED BY	None		
		PRE-MARKED OR IDENTIFIED BY	E. Cline		May 1964
		RECOVERED BY	None		
3. VERTICAL CON	1TROL	ESTABLISHED BY	None		<del></del>
·		PRE-MARKED OR IDENTIFIED BY	None		<del> </del>
Man at		COVERED (Triangulation Stations) BY	E. Cline		Aug. 1964
4. LANDMARKS AN AIDS TO NAVIG.		LOCATED (Field Methods) BY	None		
		TYPE OF INVESTIGATION	None		<del> </del>
	— <del>-</del>	TYPE OF INVESTIGATION			
5. GEOGRAPHIC N INVESTIGATION		COMPLETE  BY  SPECIFIC NAMES ONLY	ľ		
••••	•	V NO INVESTIGATION			
			<del> </del>		1000
<ol> <li>PHOTO INSPECT</li> <li>BOUNDARIES AI</li> </ol>		SURVEYED OR IDENTIFIED BY	E. Cline		Aug. 1964
II. SOURCE DATA		SURVEYED OR IDENTIFIED BY	N.A	<del></del>	<del></del>
I. HORIZONTAL C		NTIFIED	2. VERTICAL CONTR	ROL IDENTIFIED	
		1	None		
PHOTO NUMBER		STATION NAME	PHOTO NUMBER	\$TATION DES	EIGNATION
	Churen sp.	oire, 1948 (Direct)			
3. PHOTO NUMBER	De Clasificatio	£ 1 inital			
	•	) scale matte contact)			
4. LANDMARKS AN	ID AIDS TO NA	AVIGATION IDENTIFIED			•
PHOTO NUMBER	i	OBJECT NAME	PHOTO NUMBER	OBJECT	NAME
5. GEOGRAPHIC N	JAMES: [	REPORT NONE	6. BOUNDARY AND L	IMITS: REPOR	PT MONE
7. SUPPLEMENTAL None		<del></del>	6. BOUNDANT AND C	IMITS: UREFOR	RT W NONE
8. OTHER FIELD R		tch books, etc. <b>DO NOT</b> list data submitt	ted to the Geodesy Divis	rion)	-

NOAA FORM 76~36C (3-72)	T-12547 HISTORY OF FIELD	NATIONAL OCEANIG A	ND ATMOSPHER	ENT OF COMMERCIC ADMINISTRATIO
I FIELD INSPECTION OPE	RATION XX FIEL	D EDIT OPERATION		·
OP	ERATION	NAME		DATE
		(NOAA Ship FAIRW	EATHER)	MarApr.
1. CHIEF OF FIELD PARTY		C. Burroughs	<u></u>	1973
	RECOVERED BY	F. Arbusto		Mar. 1973
2. HORIZONTAL CONTROL	ESTABLISHED BY	None		
	PRE-MARKED OR IDENTIFIED BY	None		
	RECOVERED BY	None		<del> </del> _
3. VERTICAL CONTROL	None	<del></del>	<del></del>	
	PRE-MARKED OR IDENTIFIED BY	None		W 1072
R 4. LANDMARKS AND	ECOVERED (Triangulation Stations) BY	F. Arbusto		Mar. 1973
AIDS TO NAVIGATION	LOCATED (Field Methods) BY	None None		<del> </del>
	TYPE OF INVESTIGATION	None	<del></del>	<del> </del>
5. GEOGRAPHIC NAMES	COMPLETE			
INVESTIGATION	SPECIFIC NAMES ONLY			
•	XX NO INVESTIGATION			
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	F. Arbusto		Mar, 1973
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.		
II. SOURCE DATA				
1. HORIZONTAL CONTROL IDE	NTIFIED	2. VERTICAL CONTROL	IDENTIFIED	
None		None		
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DE	SIGNATION
3. PHOTO NUMBERS (Clarificat.	ion of details)		<del></del>	
None				·
4. LANDMARKS AND AIDS TO N None	AVIGATION IDENTIFIED			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	ОВЈЕСТ	NAME
			·	
5. GEOGRAPHIC NAMES:	REPORT DONE	6. BOUNDARY AND LIMI	TS: REPO	RT NONE
7. SUPPLEMENTAL MAPS AND None	PLANS			
8. OTHER FIELD RECORDS (SM l Field Edit Pape l Field edit book l Field edit repo	(Form 275)	ted to the Geodesy Division		

U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NOAA FORM 76-36D (3-72)T-12547 RECORD OF SURVEY USE MANUSCRIPT COPIES COMPILATION STAGES DATE MANUSCRIPT FORWARDED MARINE CHARTS HYDRO SUPPORT DATA COMPILED DATE REMARKS Compilation complete pending field edit Mar. 1972 Class II manuscript None July 1972 Field edit applied, compilation complete May . 1974 Class I manuscript June 1980 May 1974 July 1987 July 1987 Final review Apr. 1987 Final Map II. LANDMARKS AND AIDS TO NAVIGATION 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH CHART LETTER NUMBER REMARKS NUMBER ASSIGNED FORWARDED 2. TREPORT 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. X BRIDGING PHOTOGRAPHS; X DUPLICATE BRIDGING REPORT; XX 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 11, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

4. 🔲 D	ATA TO FEDERAL RECORDS	SENTER. DATE FORWARDED	(D:
IV. SURVEY	EDITIONS (This section shall .	be completed each time a new i	map edition is registered)
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
SECOND	TP (2)	PH ·	REVISED RESURVEY
EDITION	DATE OF PHOTOGRAPHY	DATE OF PIELD EDIT	MAP CLASS
		ļ	☐II. ☐III. ☐IV. ☐V. ☐FINAL
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
THIRD	TP(3)	РН	RÉVISED RESURVEY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS
	*		□H. □H. □IV. □V. □FINAL
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
FOURTH	TP(4)	PH	REVISED RESURVĖY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS
	1		□H. □HI. □IV. □V. □FINAL

NOAA FORM 76-36D

AILUA



## JOB PH-6402

## OFFICIAL MILEAGE FOR COST ACCOUNTS

13. W231 CUAS1	
TO SOUTH CAPE	Sheet Area Sq. No. Miles
ALE 1:10,000	T-12546 1 T-12547 3 T-12548 3
Honokohau Honokohau Ahusumi Haisu	T-12549 3 T-12550 3 T-12551 3 T-12552 3
Hotuelos	T-12553 3 T-12554 1 T-12555 3
Heauhou Manch	T-12556 1 T-12557 2 T-12558 3 T-12559 2
19° 26'06' Keswe sheka Pl T-11796 - Napound	T-12560 3 · '
19° 26' 15' 17:17:97.	T-11796 2 T-11797 2 T-13312 <u>2</u>
10° 22' 30' 57) 22' 30' 57)	Total 46
190 18 45 T-125 to Rands	Isan Camp o Wood Valley Camp HAWAII
19°11'5" 7-13551 Pape 1-150	W. O. KEOXEO  Meyer Camp O  TO: 6000  Middle Megulia Camp O  Pahala
17-13312-> 19-08-00"	Mountain houses Hibra O Puneluu
79 07 30 T-12593	Waiohinu Wanuapa
19 00' 00' T-12554 T-12555 T-1558	Market Pares Maale To
15.00 15. 15. 15. 15. 15. 15. 15. 15. 15. 15.	Kasiusiu 12558 7-12558 7-12860
Ra licino d	Ratales Ka Lae (South Cape)
To the second se	

# SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

#### T-12547

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 west coast of Hawaii Island from Latitude 19° 26' 15" to Latitude 19° 30' 00". The northwest segment of this map is portrayed by a portion of inset map T-11796, 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, 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 March 1972. The northwest segment of this map was not compiled since it is mapped at 1:5,000 scale on inset map T-11796. Copies of the initial compilation and hydrographic support data were forwarded to the hydrographer for field edit.

#### T-12547

Field edit was conducted by NOAA Ship FAIRWEATHER personnel in March 1973. This map is contemporary to hydrographic survey H-9346 which was field surveyed by NOAA ship RAINIER in 1972.

Application of field edit was completed at the original compilation office in May 1974 and the manuscript was advanced to Class I. Map copies were submitted to the hydrographer for smooth sheet application.

Final review was performed at the Atlantic Marine Center in April 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.

#### 7

### FIELD INSPECTION

### T-12547

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

U.S. DEPARTMENT OF COMMERCES
COAST AND GEODETIC SURVEY

631W

Memorandum

TO

: Chief, Photogrammetric Field Operations

DATE: August 5, 1964

THRU

: Honolulu Field Officer

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 a PELE, 1891 PUU KI, 1914 TANK, 1948

Supplimental Station Pricked: KAUNA POINT LIGHT, 1949

FLIGHT STRIP NO. 7

KALAB 2, 1948 PALAHEMO 1898 **KAMILO, 1898** KIPARPAE, 1898

Supplimental 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.

dward P. Oline

\_\_\_CC.\_Haralulu\_Field Office,...\_\_\_\_

## 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-5401. 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) <u>63-s-7964-7965</u>

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

(2) <u>63-8-8080-8081</u>

Points 22330, 23310, 23800, 23801

(3) <u>63-s-8081-8082</u>

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

(4) <u>63-s-8082-8083</u>

Points 76331, 77331, 77333.

(5) 63-S-8083-8084

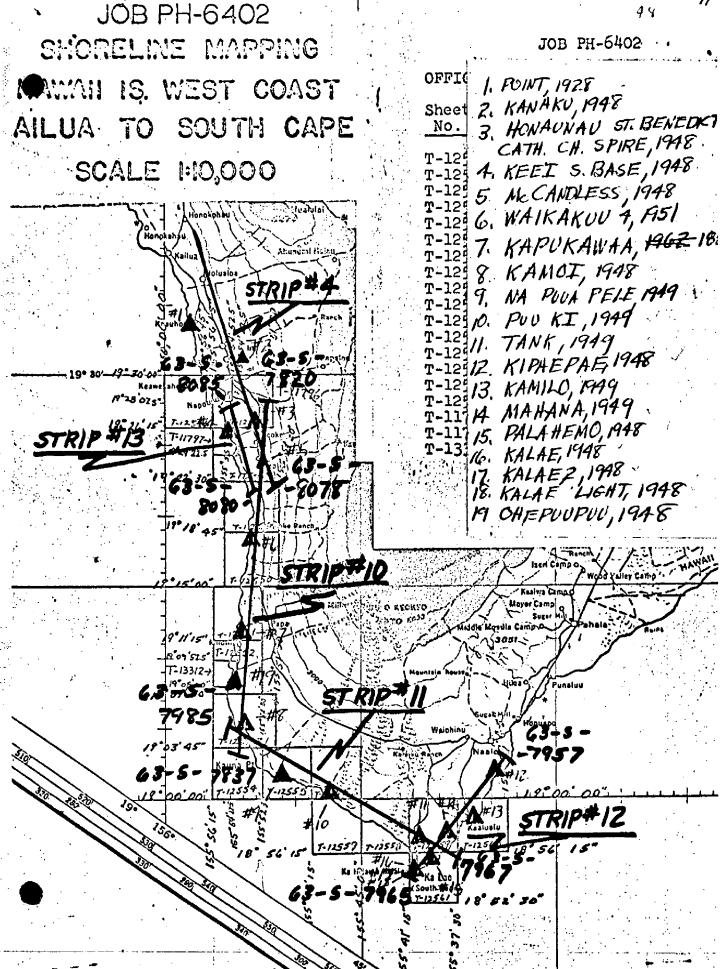
Points 75331 HONAUNAU ST. BENEDICT CATH. CH. SPIRE, 1948 plus points dropped from model 8082-8083.

(6) <u>63-s-8084-8085</u>

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.



## Photogrammetric Plot Report PH-6401 Hawaii Island, Hawaii Feb.4, 1969

### 21. Area Covered

The area covered by this report is along the northwest coast of Hawaii Island. T-sheets in this area are numbered 12534 thru 12541, 12543, and 12545 at 1:10,000 scale. T-sheets 12542, 12544, 12635, 13131 and 13132 at 1:5,000 scale. Sheets T-12527 thru 12533 and 13154 were covered by a previous report on Strips #1 and #2.

## 22. Method

All strips were bridged on the stereoplanigraph and adjusted by IBM 1620 methods. Strip #3 was adjusted on four stations with two additional stations as checks. Strip #4 was adjusted on seven stations with two additional stations as checks. Strip #6 was adjusted on two control points plus 7 tie points. Strip #7 was adjusted on one control station and three tie points. Strip #8 was adjusted on three control stations and three tie points. All tie points between strips were averaged. Points were drilled using the Wild PUG.

## 23. Adequacy of Control

The control provided by the field was adequate after reidentification of Anaehoomalu 1913, Lana Cone, 1913 and the identification of Hand, 1928 and Nawai 1928. The following stations could not be held in the bridging adjustments.

- 1. LAVA CONE, 1913, SS #A and SS #B ("NEAR"). By holding four triangulation stations and floating substitute stations "NEAR A AND B", a 1 ft. check was achieved between these substitute stations and placed LAVA CONE, 1913 80 ft. north of survey mark "NEAR" and on the high point of the immediate area. This bares out the field recovery note for station LAVA CONE 1913 that the survey mark "NEAR" and intersection station LAVA CONE, 1913 are not one and the same. Geodesy Division has been notified of our findings and the bridging information added to their files.
- 2. KEEI SOUTH BASE, 1948 SS #1 and SS #2 could not be held in Strip #4 by 11' and 16' respectively. It is believed these errors are due to bad identification, since seven other stations were held in the adjustment. This station falls in Strip #4 but is outside of the PH-6401 area of compilation.

## 24. Supplemental Data

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 with the exception of T-12542. 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.

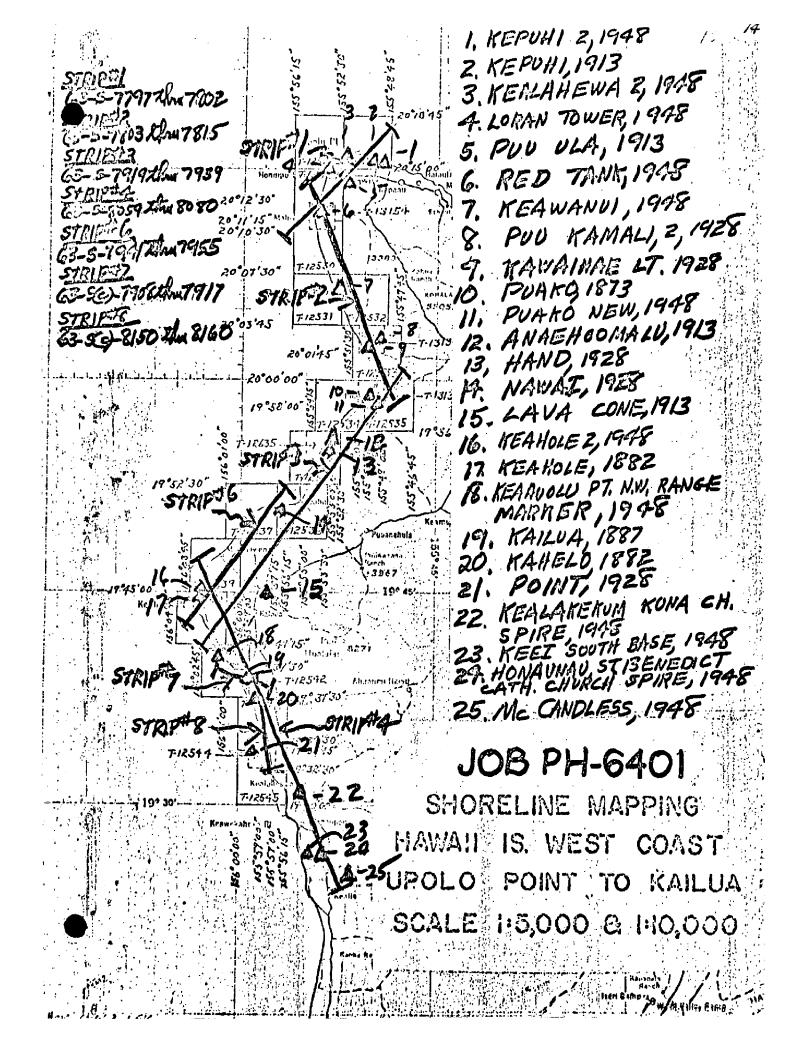
Submitted by,

John D. Perrow, Jr

Approved by,

Henry P. Eichert

Chief, Aerotriangulation Section



NOAA FORM 76-41				U.S.	U.S. DEPARTMENT OF COMMERCE
76 (-8)		DESCRIPTIV	DESCRIPTIVE REPORT CONTROL RECORD		TMOSPHERIC ADMINISTRATION
MAP NO.	ON BOF		GEODETIC DATUM	ORIGINATING ACTIVITY	/ITY
T-12547	PH-6402	402	Old Hawaiian Datum	Coastal Mapping	oing Section, AMC
	SOURCE OF	AEROTRI-		ő	
STATION NAME	INFORMATION (Index)	POINT	STATE_Hawall	φ LATITUDE λ LONGITUDE	REMARKS
HOLIGING PS ILEMITANOH	٦		χ=		
HURC	щ		y=	λ 155° 53' 27.938"	
			<i>=</i> χ	ф	
			=ĥ	γ	
			-χ	ф	
			∂h=	۲	
			=X	ф	
			≖ĥ	٧	
			=χ	ф	
			=h	۲	
			<b>-</b> χ=	ф	
			y=	γ	
			-χ	ф	
			=ĥ	γ	
			χe	ф	
			=ĥ	γ	٠
-			χ=	ф	
			η=	γ	
			=X	ф	
			<i>d=</i>	۲	
COMPUTED BY A. C. Rauck, Jr.		DATE 7-29-69	COMPUTATION CHECKED BY L. L. Graves		DATE 11-21-69
LISTED BY		DATE	LISTING CHECKED BY		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-12547

#### 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 Reports, dated February 4, 1969 (PH-6401) and 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:

None

#### CONTROL FOR FUTURE SURVEYS: 38.

During compilation, additional pass points were established by instrument methods for horizontal control of inset map T-11796 which is contained within the northeast segment of this sheet. The selection of pass points was limited to like points that were common to the 1963 photographs and the 1969 photographs provided for T-11796.

#### 39. JUNCTIONS:

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

### 40. HORIZONTAL AND VERTICAL ACCURACY:

Refer to the Photogrammetric Plot Reports dated February 4, 1969 (PH-6401) and June 10, 1969.

#### 46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS quadrangle Honaunau, Hawaii, dated 1959, scale 1:24,000.

#### 47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with C. & G.S. Chart: 4123, 2nd edition, scale 1:10,000, June 12, 1967

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

for Arnold L. Shands Cartographer

December 1969

Approved: Genz L. Hancock

Albert C. Rauck, Jr. Chief, Coastal Mapping Section

### 18

## ADDENDUM TO THE COMPILATION REPORT

T-12547

Field edit was performed in March 1973 by NOAA ship FAIRWEATHER personnel. Adequate field data was furnished to advance the manuscript to Class I.

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-6402 Hawaii

T-12547

\*(Area(s) compiled on inset map T-11796)

- \* Captain Cook
- \* Cook Point
- \* Cooks Monument

  Island of Hawaii
- \* Kaawaloa
- \* Kaawaloa Cove
- \* Kealakekua Bay

Keei

Keei Beach

Keomo Point

Kipu Rock

Limukoko Point

Maluhia Camp

\* Manini Beach

Moinui Point

Mokuakae Bay

- \* Napoopoo
- \* Napocpoo Park

Pacific Ocean

Palemano Point

\* Umis Well

Approved by:

A. Voseph Wraight

Chief Geographer

Prepared by

### FIELD EDIT REPORTS

### KONA COAST, ISLAND OF HAWAII

OPR-419 FA-73

MARCH - APRIL 1973

#### MAPS

T-11797

T-12547

T-12550

T-12551

T-12552

T-13312

#### FIELD EDIT REPORT

### KONA COAST, ISLAND OF HAWAII OPR-419 MARCH-APRIL 1973

#### INTRODUCTION

Field edit reports are attached for the following maps: T-11797, T-12547, T-12550, T-12551, T-12552, T-13312.

Field photographs and copies of the field edit ozalids were taken into the field. Due to the small tidal range in the area, shoreline verification was done by visual inspection at various tide stages. Sextant fixes were plotted on the appropriate boat sheet. Height data for rocks, ledges, and reefs is either written directly on the ozalid, or entered in the field edit notebook along with position data, and referenced on the ozalid. Because of the rough surf conditions existing in the working grounds, sextant fixes could not be taken on some near shore rocks and ledges. In these cases positions are based on visual verification by the field editor. Due to the uncommon clarity of the off shore water, numerous submerged rocks and foul areas drawn on the ozalid were found to be at such depths so as not to constitute hazards. These have been noted, and new limits and locations appear on the ozalids. All times are based on the 135°w meridian. Compilation of these maps is in general good, and field inspection is complete.

It is recommended that the maps be revised in accordance with the notes on the ozalids, and in the field edit notebook before acceptance as advanced manuscripts.

Respectfully submitted,

John A. Murphy Ens. N.O.A.A.

Approved and forwarded

Charles A. Burroughs CDR. N.O.A.A.

#### FIELD EDIT REPORT

## MAP T-12547 KEALAKEKUA BAY, ISLAND OF HAWAII MARCH 1973

Field edit of map T-12547 was done by LT(jg) Frank B. Arbusto Jr. during early March 1973. Inspection was made from a small boat and on foot.

#### METHOD

Field photographs and a copy of the field edit ozalid were examined in the field. Notes and comments were entered in both the field edit notebook and directly on the ozalid. Signals were not established for this work so control was provided by natural or manmade objects. Foul limits were obtained by sextant fix form the skiff. All times are based on the 135°W meridian.

#### ADEQUACY OF COMPILATION

Compilation of this map is fair. Many rocks shown as detached are actually connected to shore. hydrographic locations compare well with photogrammetric location.

#### RECOMMENDATIONS

It is recommended that this map be revised with the notes on the ozalid and in the field edit notebook, and then be accepted as an advanced manuscript.

Respectfully submitted,

John A. Murphy Ens. N.O.A.A.

#### REVIEW REPORT SHORELINE

#### T-12547

#### 61. GENERAL STATEMENT:

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

#### COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

## 63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with USGS quadrangle Honaunau, Hawaii, dated 1959, scale 1:24,000.

### 64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a registered copy of H-9346, RA-10-9-72, surveyed in 1972 did not reveal any significant differences.

### 65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS charts:

19332, 6th edition, scale 1:10,000, February 15, 1986 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.

Jeny L. Hancock Jerry L. Hancock Final Reviewer

Approved for forwarding:

Billy H. Barnes

Chief, Photogrammetric Section, AMC

Chief, Photogrammetric Production Sec. Chief, Photogrammetry Branch

### MAUTICAL CHART DIVISION

#### **RECORD OF APPLICATION TO CHARTS**

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.  $\underline{T-12547}$ ,  $\underline{(PH-6402)}$ 

### 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 Revi

---FORM-C& 68-8352 SUPERSEDES ALL, EDITIONS OF FORM C&GS-975.

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