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.
т-12542	1
Job No.	
PH-6402	
Map Classification	
FINAL, FIELD EDITED MA	<i>T</i> P
Type of Survey	
SHORELINE	
_	LOCALITY
State	
HAWAII	
General Locality	
HAWAII ISLAND, WEST (COAST UPOLO POINT KAILUA
Locality	
KAILUA BAY	
106	3 TO 19 72
190	3 10 19 72
REGISTE	RED IN ARCHIVES
DATE	

NOAA FORM 76-36A (3-72) NATIONA	U. S. DEPARTMENT OF COMMERCE L OCEANIC AND ATMOSPHERIC ADMIN.	TYPE OF SURVEY	SURVEY TP- 12542
	T SOLIMO MO KIMOSPILKIO KOMIN.	ORIGINAL	MAP EDITION NO. (])
DESCRIPTIVE RE	EPORT - DATA RECORD	RESURVEY	MAP CLASS Final
	OKT - DATA KEGOKD	REVISED	лов Р Н- 6401
PHOTOGRAMMETRIC OFFICE			
1	t, Atlantic Marine Center		NG MAP EDITION
Norfolk, VA		TYPE OF SURVEY	JOB PH-
OFFICER-IN-CHARGE		☐ RESURVEY	SURVEY DATES:
Richard Houlder		REVISED	19TO 19
I. INSTRUCTIONS DATED	· · · · · · · · · · · · · · · · · · ·	<u>'</u>	
	, OFFICE	2.	FIELD
		Field	
Compilation Supplement No. 1	September 12, 1968 February 11, 1969	Control/Inspection	April 29, 1964
Compilation	March 11, 1969		
Supplement No. 2	December 11, 1969		
N B. T. 1110			-
II. DATUMS		OTHER (Specify)	
1. HORIZONTAL:	1927 NORTH AMERICAN	Old Hawaiian Dat	um
	文 MEAN HIGH-WATER	OTHER (Specify)	
2. VERTICAL:	MEAN LOW-WATER		
Z. VERITORE:	MEAN LOWER LOW-WATER MEAN SEA LEVEL		
3. MAP PROJECTION	MEXIT JEX LEVEL	4	GR(D(S)
		STATE	ZONE
polyconic		Hawaii	1
5. SCALE		STATE	ZONE
1:5,000	PATIONS		
	PERATIONS	NAME	DATE
1. AEROTRIANGULATION	BY	J. Perrow	Feb 1969
метнор: stereoplania	graph LANDMARKS AND AIDS BY	H. Eichert	Feb 1969
2. CONTROL AND BRIDGE POI		J. Perrow	Feb 1969
METHOD: coradomat	CHECKED BY	H. Eichert	Feb 1969
3. STEREOSCOPIC INSTRUMEN		A. Shands	Sep 1969
COMPILATION INSTRUMENT: Wild B-8	CHECKED BY CONTOURS BY	C. Bishop	Sep 1969
scale: 1:5,000	CHECKED BY	N.A.	
4. MANUSCRIPT DELINEATION		L. Graves	Oct 1969
	CHECKED BY	R. Pate	Jan 1970
метнор: Smooth di	rafted	N.A.	
1	CHECKED BY HYDRO SUPPORT DATA BY	N.A. I. Graves	 0at 1969
scale: 1:5,000	CHECKED BY	R. Pate	Oct 1969 Jan 1970
5. OFFICE INSPECTION PRIOR		R. Pate	Jan 1970
6. APPLICATION OF FIELD ED	DIT DATA	L. Graves	Aug 1973
	CHECKED BY	C. Blood	May 1974
7. COMPILATION SECTION REV		C. Blood	May 1974
8. FINAL REVIEW 9. DATA FORWARDED TO PHO	TOGRAMMETRIC BRANCH BY	J. Hancock J. Hancock	Feb 1987
10. DATA EXAMINED IN PHOTO	···	P. Dumpsey	Mar 1987
11. MAP REGISTERED - COASTA		F. L. DAUGHERT	Y MAY 1987
NOAA FORM 76-36 A	SUPERSEDES FORM CAGS 181 SERIES		

NOAA FORM 76-36B (3-72)	CO	T-12542 MPILATION SC		HC AND ATMOSPHER	MENT OF COMMERCE RIC ADMINISTRATION NAL OCEAN SURVEY
1. COMPILATION PHOTOGRAPHY					<u></u>
CAMERA(S)			PHOTOGRAPHY	TIME R	EFERENCE
Wild R.C 8"S"; S=1	52.29mm		EGEND	ZONE	
TIDE STAGE REFERENCE		(C) COLOR		Yukon	XSTANDARD
REFERENCE STATION RECOR	DS	(P) PANCHR		MERIDIAN	
TIDE CONTROLLED PHOTOGR	RAPHY	(I) INFRARI	<u></u>	135th	DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE	OF TIDE
63s(C)7913-7917 63s(C)8151-8153 63s(C)8148-8149	Aug 30,63 Sep 1, 63 Sep 1, 63	09:16 10:32 10:30	1:15,000 1:15,000 1:15,000	1.1 ft about 1.1 ft about 1.0 f	ve MLLW
REMARKS				Mean Tide	Range = 1.4 f
2. SOURCE OF MEAN HIGH-WATE The mean high water I photographs using ste	ine was compi		fice interpre	etation of the	e compilation
3. SOURCE OF MEAN LOW-WATE No mean lower low wat					

4. CONTEMPORARY	HYDROGRAPHIC SUF	RVEYS (List only those s	surveys that are sources	tor photograms	metric survey information.)
SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED
н-9334	surveyed 1972	registered			
5. FINAL JUNCTIONS	5				
NORTH T-13382	EAST No	survey	souтн Т-12543		west T-13382

REMARKS
This 1:5,000 scale inset map is contained within the limits of map T-12541 (1:10,000 scale)

NOAA FORM 76_36 (3-72)	c	T-12542 HISTORY OF FIELD		U.S. DEPARTM ANIC AND ATMOSPHERI NATION	ENT OF COMM C ADMINISTR AL OCEAN SU	ATION
I. 💢 FIELD INSP	ECTION OPER	RATION FIEL	D EDIT OPERATION			
	091	ERATION		NAME	DATE	
1. CHIEF OF FIEL	LD PARTY		D. Notiger		Tun / 7117	1064
			R. Newsom E. Cline		Jun/Jul Jun/Jul	
1 400170NTAL (CONTROL	RECOVERED BY	E. Cline		Jun/Jul	
2. HORIZONTAL C	CONTROL	ESTABLISHED BY	E. Cline		Jun/Jul	
		RECOVERED BY	none			100-
3. VERTICAL CO	NTROL	ESTABLISHED BY	none	-		
3. VENTIONE CO.		PRE-MARKED OR IDENTIFIED BY	none			
			none			
4. LANDMARKS A		ECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY	none		<u> </u>	
AIDS TO NAVIG	SATION	IDENTIFIED BY	E. Cline		Jun/Jul	1964
		TYPE OF INVESTIGATION			J 4117, G 411	
5. GEOGRAPHIC I INVESTIGATIO		COMPLETE SPECIFIC NAMES ONLY				
		MO INVESTIGATION		-		
6. PHOTO INSPEC	TION	CLARIFICATION OF DETAILS BY	E. Cline	<u></u> .	Jun/Jul	1964
7. BOUNDARIES A	ND LIMITS	SURVEYED OR IDENTIFIED BY	none		<u> </u>	
II. SOURCE DATA		·		UTOS ISSUES		
1. HORIZONTAL C	CONTROL IDE	NTIFIED	2. VERTICAL CO	NTROL IDENTIFIED		
			None	T		
PHOTO NUMBER		STATION NAME	PHOTO NUMBER	STATION DE	SIGNATION	
63 (S) 8065*	KAILUA,	1887 (Direct and Sub Pt)				
	*Section	of ratio photo submitted	<u> </u>			
3. PHOTO NUMBE			<u>. </u>			
		51~8153 (Cronapaque Conta	acts)	•		
4. LANDMARKS A	ND AIDS TO N	AVIGATION IDENTIFIED				
PHOTO NUMBER		OBJECT NAME	PHOTO NUMBER	OBJECT	NAME	
63(S)7914	Kailua	Lighthouse				_
03 (3) 1314		Bighenouse				
	′					
	}		ł			
	i					
£ 0505040W5	14450					
 GEOGRAPHIC N SUPPLEMENTA 		REPORT NONE	6. BOUNDARY AN	ID LIMITS: REPO	RT X NON	4E
None	NG MAC3 AND I	-Long				
8. OTHER FIELD	RECORDS (Ske	tch books, etc. DO NOT list data submit	ted to the Geodesy D	livision)		

1 form 152 (CSI)

NOAA FORM 76-36C (3-72)		T-12542 History of Field		ANIC AND ATMOSPHER	ENT OF COMMERCE IC ADMINISTRATION NAL OCEAN SURVEY
I. FIELD INSPE	CTION OPER		D EDIT OPERATION	``	
		ERATION	1	NAME	DATE
1. CHIEF OF FIELD			(NOAA Ship N		
		RECOVERED BY	G. Harden S. Hollinsh		Sep/Oct 1972 Sep/Oct 1972
2. HORIZONTAL CO	NTROL	ESTABLISHED BY		ead	<u>Sep/.0cc_1972</u>
		PRE-MARKED OR IDENTIFIED BY	none		
		RECOVERED BY	none		
3. VERTICAL CONT	ROL	ESTABLISHED BY			
		PRE-MARKED OR IDENTIFIED BY	none		
		COVERED (Triangulation Stations) BY	none S. Hollinshe		Oct 1972
4. LANDMARKS AND		LOCATED (Field Methods) BY	S. Hollinshe		Oct 1972
AIDS TO NAVIGA		IDENTIFIED BY		-au	000.1572
		TYPE OF INVESTIGATION	none		
5. GEOGRAPHIC NA	MES	COMPLETE			
INVESTIGATION		SPECIFIC NAMES ONLY			
		NO INVESTIGATION			
6. PHOTO INSPECT	ION	CLARIFICATION OF DETAILS BY	S Hollinshe	·	Oct 1972
7. BOUNDARIES AN		SURVEYED OR IDENTIFIED BY		-ad —	
II. SOURCE DATA			Inone		
1. HORIZONTAL CO	NTROL IDE	NTIFIED	2. VERTICAL CO	NTROL IDENTIFIED	
none	2		no	one	
PHOTO NUMBER		STATION NAME	PHOTO NUMBER	STATION DE	SIGNATION
3. PHOTO NUMBER:	S (Clarificati	on of details)			
63 (S) 7913	. 7 915	7917 (Matte Ratios, 1:5	,000 scale)		
4. LANDMARKS AND	AIDS TO N	AVIGATION IDENTIFIED	coo scare/		
none					
PHOTO NUMBER		BMAN TOBLEO	PHOTO NUMBER	OBJECT	NAME ,
5. GEOGRAPHIC NA	MES:	REPORT WONE	6. BOUNDARY AN	ID LIMITS: REPO	RT WONE
7. SUPPLEMENTAL none	MAPS AND	PLANS	<u> </u>		
8. OTHER FIELD RE	ECORDS (Ske	tch books, etc. DO NOT list data submit	ted to the Geodesy D	livision)	
l Field E l Field E l forms 7	dit Repo	ort		•	

NOAA FORM 76-36D

(3-72)

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

T-12542

			RECO	RD OF SURVE	Y USE			
I. MANUSCRI	IPT COPIES							
	C	MPIL	ATION STAGE	s			DATE MANUSCE	RIPT FORWARDED
DA.	TA COMPILED	ļ	DATE	RE	MARKS		MARINE CHARTS	HYDRO SUPPORT
	tion complete field edit	Ja	n 1970	Class III	manuscri	pt	Jan 1970	Jan 1970 May 1972
	dit applied tion complete	Ма	у 1974	Class I Ma	nuscript			May 1974
Final R	eview	Fe	b 1987	Final Map			mar 1987	mar 1947
II. LANDMAI	RKS AND AIDS TO NAVIG	TION						
1. REPOF	TTS TO MARINE CHART D	IVISIO	N, NAUTICAL	DATA BRANCH				
76 JAGER	CHART LETTER NUMBER ASSIGNED	F	DATE DRWARDED			REM	IARKS	
2		mai	1987	landmarks	and aid	for	charts	
						-		
		<u>† </u>						
								
	PORT TO MARINE CHAR							
	PORT TO AERONAUTICAL L RECORDS CENTER DA		INI DIVISION	, AERONAUTICAL	L DATA SEC	IION. L	ATE FORWARDED	
1. 🔀 BI 2. 💢 CI 3. 💟 S	RIDGING PHOTOGRAPHS; ONTROL STATION IDENT DURCE DATA (except for C CCOUNT FOR EXCEPTION	X IFICA	TION CARDS;		5 567 SUBMI	TTED B	Y FIELD PARTIES.	
4. 🗆 0	ATA TO FEDERAL RECO	RDS C	ENTER. DAT	E FORWARDED:				_
IV. SURVEY	EDITIONS (This section	shall b	e completed e	ach time e new me	a edition is re	egistered		
	SURVEY NUMBER		JOB NUMBE	R			TYPE OF SURVEY	
SECOND	DATE OF PHOTOGRAP	_ (2)	PH			L RE		SURVEY
EDITION	DATE OF PHOTOGRAP	ΗY	DATE OF FI	ELD EDIT	□n.	□ 111.	MAP CLASS □ IV. □ V.	FINAL
	SURVEY NUMBER		JOB NUMBE	R			TYPE OF SURVEY	
THIRD	TP -	_ (3)	PH			∐R€		\$URVEY
EDITION	DATE OF PHOTOGRAP	НУ	DATE OF FI	ELD EDIT	n.	□m.	MAP CLASS □IV. □V.	FINAL
	SURVEY NUMBER		ЈОВ МИМВЕ	R			TYPE OF SURVEY	
FOURTH		_ (4)	РН			□ RE	VISEO RES	SÚRVÉY
EDITION	DATE OF PHOTOGRAP	4Y	DATE OF FI	ELD EDIT] □		MAP CLASS	[]FINA:

E St. C. Official Mileage For 201845 Cost Accounts Upolu Pt Area Sq. M1. Sheet No. 200/2'30 1333223223424 T-12527 20 1/15" No 20 10:30" T-12528 2007'30" 19°58'00' 7-12635 -19°52'30" Total of Humuul**a** JOB PH-6401 SHORELINE MAPPING HAWAII IS. WEST **UPOLO** KAILUA POINT SCALE 1:5,000 & 1:10,000

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

T-12542

This 1:5,000 scale final shoreline inset 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 inset map was to provide a large scale portrayal of Kailua Bay and vicinity for support of hydrographic operations and marine chart maintenance.

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 June/July 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 January 1970. Delineation of detail was compiled in conjunction with the common smaller scale map T-12541, which encompasses this inset map. 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-12542

Field edit was conducted in conjunction with hydrographic survey H-9334 by NOAA Ship RAINIER personnel in September/October 1972.

Application of field edit was accomplished at the Atlantic Marine Center in May 1974 and the manuscript was advanced to Class I. Copies of the Class I manuscript were forwarded to the Hydrographic Surveys Branch.

Final review was performed at the Atlantic Marine Center in February 1987. A comparison was made with the common nautical chart and hydrographic survey. 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-12542

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 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.

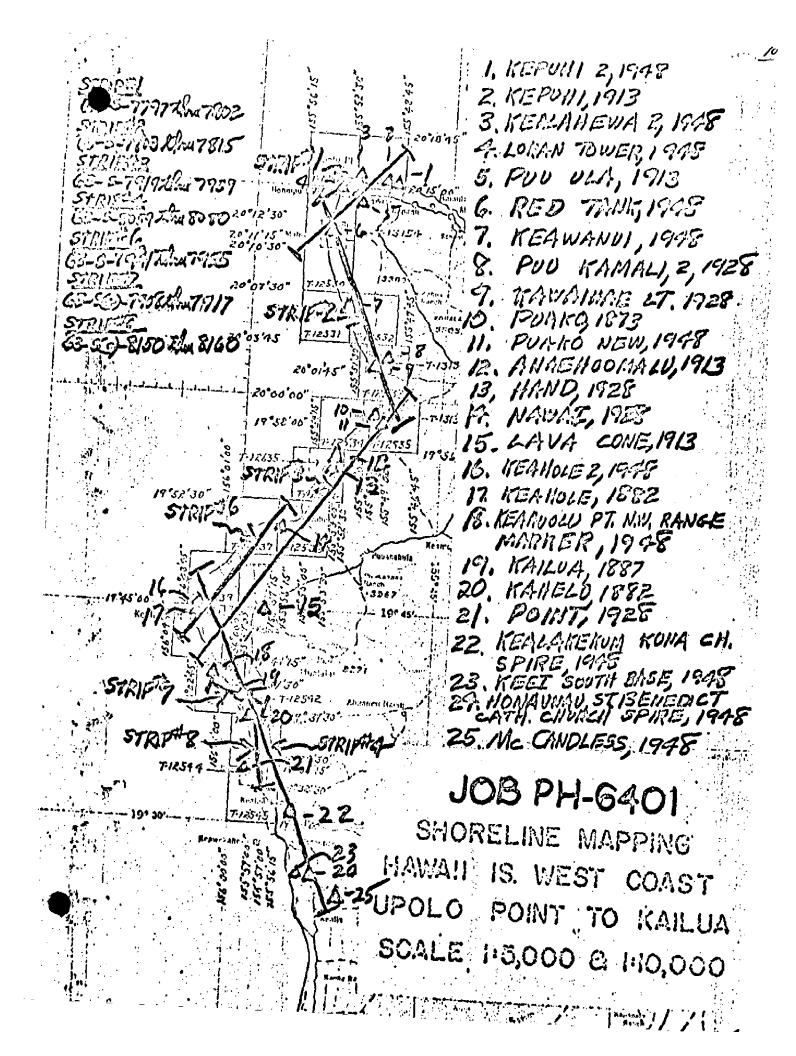
Approved by,

Henry P. Eichert

Chief, Aerotriangulation Section

per phone call John Perrow 3/5/69

Old Hawaijan Datum



NOAA FOR -41 (6-75)		DESCRIPTIV	DESCRIPTIVE REPORT CONTROL RECORD	1	U.S. DEP	U.S. DEPARTMENT C. COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
MAP NO.	JOB NO.		GEODETIC DATUM		ORIGINATING ACTIVITY	
T-12542	PH-6401		Old Hawaiian	Coastal	tal Mapping	Unit, AMC
	SOURCE OF	AEROTRI-	i⊢	GEOGRAPHIC POSITION		
STATION NAME	INFORMATION (Index)	POINT	SIATE HAWALL	φ LATITUDE λ LONGITUDE	3C	REMARKS
KATTIIA MOKIIAIKAIIA CHIIBCH		-	=X	₱ 19 38 33.854	54	
SPIRE, 1913	G.P. pg 33	,	je.	λ 155 59 47.	47.601	
			<i>=</i> χ	ф		
			y=	γ		
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			=h	٧		
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			-χ	ф		
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			y=	γ		
			<i>*</i> χ=	φ.		
			iβ=	γ		
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			<i>h</i> =	۲		
COMPUTED BY L. Graves/A. C. Rauck, J	.] Y	DATE 9/69.8/69	COMPUTATION CHECKED BY A. C. Raijck/I. Graves	-	V 0	DATE 9/11/69
		•	LISTING CHECKED BY		O A	
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		VQ.	DATE
		SUPERSEDES N	SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.	CH IS OBSOLETE.		

COMPILATION REPORT T-12542

31 - DELINEATION

Delineation was by instrument methods using the Wild B-8 stereoplotter and 1:15,000 scale color photographs. The 1:30,000 scale panchromatic field inspection photographs were used during compilation; however, several of the field identified rocks were not discernible when viewing the 1:15,000 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 February 4, 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 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

Compilation of offshore detail performed as indicated in item No. 31.

37 - LANDMARKS AND AIDS

Appropriate data was prepared for field edit.

38 - CONTROL FOR FUTURE SURVEYS

None.

39 - JUNCTIONS

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

T-12542

40 - HORIZONTAL AND VERTICAL ACCURACY

Refer to the Photogrammetric Plot Report dated February 4, 1969.

46 - COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S Quadrangles: Keahole Point, Hawaii, dated 1959, scale 1:24,000, Kailua, Hawaii, dated 1959, scale 1:24,000.

47 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with USC&GS Charts: 4164, scale 1:5,000, 2nd edition, dated June 20, 1966, 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

Jeny J. Harloch

for L. Graves
Cartographer
October 1969

Approved

for Albert C. Rauck, Jr.

Jeny L. Harwick,

Chief, Coastal Mapping Section

ADDENDUM TO THE COMPILATION REPORT

· T-12542

Field edit for this inset map was performed in conjunction with hydrographic survey H-9334 in September/October 1972. The common small scale sheet, T-12541 was also edited during this time. Pertinent edit data from both sheets was applied to the manuscript and the map was advanced to Class I status.

GEOGRAPHIC NAMES FINAL NAME SHEET

PH-6401 (Hawaii)

T-12542

Kahului Bay

Kailua Bay

Kailua Kona

Kalae Paakai

Kukailimoku Point

Laniakea

Oneo Bay

Pacific Ocean

Pohakuloa Rock

Waiaha

Approved by:

A. Joseph Wraight Chief Geographer

Prepared by:

Frank W. Prckett Cartographic Technician

FIELD EDIT REPORT

OPR-419, 1972

()

T-12539 through T-12550 7-13382 7-11796 Kona Coast, Hawaii

NOAA Ship RAINIER

\$

CAPT G.E. HARADEN Commanding

INTRODUCTION - METHODS

Field edit was accomplished between lh September and 26 October 1972 by personnel of the NOAA Ship RAINIER. Work was performed from a 16 foot skiff. Landings were made where necessary to verify shoreline character.

The field edit started approximately 0.4 mile: northeast of Puialoa Point. Hawaii and extended southward to Puoa Point (see appendix). Editing was completed on Manuscripts T-12539, T-12540, T-12541, T-12542, T-13382, T-12543, T-12544, T-12545, T-11796, T-12546, T-12548, and T-12549. Field edit was begun but not completed on Manuscript T-12550. No field edit was done on Manuscripts T-12547 and T-11797.

All additions and corrections were noted in purple on the field edit ozalids. Deletions were accented in green. Photos used in this edit were from PH-6401 and 6402. Values given for distances from MHWL and heights of rocks were estimated. All time references were made to 150° W longitude.

To aid in cross-referencing, A "Manuscript Reference Index" and a "Position Abstract" are included in the appendix. Also included in the appendix are: 1) List of detached positions, 2) A complete signal tape listing, 3) Listing of Triangulation Stations recovered, established, and re-established.

ADEQUACY OF COMPILATION

The compilation of the MHWL on the edited manuscripts was excellent and required very few corrections. In general the compilation of off-shore features was also excellent.

Time and height data for rocks not identified on the manuscripts has been included on the photographs.

DISCUSSION AND RECOMMENDATIONS

T-12539 (completed) Mahailua Bay

The shoreline in this area is primarily composed of steep cliffs 20' high, interspersed with sandy beach. The northern and southern-most buildings at Mahailua Bay are the only two prominent objects in the vicinity and therefore are of land-mark value. The wooden windmill located at 19° 47' 13.35" N and 156° 02' 22.50" W, is no longer standing and should be deleted from C&GS Chart 4140. Further information is furnished on NOAA Form 76-40 (see appendix).

T-12540 (completed) Makako Bay

The shoreline in this area is composed primarily of low bluffs and sandy beach with marsh surrounding fish ponds.

Keahole Point Lighthouse is of landmark value. The lighthouse was field identified from photo 63-S-7943. Further information is provided on NOAA Form 76-40 (see appendix).

T-13382 (completed) Honokohau Bay

The shoreline in this area is composed primarily of gently sloping lava flows with interspersed sandy beach and marsh surrounding Kaloko Fish Pond.

Keahuolu Point Northeast Range Marker, 1948, is of landmark value. Keahuolu Point Northwest Range Marker, 1948, has fallen over and is no longer visible from seaward. Four new navigatinal lights mark the entrance to the new boat basin at Honokohau, located just south of Maliu Point. Further information is privided on NOAA Form 76-40 (see appendix).

T-12541 (completed) Kailua Bay

The shoreline in this area is composed primarily of sloping lava rock with marsh surrounding small ponds and fish ponds at Honokohau Bay.

* NOTE: Keahuolu Point Northeast Range Marker, 1948, and Keahuolu Point Northwest Range Marker, 1948, are located on Manuscripts T-12541 and T-13382.

The northern-most building at Honokohau, although small, is of landmark value as a navigational aid when entering the Honokohau boat basin. Keehuolu Point Northeast, Keehuolu Point Southeast, and Keehuolu Point Southwest Range Markers are very faded and weathered but are of landmark value. The building located at Honokohau (approximate location, latitude 19°40'25.85" N and longitude 156°01'44.83" W) and Keehuolu Point Northwest Range Marker are not visible from seaward and should be deleted. Further information is provided on NOAA Form 76-40 (see appendix).

CT-12542 (completed) Kailua Bay

The shoreline in this area is composed primarily of low bluffs interspersed with sandy beach.

The facade of the Kona Hilton Hotel, which is illuminated yellow at night, and Kailua Lighthouse are of landmark value; both were intersected using second order, class II methods. A crane lighted at night by a floodlight and used by fishermen as a navigational aid and the Kailua Mokuaikaua Church spire are also of landmark value.

The cattle pens, small craft warning mast, and building on the Kailua pier have been removed and should be deleted. The tanks located at latitude 19°38'34.80" N, and longitude 156°00'03.46" W, and the Kona Airport Airway Beacon have been removed and should be deleted. The church spire, latitude 19°38'24.22"" N and longitude 155°59'37.05" W, is

present as described but is obscured by vegetation. Further information is provided on NOAA Form 76-40 (see appendix).

T-12543 (completed) Keauhou Bay

This area is composed primarily of rocky shoreline interspersed with sandy beaches.

New buildings at latitude 19°35'52.50 " N, longitude 155°58'31.50" W and latitude 19°34'39.60" W, longitude 155°58'12.60" W are not of landmark value. A hotel just south of Kalaau o Kalakani and a blue church building at Kahaluu Bay are of landmark value.

A spire at Kahaluu Bay is not visible and should be deleted. Further information is provided on NOAA Form 76-40 (see appendix).

T-12544 (completed) Keauhou Bay

The shoreline in this area is primarily composed of lava bluffs 30 feet high.

Keauhou Bay Light and Keauhou Bay Entrance Directional Light (both lights on the same structure) and the Kona Surf Hotel (approximate position scaled) are of landmark value. Further information is provided on NOAA Form 76-40 (see appendix).

T-12545 (completed) Keikiwaha Point

The shoreline in this area is composed of low lava bluffs approximately 10 feet high. There are no objects of landmark value.

T-12546 (completed) Keawekaheka Bay

The shoreline in this area is primarily composed of lava bluffs approximately 30 feet high.

There are no objects of landmark value.

T-11796 (completed) Kealakekua Bay

The shoreline in this area consists of low lava bluffs six to ten feet high with rocky beaches and a steep cliff (160 feet high) on the northeast side of the bay.

Napoopoo, Kahikolu Church Spire, 1913, Napoopoo Light-house, and Captain Cook's Monument are all of landmark value. Further information is provided on NOAA Form 76-40 (see appendix).

T-12547 (incomplete) Kealakekua Bay

No field edit was done on this manuscript.

T-11797 (incomplete) Honaunau Bay

No field edit was done on this manuscript.

T- 12548 (completed) Kauhako Bay

The shoreline in this area is composed of bluffs approximately 40-60 feet high with interspersed sandy beach. Buildings in the area indicated on the manuscript at Kauhako Bay are of landmark value. (building locations were not determined by the field editor or located by the compiler - see manuscript).

A church steeple located near Palianihi Point no longer exists and should be deleted.

Further information is provided on NOAA Form 76-40 (see appendix).

T-12549 (completed) Kauluoa Point

The shoreline in this area is composed of cliffs from 10 to 60 feet high interspersed with gravel, sand, and rocky beaches. There are no objects of landmark value.

T-12550 (incomplete) Puoa Point

The shoreline in this area is composed of lava bluffs approximately 40-60 feet high. There are no objects of landmark value. Field edit was completed to Puoa Point.

Respectfully submitted,

Steven J. Hollinshead

LTJG, NOAA

MANUSCRIPT REFERENCE INDEX

OPR-419

FIELD EDIT

	MANUSCRIPT NUMBER	REFERENCE PHOTO NUMBERS	REFERENCE DETATCHED POSITIONS
	T-12539 Mahailua Bay	63-S-7948 63-S-8060	
	T-12540 Makako Bay	63-8-7943 63-8-8063*	
)	T-12541 Kailua Bay	63-8-8063* 63-8-8094	
	T-13382 Honokohau Bay	69 - E - 9255 69 - E - 9254	
	Æ-12542⊃ Kailua Bay	63-s(c)-7913 63-s(c)-7915 63-s(c)-7917	Detatched Positions 10/05/72
	T=12543 Keauhou Bay	63-s-8067 63-s-8068	
	T-125lД Keauhou Bay	63-s(c)-8158 63-s(c)-8159 63-s(c)-8160	

*NOTE: Photo 63-S-8063 used on T-Sheets T-12540 and T-12541

REVIEW REPORT T-12542

SHORELINE

61 - GENERAL STATEMENT

Final review for this final Class III 1:5,000 scale inset map was accomplished at the Atlantic Marine Center in February 1987. The field inspection was performed in conjunction with the common smaller scale map, T-12541, which encompasses this inset map. 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 Quadrangles: Keahole Point, Hawaii, dated 1959, scale 1:24,000. Kailua, Hawaii, dated 1959, scale 1:24,000

64 - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison made with a registered copy of H-9334, RA-10-7-72, surveyed in 1972 did not reveal any significant differences.

65 - COMPARISON WITH NAUTICAL CHARTS

A comparison was made with NOS charts: . 19331, scale 1:5,000, 5th edition, July 9, 1977; 19327, scale 1:80,000, 8th edition, September 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.

Submitted by

Geny L. Hancock Jerry L. Hancock Final Reviewer

Approved for forwarding

Billy H. Barnes

Chief, Photogrammetric Section, AMC

Chief, Photogrammetric Production Sec.

Chief, Photogrammetry Branch

NOAA FORM 76-40 (8-74) The following objects OPR PROJECT NO. SLIDE HOTEL TO BE CHARTED Replaces C&GS Form 567 SPIRE CHARTING NAME TO BE DELETED TO BE REVISED DESCRIPTION
(Record reason for deletion of landmark or aid to navigation.
Show triangulation station names, where applicable, in parentheses (Kailua Kona Hilton Hotel 1913) HAVE X HAVE NOT REPORTING UNIT (Field Party, Ship or Office) Coastal Mapping Sect. PH-6401 Atlantic Marine Center Mokuaikaua Church Spire, NONTHOATHNG AND SOR LANDMARKS FOR CHARTS been inspected from seaward to determine their value as landmarks.

SURVEY NUMBER DATUM T-12542 STATE Hawaii 19 19 0 38 38 LATITUDE 01d Hawaiian U.S. DEPARTMENT OF COMMERCE 05.5033.854 D.M. Meters LOCALITY Hawaii Island POSITION 155 155 0 LONGITUDE 59 59 D.P. Meters 36.04 47.601 63(S)8148 63(S)8152 Sept 1,1963 Sept. 1, 1963 METHOD AND DATE OF LOCATION (See Instructions on reverse side) OFFICE INISTRATION HYDROGRAPHIC PARTY
GEODETIC PARTY
PHOTO FIELD PARTY
COMPILATION ACTIVITY
June 1974 OUALITY CONTROL REVIEW GRP.
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NOAA FORM 75-40 (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:1975-0-665-080/1155

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NOAA FORM 76-40 (8-74)



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NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. PH-6402 T-12542

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

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