NOAA FORM 76-35 (6-80)

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

DESCRIPTIVE REPORT

THIS MAP EDITION WILL NO	T BE LIETO EDITED
Map No.	Edition No.
TP-01300	1
Job No.	
CM-8317	
Map Classification	
CLASS III FINAL	
Type of Survey	
SHORELINE	
LOCALIT	Y
State	
HAWAII	
General Locality	
BARBERS POINT TO MAKAPUU POINT	!
Locality	
KOKO HEAD	
	<u> </u>
19 86 TO 19	?
-	
REGISTERED IN A	RCHIVES
	,
DATE	

					
NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	TYPE OF SURVEY	SURVEY TP01300			
	MC ORIGINAL	MAP EDITION NO. ()			
DESCRIPTIVE REPORT - DATA RECORD	☐ RESURVEY	MAP CLASS III Final			
	REVISED	јов СМ Р Ж <u>. 8317</u>			
PHOTOGRAMMETRIC OFFICE	LAST PRECEED	ING MAP EDITION			
Norfolk, VA Coastal Mapping Unit, Atlantic Marine Center	TYPE OF SURVEY	JOB PH-			
OFFICER-IN-CHARGE	ORIGINAL	MAP CLASS			
OFFICENIN-CHANGE	RESURVEY	SURVEY DATES:			
C. Dale North, Jr.	REVISED	19TO 19			
I. INSTRUCTIONS DATED					
1. OFFICE	2.	FIELD			
Aerotriangulation - April 3, 1987 Compilation - October 2, 1987	Control - May 17,	1987			
	ĺ				
	<u> </u>				
II. DATUMS	OTHER (Specify)				
1. HORIZONTAL: 1927 NORTH AMERICAN	Old Hawaiian Da	tum			
X MEAN HIGH-WATER	OTHER (Specify)				
2. VERTICAL: MEAN LOW-WATER	•				
MEAN LOWER LOW-WATER MEAN SEA LEVEL					
3. MAP PROJECTION	4.	GRID(S)			
Transverse Mercator Projection	STATE	ZONE			
	Hawaii 3				
5. SCALE 1:10,000	STATE	ZONE			
III. HISTORY OF OFFICE OPERATIONS	<u> </u>				
OPERATIONS	NAME	DATE			
1. AEROTRIANGULATION BY METHOD: ANALYTIC LANDMARKS AND AIDS BY	B. Thornton	April 198			
1	B. Thornton	April 198			
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Kongsburg Plotter CHECKED BY	B. Thornton D. Norman	April 198 April 198			
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	A. Grimes	Dec 1987			
COMPILATION CHECKED BY	F. Mauldin	Dec 1987			
INSTRUMENT: WILD B-8 CONTOURS BY	NA				
SCALE: 1:10,000 CHECKED BY	NA Contract	Dec 1987			
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY	A. Grimes F. Mauldin	Jan 1988			
CONTOURS BY	NA				
метнор: Smooth Draft снескед ву	NA				
SCALE: 1:10,000 HYDRO SUPPORT DATA BY	A. Grimes	Dec 1987			
CHECKED BY	F. Mauldin	Jan 1988			
5. OFFICE INSPECTION PRIOR TO XXXXXXXXXXXXXXIII Revieway	F. Mauldin	Jan 1988			
6. APPLICATION OF FIELD EDIT DATA CHECKED BY	NA NA				
7. COMPILATION SECTION REVIEW Class III BY	F. Mauldin	Jan 1988			
8. FINAL REVIEW Class III BY	7 0 11-1 7	Mar 1989			
	L.O. Neterer, Jr.				
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	L.O. Neterer, Jr. L.O. Neterer, Jr. P. Dampsey	June 1989			

SUPERSEDES FORM CAGS 181 SERIES

NOAA FORM 76-36 A

NOAA FORM 76-36B (3-72)		TP-0130	O NATIONAL OCE	ANIC AND ATMOS	'ARTMENT OF CO PHERIC ADMINIS' IATIONAL OCEAN	TRATIO
<u>ė</u>	COM	PILATION	SOURCES	.`	ATTORAC OCEAN	SURVE
I. COMPILATION PHOTOGRAPHY			- 			
CAMERA(S) Wild RC 10(B) (B=152.	.21mm)	TYPES	F PHOTOGRAPHY LEGEND	TII	ME REFERENCE	·
TIDE STAGE REFERENCE PREDICTED TIDES REFERENCE STATION RECORD TIDE CONTROLLED PHOTOGRA	(C) COLO (P) PANC (I) INFR	HROMATIC	zone 7th Hawaii-A MERIDIAN 150°	leutian X st	ANDAR YLIGH	
NUMBER AND TYPE	DATE	TIME	SCALE	s	TAGE OF TIDE	
86B(C)C099-C100 86B(C)C103-C105	03-09-86 03-09-86	03:35 03:43	1:30,000	ľ	above MLLW above MLLW	
				Mean Tid	e Tange = l	.5 ft
REMARKS Stage öf tide for all r staff at Honolulu, Hawa		s based	on reference	station rec	ords for th	e
3. SOURCE OF MEAN LOW-WATER There was no mean low				map.		
4. CONTEMPORARY HYDROGRAPA	·					
SURVEY NUMBER DATE(S)	SURVEY COP	Y USED S	URVEY NUMBER	DATE(S)	SURVEY COPY	USED
5. FINAL JUNCTIONS				<u> </u>		
	No survey	S	outh No survey	WES'	01302 (1:5,	000)
REMARKS	*	1		I		

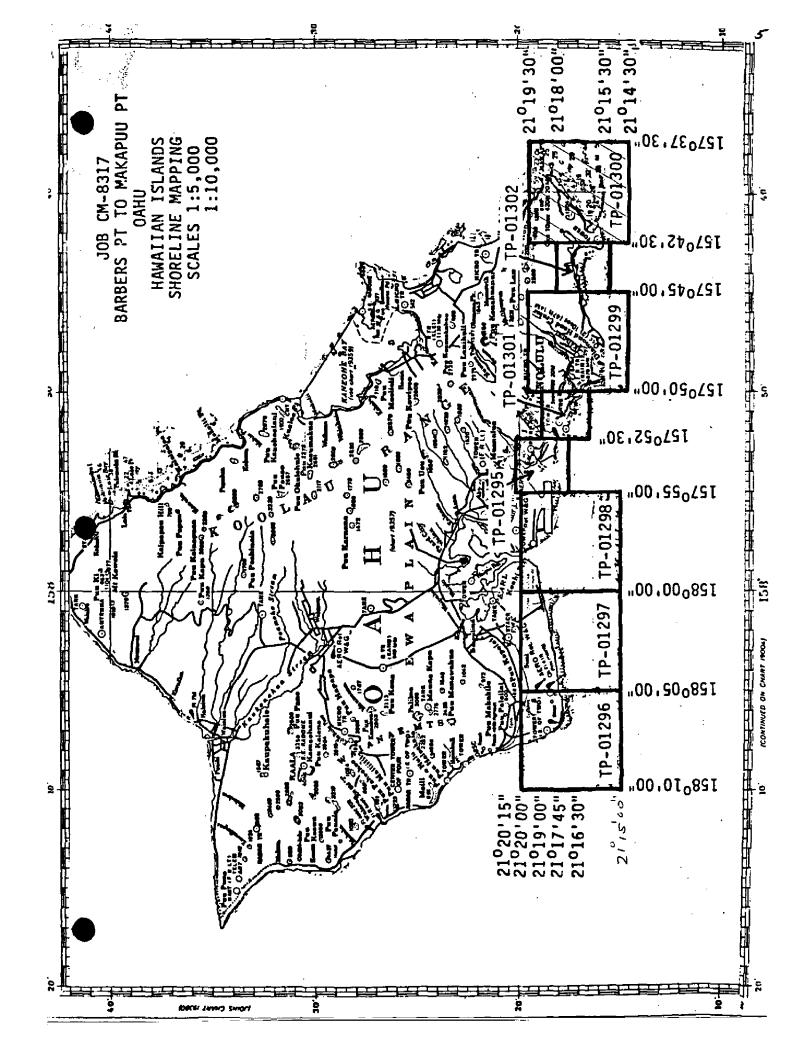
U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

TP-01300

_	_	HISTORY OF FIELD	OPERATIONS		TE OCEAN JORVE.
I. X FIELD INSP	ECTION OPER	ATION FIEL	D EDIT OPERATION		
	OPI	RATION	N	AME	DATE
[, CHIEF OF FIEL	D PARTY		J. Eredrick		Nov 1986
		RECOVERED BY	M. McEwen	<u> </u>	Nov 1986
2. HORIZONTAL C	CONTROL	ESTABLISHED BY	NA M, McEwen		Nov 1986
— 		RECOVERED BY	NA NA		NOV 1300
3. VERTICAL CON	NTROL	ESTABLISHED BY	NA ·		
		PRE-MARKED OR IDENTIFIED BY	NA		
	RE	COVERED (Triangulation Stations) BY	NA		
4. LANDMARKS AL	ND	LOCATED (Field Methods) BY	NA		
AIDS TO NAVIG	ATION	IDENTIFIED BY	NA		
		TYPE OF INVESTIGATION	1		
5. GEOGRAPHIC NINVESTIGATION		COMPLETE	Ì		
111 23 1 10 4 1 10	•	SPECIFIC NAMES ONLY TO INVESTIGATION			
6. PHOTO INSPEC			NA NA		
7. BOUNDARIES A		SURVEYED OR IDENTIFIED BY	NA NA		
II. SOURCE DATA		,] NA	 	<u>/</u>
1. HORIZONTAL C	ONTROL IDE	NTIFIED	2. VERTICAL CON	TROL IDENTIFIED	
Photo ide	entified	•	None		
PHOTO NUMBER		STATION NAME	PHOTO NUMBER	STATION DES	IGNATION
86B (C) C099 86B (C) C097 86B (C) C099	Kuapa,	Point Light, 1927 1928 Point RM3, 1872			
None A. LANDMARKS A	· 	OR of details) AVIGATION IDENTIFIED			
PHOTO NUMBER		OBJECT NAME	PHOTO NUMBER	OBJECT	NAME
86B(C)C099	MAKAPUU	POINT LIGHT, 1927			
5. GEOGRAPHIC N 7. SUPPLEMENTA None		REPORT NONE	6. BOUNDARY AND) LIMITS: REPOR	RT X NONE
8. OTHER FIELD 3 Forms C&G 2 Forms 76-8 4 Forms 76-8	\$ 152 36	tch books, etc. DO NOT list data submi	tied to the Geodesy Di	vision)	

U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NOAA FORM 76-36D (3-72)TP-01300 RECORD OF SURVEY USE MANUSCRIPT COPIES COMPILATION STAGES DATE MANUSCRIPT FORWARDED DATE MARINE CHARTS HYDRO SUPPORT DATA COMPILED REMARKS Jan 1988 Compilation Complete Class III Manuscript Final Review Mar 1989 Class III Final Map WEA 1582 may 1989 II. LANDMARKS AND AIDS TO NAVIGATION 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH pages NUMBER CHART LETTER DATE REMARKS NUMBER ASSIGNED FORWARDED May 1955 Charted landmarks and aids to navigation form 1 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. $\boxed{\chi}$ BRIDGING PHOTOGRAPHS; $\boxed{\chi}$ DUPLICATE BRIDGING REPORT; $\boxed{\chi}$ COMPUTER READOUTS. 2. X CONTROL STATION IDENTIFICATION CARDS: FORM NOS 567 SUBMITTED BY FIELD PARTIES.

4. 🔲 D	COUNT FOR EXCEPTIONS:	rephic Names Report) AS LISTE CENTER. DATE FORWARDE I be completed each time a new		
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY	
SECOND	TP(2) PH	REVISED RESUR	₹VEY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS	
			□a. □m. □tv. □v.	FINAL
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY	
THIRD	TP(3) PH	REVISED RESUR	VEY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS	
				FINAL
	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY	
FOURTH	TP (4) PH	REVISED RESÚR	VĖY
EDITION	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS	
	<u> </u>		□ □ □ □ □ · · □ · · · □ · · · · □ ·	FINAL



SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

TP-01300

This 1:10,000 scale map is one of eight maps in Project CM-8317, Barbers Point to Makapuu Point, Oahu, Hawaii. The project extends from longitude 157 37' 30" to longitude 158 10' 00" along the southern coastline of the island of Oahu.

Photographic coverage was provided in March 1986 with color film at 1:30,000 scale using a Wild RC 8 "B" camera (focal length 152.21 millimeters).

Field work prior to compilation was accomplished during November 1986. It consisted of photoidentification of the horizontal control stations to satisfy aerotriangulation requirements.

Analytic aerotriangulation was performed at the Washington Science Center in April 1987.

Compilation was performed at the Atlantic Marine Center, from office interpretation of the 1:30,000 scale color photography in January 1988.

Final review was accomplished at the Atlantic Marine Center in March 1989. A Chart Maintenance Print for the Marine Chart Branch and Notes to the Hydrographer Print for the Hydrographic Branch were prepared and forwarded.

This map is to be registered as a Class III, Final Map.

The original base manuscript and all pertinent data were forwarded to the Washington Science Center for final registration.

AEROTRIANGULATION REPORT

CM-8317

BARBERS PT. TO MAKAPUU PT.

OAHU, HAWAII

APRIL 1987

21. AREA COVERED



23. ADEQUACY OF CONTROL

The control for this project is adequate for the job and meets the National Ocean Service's requirements. A listing of closures to control is attached.

24. SUPPLEMENTAL DATA

USGS topographic quadrangles were used to obtain vertical control for bridging.

25. PHOTOGRAPHY

The coverage, overlap, and quality of the photographs were adequate for the job.

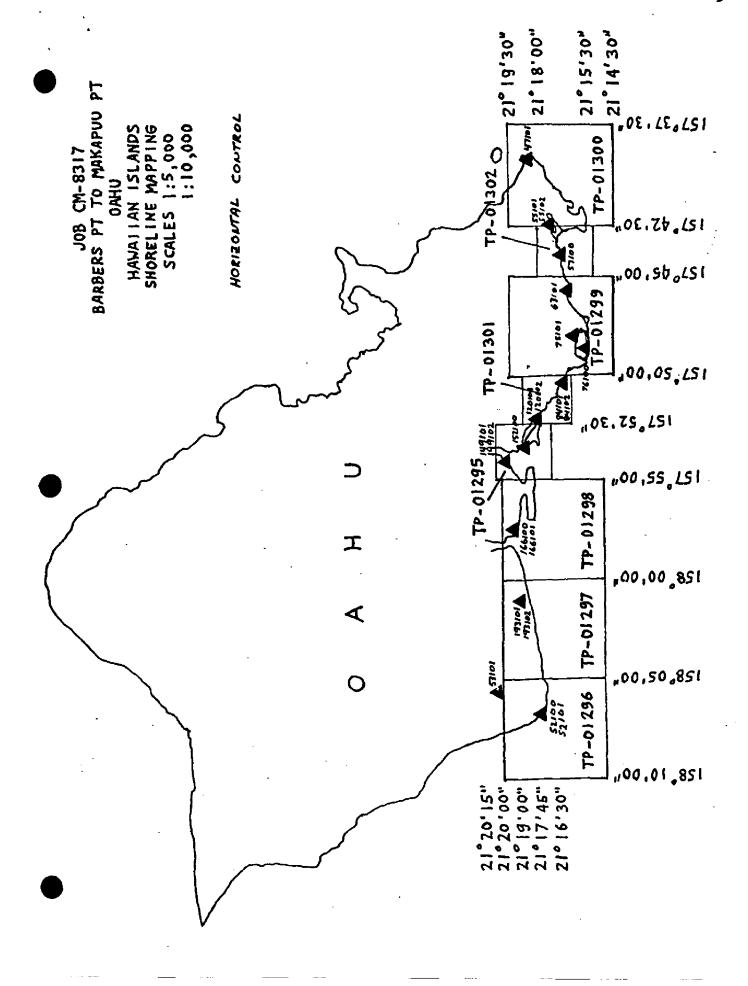
Submitted by:

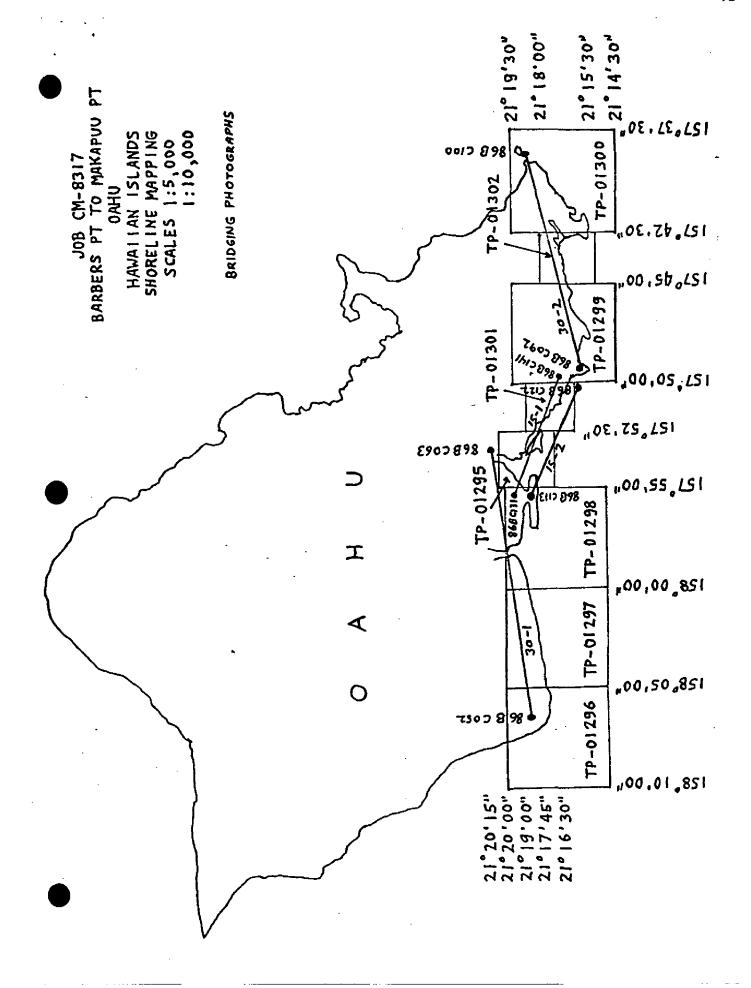
Brian Thornton

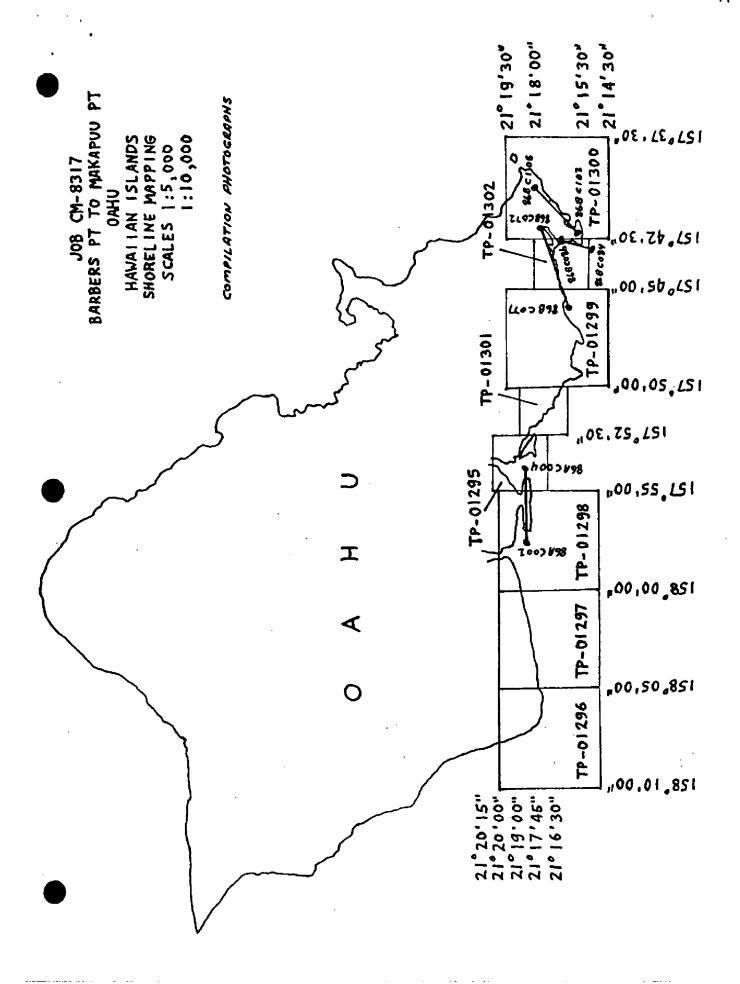
Approved and Forwarded:

Don O. Norman

Chief, Aerotriangulation Unit







FIT TO CONTROL

△ • Control point held in adjustment

☐ = Tie point held in adjustment

STRIP #30-1

	STATION NAME	POINT NO.	VALUES IN FEET	
			x	Y
Λ	Barbers Pt. Lighthouse New, 1933 Barbers Pt. Lighthouse Sub	52100	-0.9	-1.6
	Pt. 1A	52101	-1.0	0.6
Δ	State Survey 9-3, 1969 Sub Pt. 1B Barbers Pt. NAS Base Control	53101	1.1	-1.1
	Twr. Beacon	226110	-2.2	0.2
	30188, 1973 Sub Pt. 2A	193101	-4.6	-5.2
Δ	30188, 1973 Sub Pt. 2B	193102	-1.1	-1.7
	Ft. Kamehameha Flagstaff, 1925 Ft. Kamehameha Flagstaff Sub	166100	2.0	1.0
	Pt. 3A Pearl Harbor Water Tank B,	166101	1.3	3.4
	1925	188110	-1.4	-0.2
	Pearl Harbor Escape Training Tower	181110/	-0.7	4.7
	Honolulu Inter. Airport Control Twr. Beacon '64	158110	-1.0	0
	Honolulu Moanalua Water Tank,			•
	1957	183110	-1.7	2.2
	Aliamanu Honolulu Board of	104140		
٨	Water Supply Tank, '69 State Survey 1-13, 1969 Sub	184110	-0.7	-0.7
	Pt. 4A	149101	1.7	0.4
Δ	State Survey 1-13, 1969 Sub Pt. 4B	149102	-2.0	-1.6
	STRIP #30-2	-		
Δ	State Survey 3-5, 1969 Sub		·	
	Pt. 7A	75101	2.8	-2.0
	Diamond Head Lighthouse, 1925	76100	3.8	-8.5
	Honolulu Sac. Heart Acad. Cross	89110	-3.0	1.7
	Tie from Strip #15-1	140801	-3.2	2.5
	Tie from Strip #15-1	140802	-2.0	2.5
	Tie from Strip #15-1	140803	-1.8	2.6

△ State Survey 3~6, 1969			
Sub Pt. 8A	63101	2.8	0
NIU Water Tank, 1963	57100	-2.4	-1.8
∧ Kuapa, 1928 Sub Pt. 9A	55101	-2.8	0.8
Kuapa, 1928 Sub Pt. 9B	55102	-4.7	-3.0
△ Makapuu Pt. 1872 RM3 Sub			
Pt. 10A	47101	1.6	0.3
Makapuu Pt. 1872 RM3	47110	3.5	-1.2
Makapuu Pt. Light, 1927	47120	4.1	-1,5
STRIP #15-1			
☐ Tie from Strip #30-1	63801	0.1	-0.8
· -	63802	1.4	-1.0
n	63803	1.0	-1.8
∑ State Survey 1-13 Sub Pt. 4A	149101	-0.3	0,7
A State Survey 1-13 Sub Bh AD	140102	<u> </u>	



RATIO VALUES CM-8317

1:30,000-scale color bridging photographs:

86-B-C052 to C063 Ratio 3.118 86-B-C092 to C100 Ratio 3.132

1:15,000-scale color bridging photographs:

86-B-C131 to C141 Ratio 3.112 86-B-C113 to C122 Ratio 3.104

1:30,000-scale color compilation photographs:

86-A-C002 to C004 Ratio 3.100

1:15,000-scale color compilation photographs:

86-B-C072 to C077 Ratio 3.100 86-B-C084 to C086 Ratio 3.100

U.S. DEPARTMENT OF COMMERCE	ing Unit, Norfolk,VA	REMARKS												•	DATE	DATE 1-7-88	
	ORIGINATING ACTIVITY Coastal Mapping	GEOGRAPHIC POSITION φ <i>Latitude</i> λ <i>Longitude</i>		21° 17' 32.789" ~ 157° 42' 28.173" ~	21° 18' 41.093"	21° 18' 41.463" ~ 157° 39' 20.196 _											OBSOLETE.
THE CONTROL RECORD	Datum	ATES IN FEET HAWALL 3	Φ «	Φ Κ	ф к	\$ K	Φ «	. +	χ ,	γ φ	•	•	γ φ		ATION CHECKED BY	CHECKED BY 1Uldin OTTING CHECKED BY	76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT

TP-01300

31. DELINEATION:

Delineation was accomplished using Wild B-8 stereo instrument compilation methods. Instrument compilation was used to delineate shoreline, alongshore, and interior detail based upon office interpretation of the 1:30,000 scale bridging/compilation color photographs.

All photographs used to compile this map are listed on NOAA form 76-36B. The photography was adequate. There were no mean lower low water infrared photographs for this project.

32. CONTROL:

The horizontal control was adequate. Refer to the Aerotriangulation Report, dated April 1987.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. Drainage was compiled from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The mean high water line was compiled from office interpretation of the bridging/compilation photographs. The shoreline compiled was the visible line of contact between land features and the water surface at the time of photography.

There was no mean lower low water line compiled on this map.

36. OFFSHORE DETAILS:

Offshore detail was compiled by instrument methods using the 1:30,000 scale bridging/compilation color photographs as described in item #31.

TP-01300

37. LANDMARKS AND AIDS:

There are two charted landmarks and seven charted aids to navigation within the limits of this map. Among these, two landmarks and five aids were located/verified photogrammetrically.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Refer to the Data Record Form 76-36B, item 5, of the Descriptive Report.

40. HORIZONTAL AND VERTICAL ACCURACY:

See item #32.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with the following U.S. Geological Survey Quadrangles:

Koko Head, Hawaii; dated 1983; scale 1:24,000

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with the following National Ocean Service charts:

19013; 13th edition; dated February 12, 1983; scale 1:675,000 19357; 17th edition; dated October 15, 1983; scale 1:80,000 19358; 16th edition; dated October 20, 1984; scale 1:20,000

TP-01300

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert L. Grimes III Cartographic Technician December 23, 1987

Approved:

James L. Byrd, Jr.

Chief, Coastal Mapping Unit

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8317 (Oahu, Hawaii)

TP-01300

Halona Point

Hanauma Bay

Hawaii Kai

Kahauloa

Kaihuokapuaa

Kaiwi Channel

Kaloko

Kaohikaipu Island

Koko Crater

Koko Head

Kuapa Pond

Makapuu Head

Makapuu Point

Oahu

Pacific Ocean

Paioluolu Point

Palea Point

Approved:

Charles E. Harrington

Charles & Having

Chief Geographer

Nautical Charting Division

REVIEW REPORT SHORELINE

TP-01300

61. GENERAL STATEMENT

See Summary included with this Descriptive Report.

The Office Instructions were executed as indicated in paragraph 2.1 with reference to the Old Hawaiian horizontal datum. Reference to the horizontal North American Datum 1927 in paragraphs 4.5 and 4.6 of the Aerotriangulation Instructions and paragraphs 2.6 and 5.2.3 of the Office Instructions were inapplicable and were ignored.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with the following USGS quadrangle:

KOKO HEAD, HAWAII, dated 1983, scale 1:24,000

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

There are no contemporary hydrographic surveys within the limits of this map.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with the following nautical charts:

19013, 13th edition, dated February 12, 1983, scale 1:675,000

19357, 17th edition, dated October 15, 1983, scale 1:80,000

19362, 10th edition, dated November 10, 1982, scale 1:20,000.

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:

Lowell O. Neterer, Jr.

Final Reviewer March 1989

Approved for Forwarding:

Bill & Barn_

Billy H. Barnes

Chief, Quality Assurance Group

Approved:

Chief, Photogrammetric Production Section

Chief, Photogrammetry Branch

CARTOGRAPHIC FEATURES OF POSSIBLE LANDMARK VALUE LISTING

Page 1 of 1

PROJECT: CM-8317

MAP NUMBER (Scale); Locality: TP-01300; 1:10,000; Barbers Point to Makapuu Point, Oahu, Hawaii

	GEODETIC DATUM: Old Hawaiian Datum
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A:	
in December	

HAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.		

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 Review.

CHART	DATE	CARTOGRAPHER	REMARKS
İ			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
+			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
		· -	77
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
		·	Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			<u>_</u>
<u>. I</u>			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
	·		
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
		-	Diawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			
			
		 +	