

TP-01296

TP-01296

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 NOT BE FIELD EDITED

<i>Map No.</i> TP-01296	<i>Edition No.</i> 1
<i>Job No.</i> CM-8317	
<i>Map Classification</i> CLASS III FINAL	
<i>Type of Survey</i> SHORELINE	
LOCALITY	
<i>State</i> HAWAII	
<i>General Locality</i> BARBERS POINT TO MAKAPUU POINT	
<i>Locality</i> BARBERS POINT	
1986 TO 19	
REGISTERED IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY ☒ ORIGINAL ☐ RESURVEY ☐ REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit Atlantic Marine Center, Norfolk, VA OFFICER-IN-CHARGE C. Dale North, Jr.		SURVEY TP. <u>01296</u> MAP EDITION NO. (1) MAP CLASS III Final JOB <u>CM-8317</u>	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Unit Atlantic Marine Center, Norfolk, VA OFFICER-IN-CHARGE C. Dale North, Jr.		LAST PRECEDING MAP EDITION TYPE OF SURVEY ☐ ORIGINAL ☐ RESURVEY ☐ REVISED JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Aerotriangulation April 3, 1987 Compilation October 2, 1987		Control May 17, 1987	
II. DATUMS			
1. HORIZONTAL: ☒ 1927 NORTH AMERICAN		OTHER (Specify) Old Hawaiian Datum	
2. VERTICAL: ☒ MEAN HIGH-WATER ☐ MEAN LOW-WATER ☐ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Transverse Mercator Projection		4. GRID(S) STATE ZONE Hawaii 3	
5. SCALE 1:10,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY		B. Thornton	Apr. 1987
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Kongsburg Plotter CHECKED BY		B. Thornton D. Norman	Apr. 1987 Apr. 1987
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild B-8 SCALE: 1:10,000 CONTOURS BY CHECKED BY		R. Kravitz F. Mauldin N.A. N.A.	Nov. 1987 Dec. 1987
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smooth Drafted CONTOURS BY CHECKED BY SCALE: 1:10,000 HYDRO SUPPORT DATA BY CHECKED BY		R. Kravitz F. Mauldin N.A. N.A. R. Kravitz F. Mauldin	Nov. 1987 Dec. 1987
5. OFFICE INSPECTION PRIOR TO Final Review BY		F. Mauldin	Dec. 1987
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		N.A. N.A.	
7. COMPILATION SECTION REVIEW Class III BY		F. Mauldin	Dec. 1987
8. FINAL REVIEW Class III BY		L. O. Neterer, Jr.	Jan. 1989
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		L. O. Neterer, Jr.	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		P. Dempsey	June 1989
11. MAP REGISTERED - COASTAL SURVEY SECTION BY			

TP-01296

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 8 (B) (B = 152.21mm)		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE ZONE 7th Hawaii-Aluetian MERIDIAN 150° W	
TIDE STAGE REFERENCE ☐ PREDICTED TIDES ☒ REFERENCE STATION RECORDS ☐ TIDE CONTROLLED PHOTOGRAPHY				☒ STANDARD ☐ DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
86 B(C) C052-C053	03-09-86	09:31	1:30,000	0.3 ft. above MLLW	
				Mean Tide Range = 1.5 ft.	

REMARKS

Stage of tide for all photographs was based on reference station records for the staff at Honolulu, Hawaii.

2. SOURCE OF MEAN HIGH-WATER LINE:

The Mean High-Water Line was compiled from office interpretation of the above listed compilation/bridging photographs using stereo instrument methods.

3. SOURCE OF ~~MEAN HIGH-WATER LINE~~ OR MEAN LOWER LOW-WATER LINE:

There was no Mean Lower Low-Water Line compiled on this map.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

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

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
No Survey	TP-01297	No Survey	No Survey

REMARKS

TP-01296

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD ~~INSPECTION~~ OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	G. Fredrick	Nov. 1986
2. HORIZONTAL CONTROL	RECOVERED BY M. McEwen	Nov. 1986
	ESTABLISHED BY N.A.	
	PRE-MARKED OR IDENTIFIED BY M. McEwen	Nov. 1986
3. VERTICAL CONTROL	RECOVERED BY N.A.	
	ESTABLISHED BY N.A.	
	PRE-MARKED OR IDENTIFIED BY N.A.	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY N.A.	
	LOCATED (Field Methods) BY N.A.	
	IDENTIFIED BY N.A.	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY N.A.	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

Photo identified

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
86B(C)C052	BARBERS POINT LIGHTHOUSE, 1933		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
86B(C)C052	BARBERS POINT LIGHT		

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

1 Form C&GS 152 3 Forms 75-63
 2 Forms 76-86
 2 Forms 75-52

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete	Dec. 1987	Class III Manuscript		
Final Review	Jan. 1989	Class III Final Map	May 1989	May 1989

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER Pages	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		May 1989	Charted landmarks and aids to navigation form

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

JOB CM-8317

BARBERS PT TO MAKAPUU PT

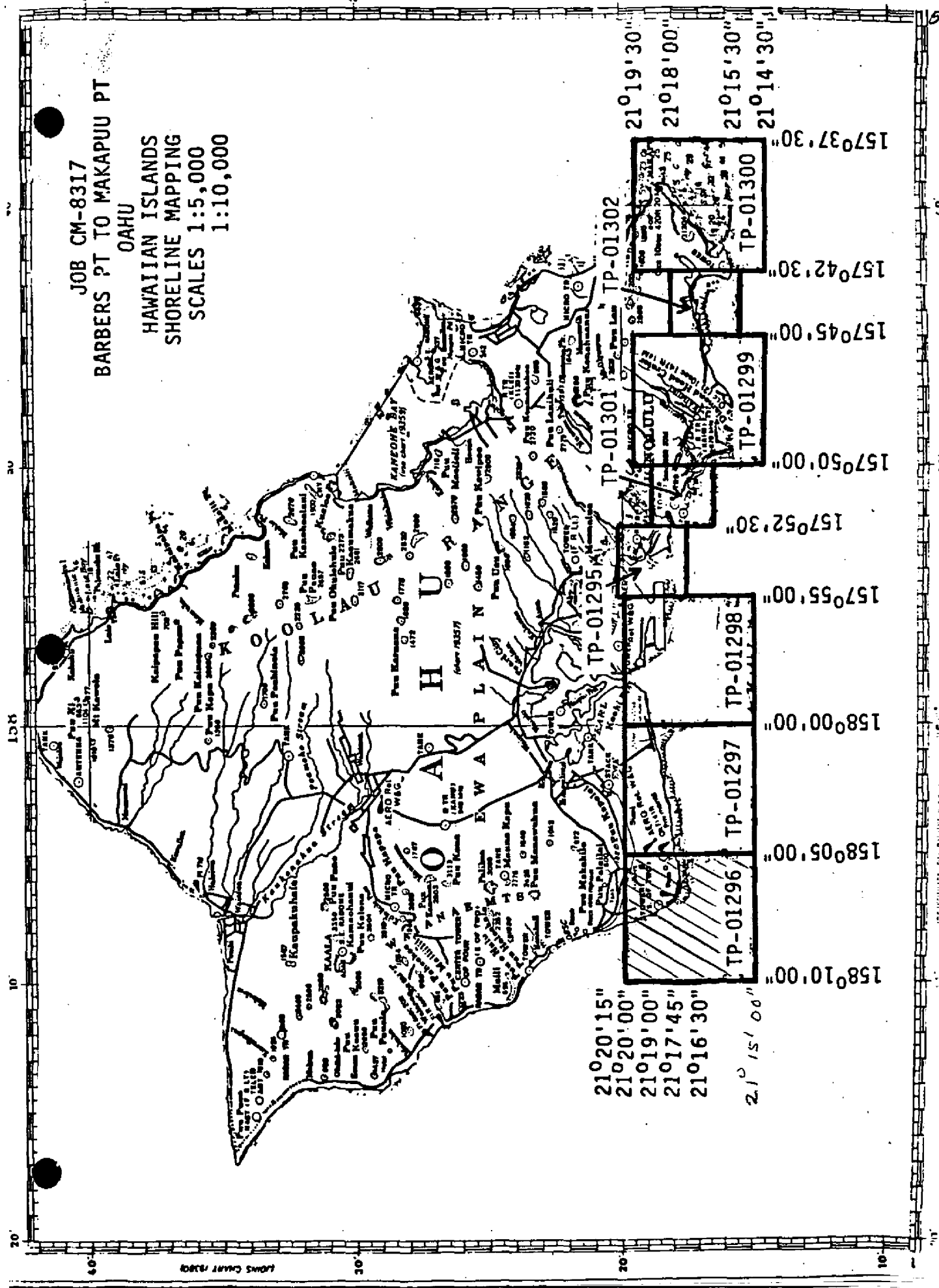
OAHU

HAWAIIAN ISLANDS

SHORELINE MAPPING

SCALE 1:5,000

1:10,000



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-01296

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 December 1987.

Final review was accomplished at the Atlantic Marine Center in January 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

This shoreline mapping project covers the southern part of the island of Oahu, Hawaii, from Barbers Pt. to Makapuu Pt. There are five sheets at 1:10,000 scale and three sheets at 1:5,000 scale that cover the job area. The sheets are numbered TP-01295 through TP-01302.

22. METHOD

Two strips of 1:30,000-scale photographs: 86-B-C052 to C063, 86-B-C092 to C100, and two strips of 1:15,000-scale photographs: 86-B-C113 to C122, 86-B-C131 to C141 were bridged by analytical aerotriangulation methods and adjusted to ground using photo-identified field control. Office identified intersection stations were used as checks.

Compilation points were placed on four additional strips of photographs not used for bridging:

86-A-C002 to C004	1:30,000 scale
86-B-C103 to C105	1:30,000 scale
86-B-C072 to C077	1:15,000 scale
86-B-C084 to C086	1:15,000 scale

Tie points were used to ensure adequate junctions of all strips and were used as supplemental control.

Ratio values were determined for the bridging, and where needed, compilation photographs.

A magnetic tape was generated for plotting base manuscripts on the Kongsburg plotter. Bridged points were based on the Hawaiian Islands, Zone 3 Coordinate System and referenced to the Transverse Mercator projection.

Two each of the eight base manuscripts have been ruled as per Aerotriangulation Instructions.

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.

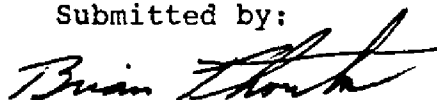
24. SUPPLEMENTAL DATA

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:

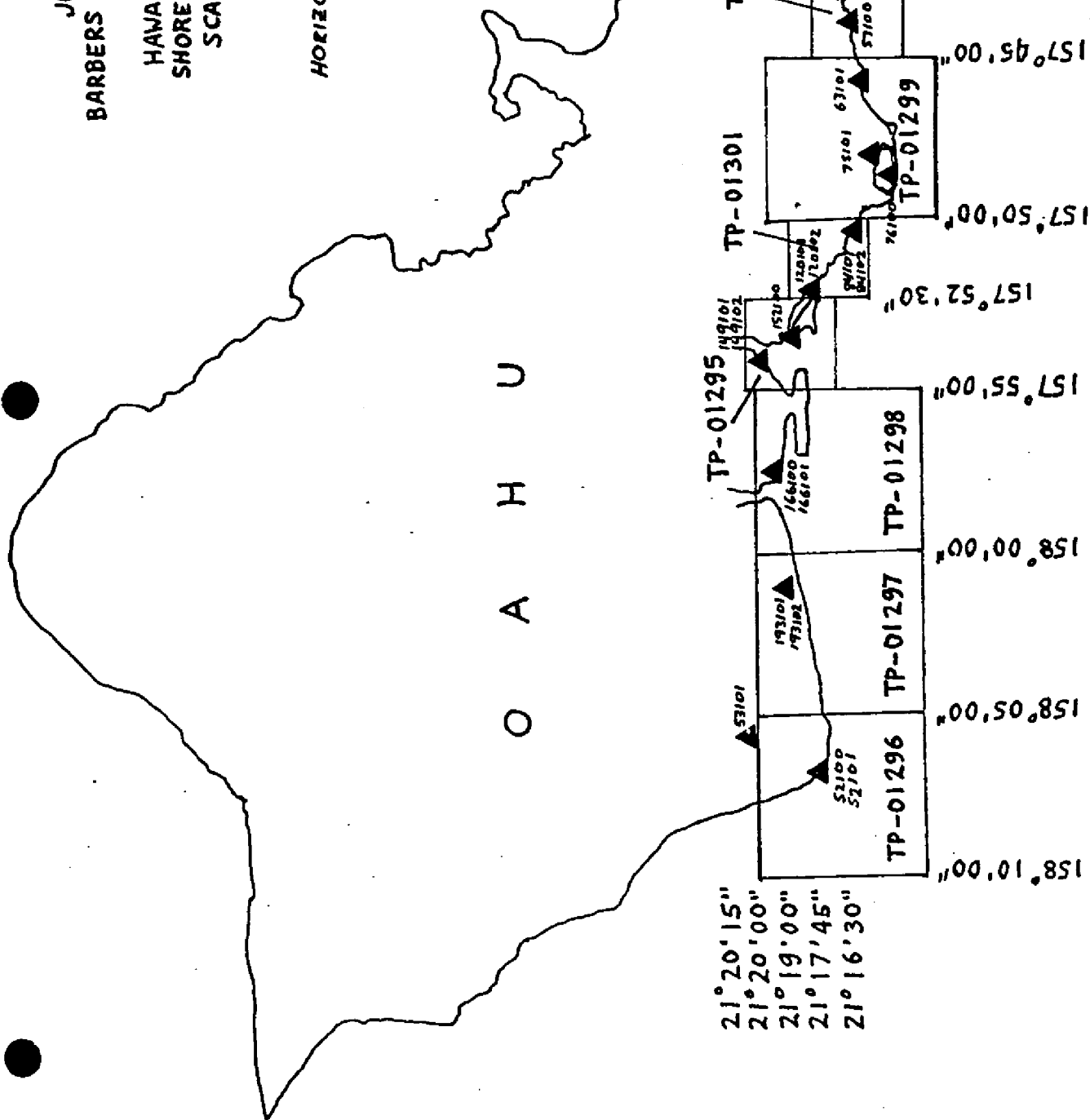


Don O. Norman
Chief, Aerotriangulation Unit

JOB CM-8317
 BARBERS PT TO MAKAPUU PT

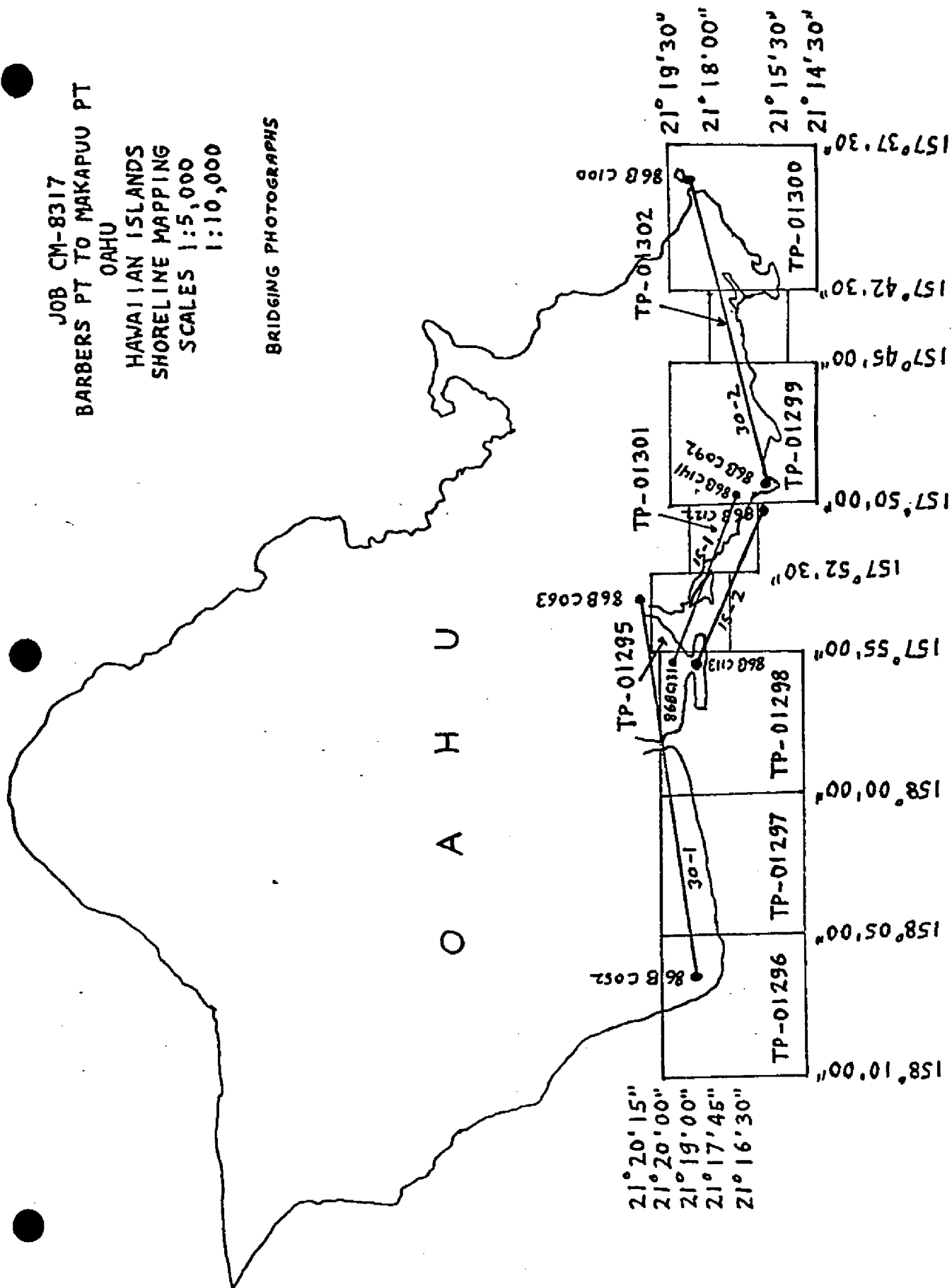
OAHU
 HAWAIIAN ISLANDS
 SHORELINE MAPPING
 SCALES 1:5,000
 1:10,000

HORIZONTAL CONTROL



OAHU
HAWAIIAN ISLANDS
SHORELINE MAPPING
SCALES 1:5,000
1:10,000

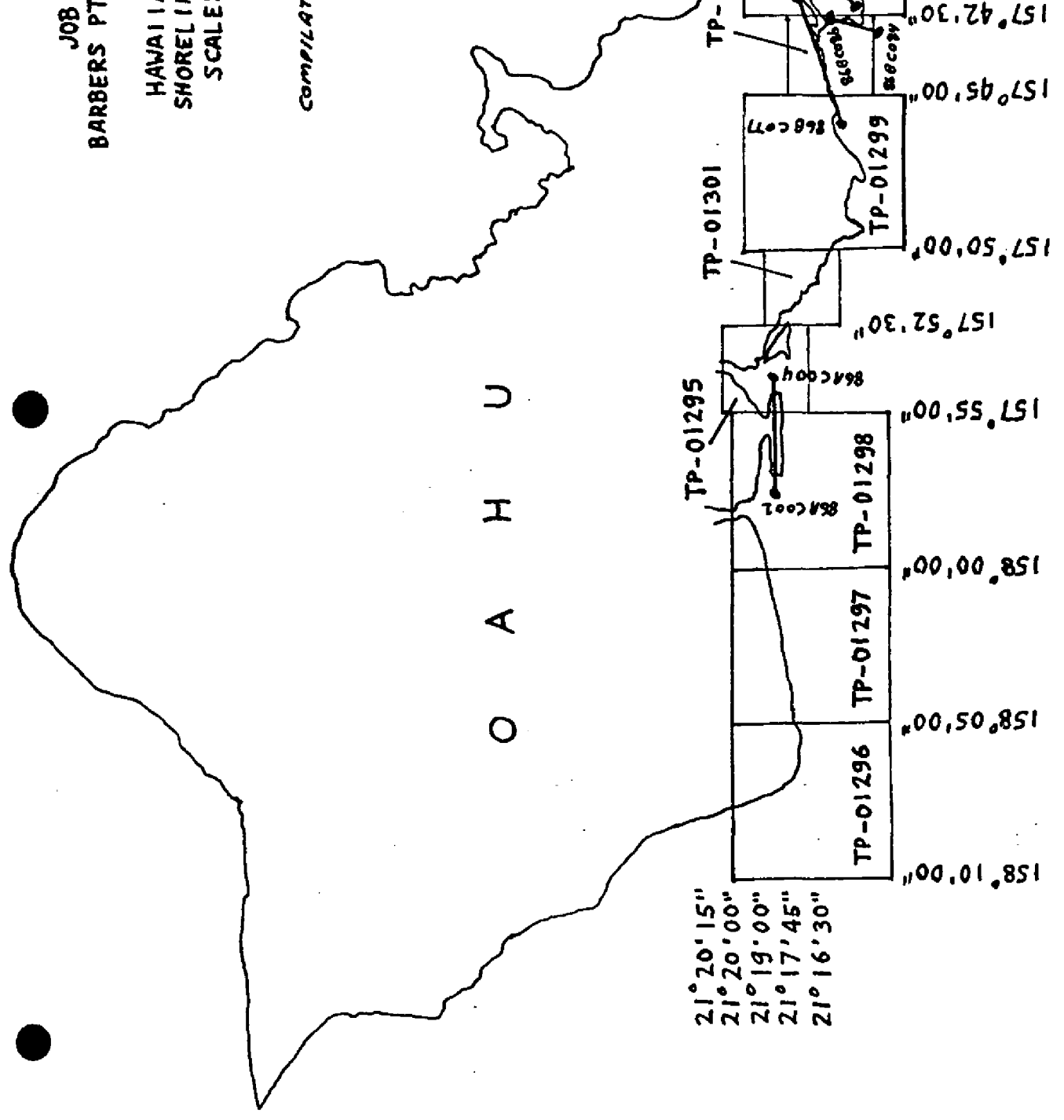
BRIDGING PHOTOGRAPHS



JOB CM-8317
 BARBERS PT TO MAKAPUU PT
 OAHU

HAWAIIAN ISLANDS
 SHORELINE MAPPING
 SCALES 1:5,000
 1:10,000

COMPILATION PHOTOGRAPHS



FIT TO CONTROL

△ = Control point held in adjustment

□ = Tie point held in adjustment

STRIP #30-1

<u>STATION NAME</u>	<u>POINT NO.</u>	<u>VALUES IN FEET</u>	
		X	Y
Barbers Pt. Lighthouse New, 1933	52100	-0.9	-1.6
△ Barbers Pt. Lighthouse Sub			
Pt. 1A	52101	-1.0	0.6
△ State Survey 9-3, 1969 Sub			
Pt. 1B	53101	1.1	-1.1
Barbers Pt. NAS Base Control			
Twr. Beacon	226110	-2.2	0.2
30188, 1973 Sub Pt. 2A	193101	-4.6	-5.2
△ 30188, 1973 Sub Pt. 2B	193102	-1.1	-1.7
Ft. Kamehameha Flagstaff, 1925	166100	2.0	1.0
Ft. Kamehameha Flagstaff Sub			
Pt. 3A	166101	1.3	3.4
Pearl Harbor Water Tank B,			
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			
Water Supply Tank, '69	184110	-0.7	-0.7
△ State Survey 1-13, 1969 Sub			
Pt. 4A	149101	1.7	0.4
△ State Survey 1-13, 1969 Sub			
Pt. 4B	149102	-2.0	-1.6

STRIP #30-2

△ 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

2

△ 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
	63803	1.0	-1.8
△ State Survey 1-13 Sub Pt. 4A	149101	-0.3	0.7
△ State Survey 1-13 Sub Pt. 4B	149102	-0.2	2.4
△ Sand Island S. Base, 1927			
Sub Pt. 5A	120101	-0.7	1.0
△ Sand Island S. Base, 1927			
Sub Pt. 5B	120102	0	-1.7
△ DeRussy, 1927 Sub Pt. 6A	84101	1.2	0.7
△ Sub Pt. 6B	84102	-1.1	-0.5

STRIP #15-2

Tie from Strip #15-1	113801	-0.1	0.7
□ Tie from Strip #15-1	113802	-0.1	0.3
Sand Island S. Base, '27			
Sub Pt. 5A	120101	-2.4	-0.4
△ Sand Island S. Base, '27			
Sub Pt. 5B	120102	0.6	-1.5
Honolulu Kewald Basin KGU Twr.	118115	-0.5	0
Tie from Strip #15-1	118801	-2.0	2.0
Tie from Strip #15-1	118802	-2.2	1.8
Tie from Strip #15-1	118803	-1.8	2.1
△ DeRussy, 1927 Sub Pt. 6A	84101	-0.7	0.6
DeRussy, 1927 Sub Pt. 6B	84102	-2.1	-0.1
Honolulu Kaiser Hotel KHVH			
Twr. '57	120120	-2.5	0
Tie from Strip #15-1	120801	-2.0	-0.1
Tie from Strip #15-1	120802	-1.0	0.6
□ Tie from Strip #15-1	120803	-1.2	1.8
Tie from Strip #15-1	121801	-0.8	2.0
Tie from Strip #15-1	121802	-1.5	1.3
Tie from Strip #15-1	121803	0.1	1.9
□ Tie from Strip #30-2	93801	1.4	-1.2
Tie from Strip #30-2	93802	0.6	-3.9

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	STATION NAME	SOURCE OF INFORMATION (Index)	CM-8317 AEROTRI- ANGULATION POINT NUMBER	GEODETTIC DATUM		ORIGINATING ACTIVITY		REMARKS
					Old Hawaiian Datum COORDINATES IN FEET STATE <u>Hawaii</u> ZONE <u>3</u>	Geographic Position ϕ LATITUDE λ LONGITUDE	Unit, AMC, Norfolk, VA		
TP-01296		BARBERS POINT LIGHTHOUSE NEW, 1933	Quad 211582, Sta 1054 ✓	52100 ✓	X=	ϕ 21° 17' 58.275"	-		
					Y=	λ 158° 06' 32.121"	-		
					X=	ϕ 21° 18' 48.858"	✓		
		BARBERS PT STANDARD OIL NW TWR, 1969 ✓	Quad 211582 Sta 1055 ✓	231A ✓	Y=	λ 158° 06' 59.686"	✓		
					X=	ϕ 21° 18' 44.106"	✓		
					Y=	λ 158° 06' 56.260"	✓		
		BARBERS PT STANDARD OIL SE TWR, 1969 ✓	Quad 211582 Sta 1056 ✓	231B ✓	X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			
					Y=	λ			
					X=	ϕ			

COMPILATION REPORT

TP-01296

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, however, in some areas, glare on the water made the delineation of offshore detail difficult. 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 this 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 as described in item #31. 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.

37. LANDMARKS AND AIDS:

There are nine charted landmarks and three charted aids to navigation within the limits of this map. Among these, six landmarks and three aids were located/verified photogrammetrically.

TP-01296

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 Quadrangle:

Ewa, 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

19362; 10th edition; dated November 6, 1982; scale 1:20,000

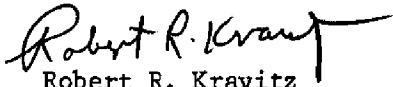
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

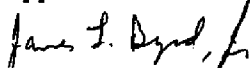
ITEMS TO BE CARRIED FORWARD:

None.

Submitted by;


Robert R. Kravitz
Cartographic Technician
November 25, 1987

Approved:


James L. Byrd, Jr.
Chief, Coastal Mapping Unit

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8317 (Oahu, Hawaii)

TP-01296

Barbers Point

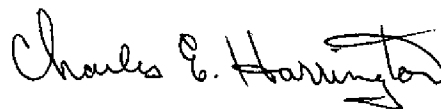
Barbers Point Harbor

Barbers Point Naval Air Station

Oahu

Pacific Ocean

Approved:



Charles E. Harrington
Chief Geographer
Nautical Charting Division

REVIEW REPORT
SHORELINE

TP-01296

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:

EWA, 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.

TP-01296

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:

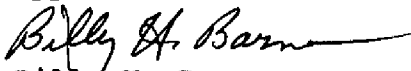


Lowell O. Neterer, Jr.

Final Reviewer

January 1989

Approved for Forwarding:



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-01296; 1:10,000; Barbers Point
to Makapuu Point, Oahu, Hawaii

GEODETIC DATUM: Old Hawaiian Datum

The following cartographic features have been identified as being of possible landmark value. These features have been identified and measured during photogrammetric operations. Refer to Nautical Charting Division Standard Digital Data Exchange Format documentation for quality code (QC) criteria and clarification of cartographic codes (CC).

FEATURE DESCRIPTION	NCD CC	GEOGRAPHIC POSITION °-'-"		NCD Q.C.	DATE OF LOCATION
		LATITUDE	LONGITUDE		
BARBERS POINT LIGHT ✓	139 ✓	21 17 58.28 ✓	158 06 32.12 ✓	3 ✓	03-09-86 ✓
TOWER ✓	086 ✓	21 18 30.00 ✓	158 05 45.70 ✓	7 ✓	03-09-86 ✓
FLARE ✓	086 ✓	21 18 31.10 ✓	158 05 30.60 ✓	7 ✓	03-09-86 ✓
FLARE ✓	086 ✓	21 18 36.30 ✓	158 06 51.80 ✓	7 ✓	03-09-86 ✓
FLARE ✓	086 ✓	21 18 37.30 ✓	158 06 49.50 ✓	7 ✓	03-09-86 ✓
TOWER ✓	139 ✓	21 18 44.10 ✓	158 06 56.26 ✓	3	03-09-86 ✓
TOWER ✓	139 ✓	21 18 48.86 ✓	158 06 59.69 ✓	3 ✓	03-09-86 ✓
BARBERS POINT HARBOR					
ENTRANCE CHANNEL					
RANGE FRONT LIGHT ✓	208 ✓	21 19 56.30 ✓	158 07 03.00 ✓	7 ✓	03-09-86 ✓
RANGE REAR LIGHT ✓	209 ✓	21 19 58.90 ✓	158 07 00.20 ✓	7 ✓	03-09-86 ✓

Listing approved by:

Lowell O. Ketchum
FINAL REVIEWER

Jan 1989
DATE

