

TP-01301

TP-01301

NOAA FORM 76-35
(6-80)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

THIS FIELD EDITION WILL NOT BE FIELD EDITED

Map No.

TP-01301

Edition No.

1

Job No.

CM-8317

Map Classification

CLASS III FINAL

Type of Survey

SHORELINE

LOCALITY

State

HAWAII

General Locality

BARBERS POINT TO MAKAPUU POINT

Locality

HONOLULU

1986 TO 19

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TP. <u>01301</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final III</u> JOB CM PH. <u>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 <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED				JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED									
1. OFFICE Aerotriangulation - April 3, 1987 Compilation - October 2, 1987				2. FIELD Control - May 17, 1987					
II. DATUMS									
1. HORIZONTAL:				<input type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify) Old Hawaiian Datum	
				<input type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER				OTHER (Specify)	

TP-01301

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC10(B) (B=152.21mm)		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE ZONE 7th Hawaii-Aleutian MERIDIAN 150° W <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input checked="" type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY					
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
86B(C)C117-C121	3/9/86	3:59	1:15,000	1.3 ft above MLLW	
86B(C)C136-C137	3/9/86	4:19	1:15,000	1.3 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 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-01299 (1:10,000)	No survey	TP-01295

REMARKS

TP-01301

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J. Fredrick	Nov 1986
2. HORIZONTAL CONTROL	RECOVERED BY M. McEwen ESTABLISHED BY NA PRE-MARKED OR IDENTIFIED BY M. McEwen	Nov 1986 Nov 1986
3. VERTICAL CONTROL	RECOVERED BY NA ESTABLISHED BY NA PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY NA LOCATED (Field Methods) BY NA IDENTIFIED BY NA	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY NA	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY NA	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
Photo identified2. VERTICAL CONTROL IDENTIFIED
None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
86B(C)C045	DERUSSY 1927		
86B(C)C044	SAND ISLAND SOUTH BASE		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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)

3 Forms C&GS 152

2 Form 76-86

5 Form 76-52

5 Form 76-91

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	Mar 1989	Class III Final Map	may 1989	may 1989

II. LANDMARKS AND AIDS TO NAVIGATION			
1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH			
PAGES NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
2		may 1989	Charted landmarks and aids to navigation form
2. <input type="checkbox"/> REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____			
3. <input type="checkbox"/> REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____			

III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.

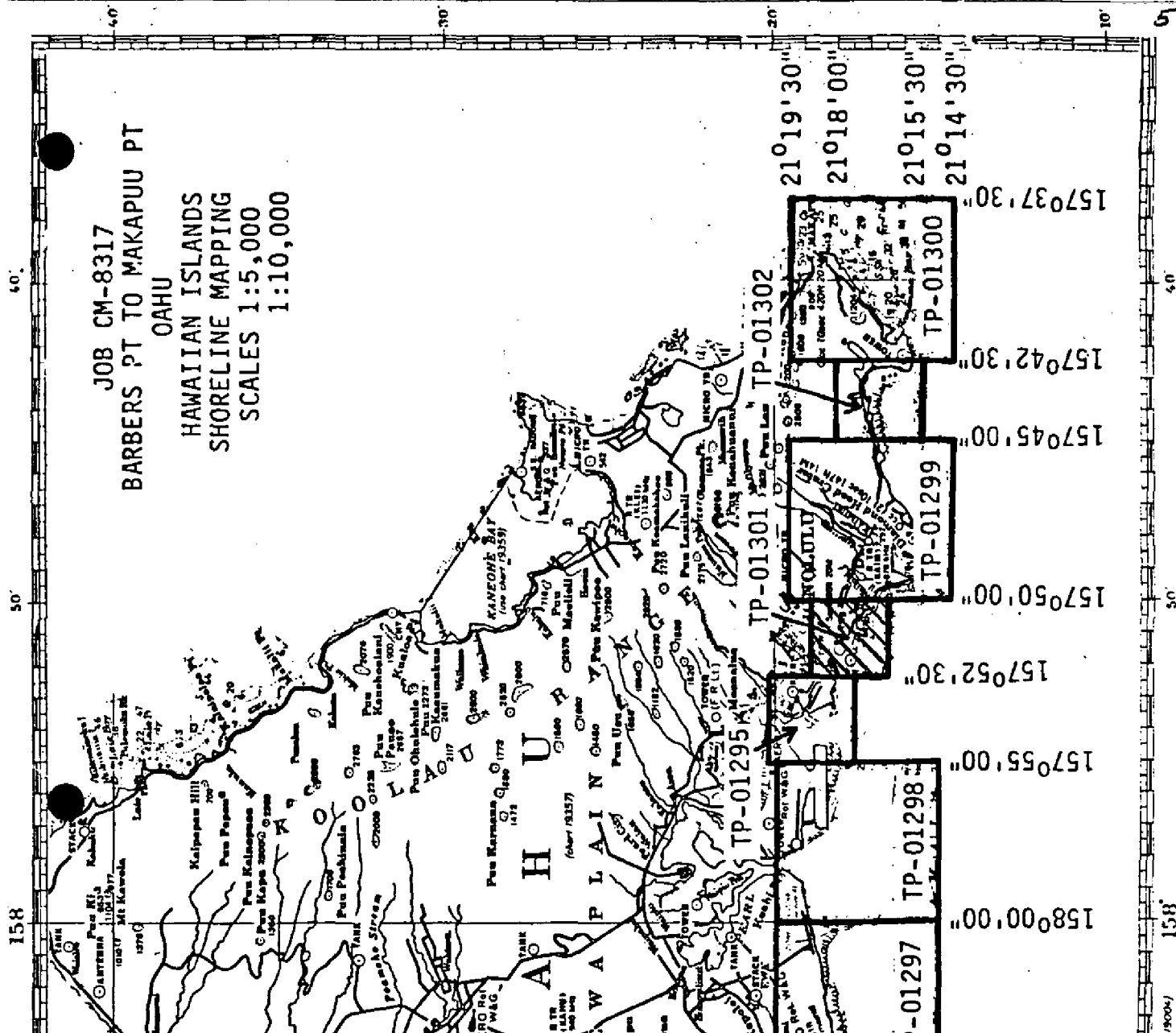
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.

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 <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	

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



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

TP-01301

This 1:5,000 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 1:15,000 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 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.

^R

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.

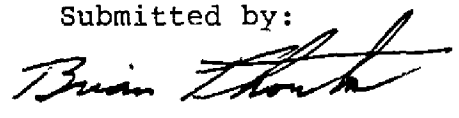
24. SUPPLEMENTAL DATA

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

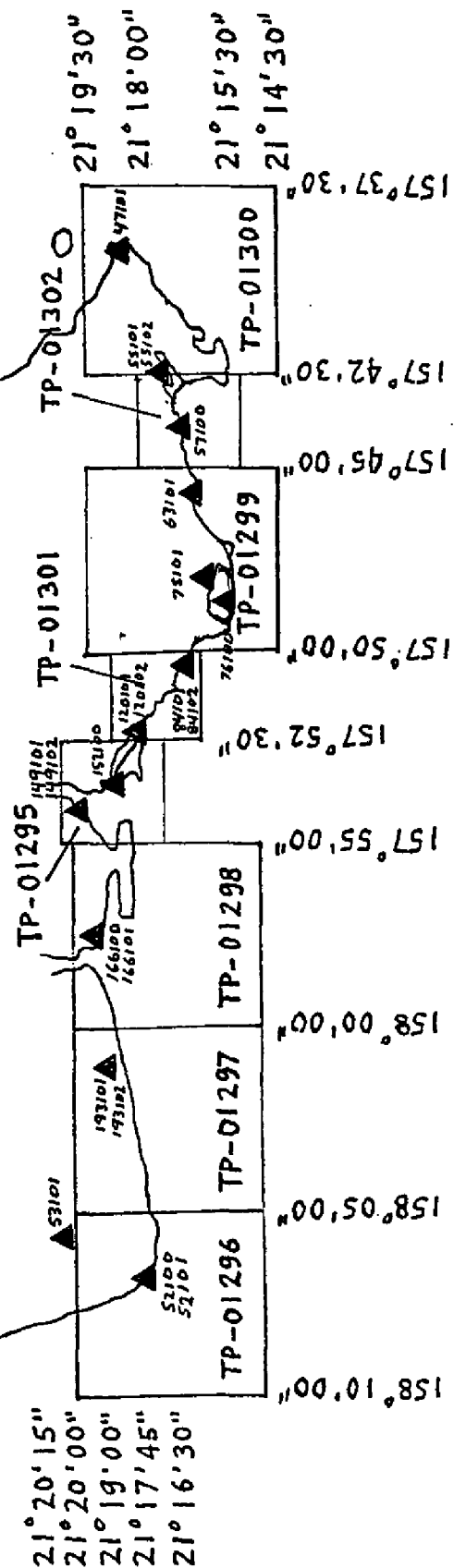
Approved and Forwarded:



Don O. Norman
Chief, Aerotriangulation Unit

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

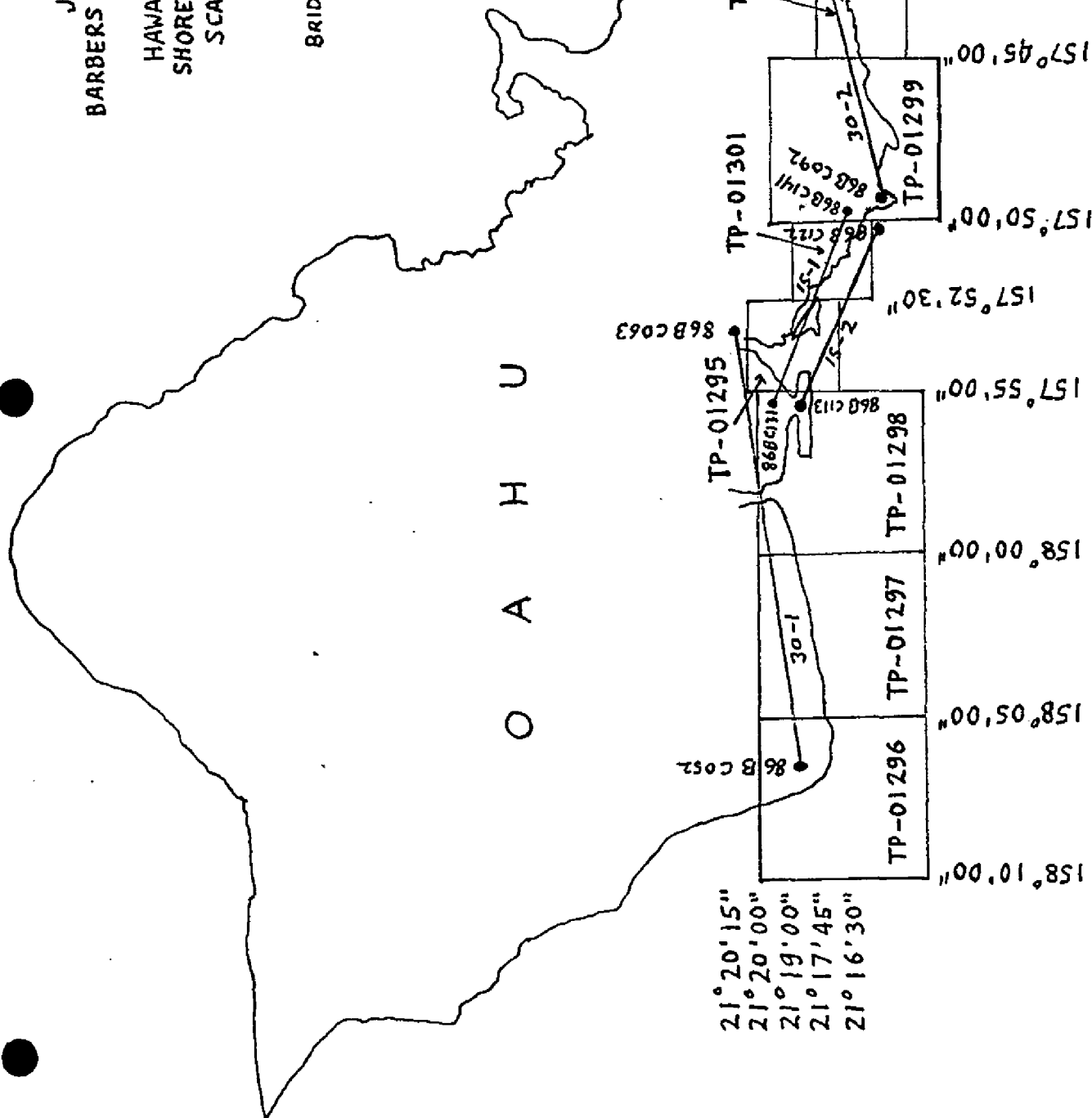
HORIZONTAL CONTROL



JOB CM-8317
 BARBERS PT TO MAKAPUU PT

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

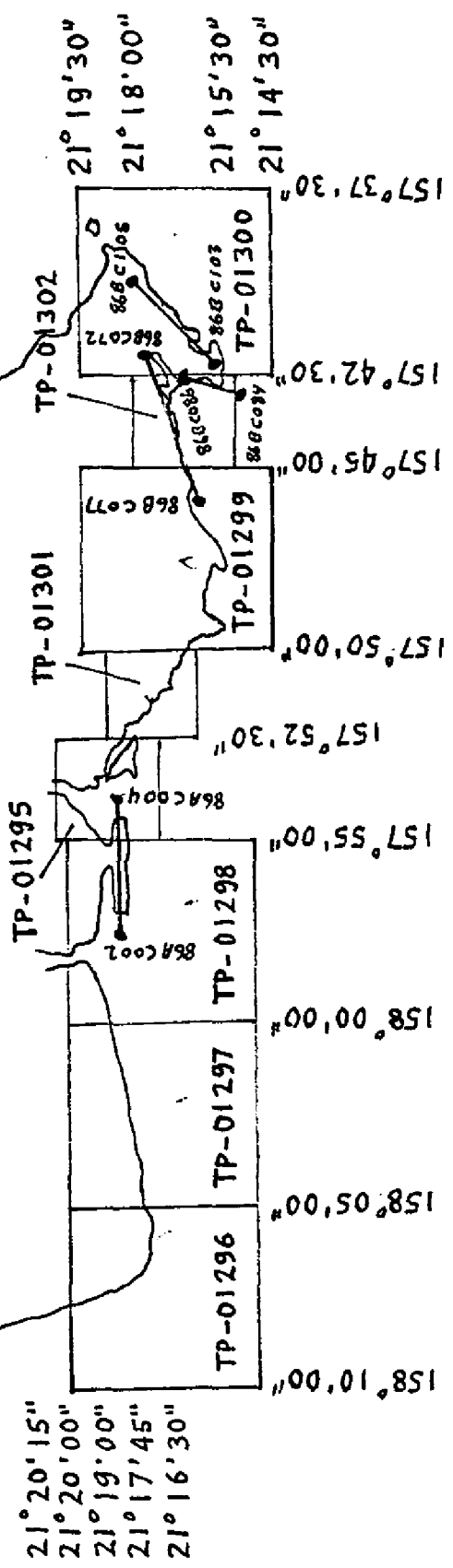
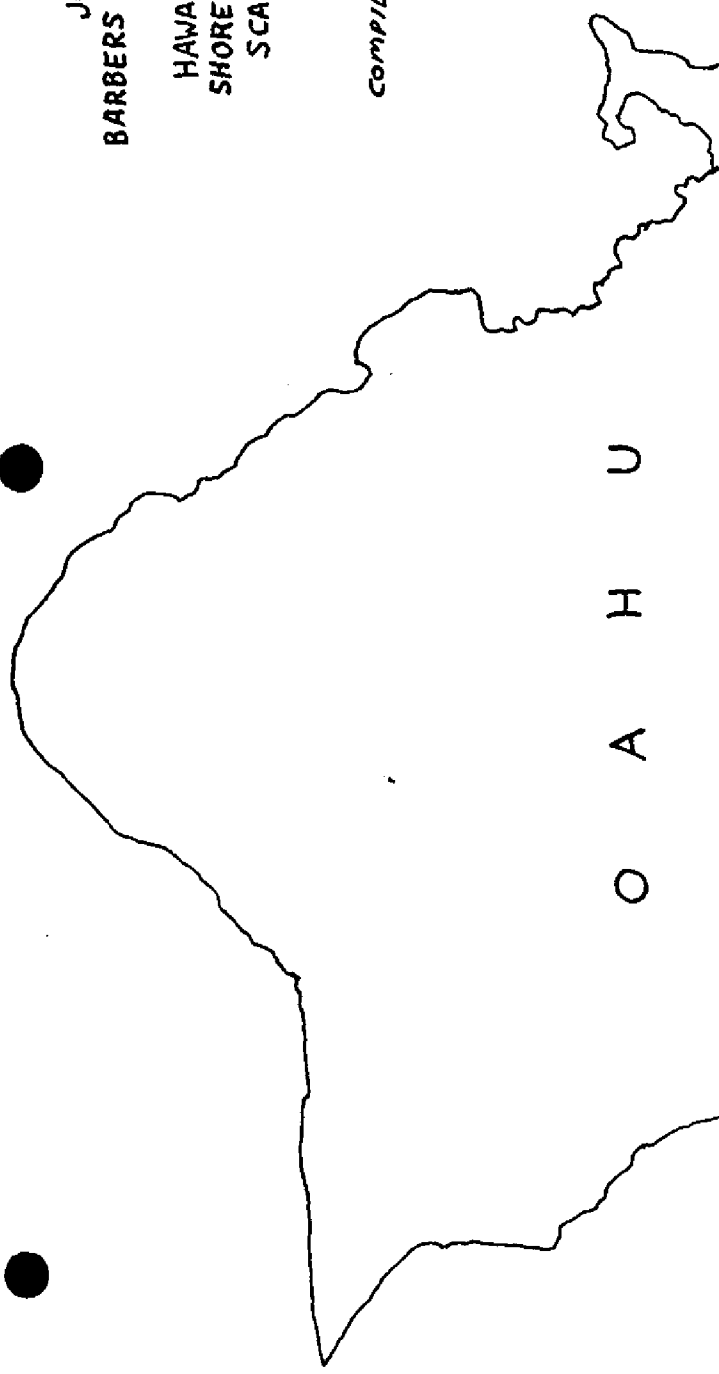
BRIDGING PHOTOGRAPHS



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

△ 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

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. TP-01301	JOB NO. CM-8317	GEOGRAPHIC DATUM Old Hawaiian Datum		ORIGINATING ACTIVITY Coastal Mapping Unit, Norfolk, VA	
		STATION NAME	SOURCE OF INFORMATION (Index)	COORDINATES IN FEET STATE Hawaii ZONE 3	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE
DERUSSY, 1927 ✓	Quad 211573 Sta 1252 ✓	84100 ✓	X= 21° 16' 55.269" ✓ Y= 157° 50' 11.886" ✓		
SAND ISLAND SOUTH BASE, 1927 ✓	211573 Sta 1108 ✓	120100 ✓	X= 21° 18' 09.964" ✓ Y= 157° 52' 22.372" ✓		
HONOLULU TV STATION KCMB TOWER, 1963 ✓	211573 ✓ Sta 1173	139112 ✓	X= 21° 17' 45.916" ✓ Y= 157° 50' 35.849" ✓		
HONOLULU KEWALD BASIN KGU TWR, 1957 ✓	211573 ✓ Sta 1189	118115 ✓	X= 21° 17' 41.049" ✓ Y= 157° 51' 49.168" ✓		
HONOLULU KAISER HOTEL KHVH TOWER, 1957 ✓	211573 ✓ Sta 1169	120120 ✓	X= 21° 17' 05.947" ✓ Y= 157° 50' 23.555" ✓		
HONOLULU ALOHA TOWER, 1925 ✓	211573 ✓ Sta 1197	126 ✓	X= 21° 18' 36.756" ✓ Y= 157° 52' 07.425" ✓		
HONOLULU HAWAII ELEC NW STACK, 1955 ✓	211573 ✓ Sta 1202	126E ✓	X= 21° 18' 34.705" ✓ Y= 157° 52' 00.256" ✓		
HONOLULU HAWAII ELEC N TW STK 1957 ✓	211573 ✓ Sta 1201	1201 ✓	X= 21° 18' 32.147" ✓ Y= 157° 51' 58.208" ✓		
HONOLULU HAWAII ELEC SE STACK, 1955 ✓	211573 ✓ Sta 1199	126H ✓	X= 21° 18' 31.526" ✓ Y= 157° 51' 57.808" ✓		
			X= φ Y= λ		
COMPUTED BY		DATE	COMPUTATION CHECKED BY	DATE	
LISTED BY D. R. Miller		DATE 10/87	LISTING CHECKED BY F. Mauldin	DATE 12/9/87	
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY	DATE	

COMPILATION REPORT

TP-01301

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 1:15,000 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 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. 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 1:15,000 scale bridging/compilation color photographs as described in item #31.

TP-01301

37. LANDMARKS AND AIDS:

There are forty-one charted landmarks and eighteen charted aids to navigation within the limits of this map. Among these, twenty-three landmarks and thirteen 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 Quadrangle:

Honolulu, 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
19364; 20th edition; dated January 12, 1985; scale 1:20,000
19367; 33rd edition; dated April 12, 1986; scale 1:5,000

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ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

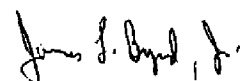
None.

Submitted by:



David R. Miller
Cartographer
December 1, 1987

Approved:



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

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-8317 (Oahu, Hawaii)

TP-01301

Ala Wai Boat Harbor

Ala Wai Canal

Honolulu

Honolulu Harbor

Kewalo Basin

Magic Island

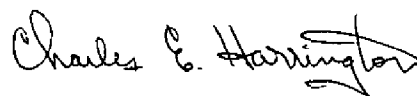
Mamala Bay

Moiliili

Oahu

Sand Island

Approved:



Charles E. Harrington
Chief Geographer
Nautical Charting Division

REVIEW REPORT
SHORELINE

TP-01301

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:

HONOLULU, HAWAII, date 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:

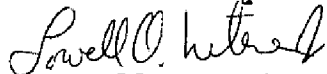
19013, 13th edition, dated February 12, 1983, scale
1:675,000
19357, 17th edition, dated October 15, 1983, scale
1:80,000
19364, 20th edition, dated January 12, 1985, scale
1:20,000
19367, 33rd edition, dated April 12, 1986, scale
1:5,000.

TP-01301

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:



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 2

PROJECT: CM-8317

MAP NUMBER (Scale); Locality: TP-01301; 1:5,000; 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).

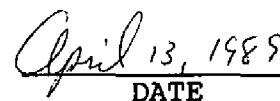
FEATURE DESCRIPTION	NCD CC	GEOGRAPHIC POSITION -'-'		NCD Q.C.	DATE OF LOCATION
		LATITUDE	LONGITUDE		
GRAIN ELEVATOR ✓	086 ✓	21 18 54.10 ✓	157 52 19.90 ✓	7 ✓	03-09-86 ✓
TOWER ✓	086 ✓	21 18 51.70 ✓	157 52 04.90 ✓	7 ✓	03-09-86 ✓
ALOHA TOWER ✓	139 ✓	21 18 36.76 ✓	157 52 07.42 ✓	3 ✓	03-09-86 ✓
STACK (NW) ✓	139 ✓	21 18 34.70 ✓	157 52 00.26 ✓	3 ✓	03-09-86 ✓
STACK (SW) ✓	139 ✓	21 18 33.09 ✓	157 52 00.42 ✓	3 ✓	03-09-86 ✓
STACK ✓	086 ✓	21 18 04.80 ✓	157 51 56.20 ✓	7 ✓	03-09-86 ✓
STACK ✓	139 ✓	21 17 48.25 ✓	157 51 52.16 ✓	3 ✓	03-09-86 ✓
RADIO TOWER ✓	139 ✓	21 17 41.09 ✓	157 51 49.17 ✓	3 ✓	03-09-86 ✓
RADIO TOWER ✓	086 ✓	21 17 59.50 ✓	157 51 32.40 ✓	7 ✓	03-09-86 ✓
BUILDING ✓	086 ✓	21 17 45.50 ✓	157 50 44.60 ✓	7 ✓	03-09-86 ✓
TV TOWER ✓	139 ✓	21 17 45.92 ✓	157 50 35.85 ✓	3 ✓	03-09-86 ✓
RADIO TOWER ✓	086 ✓	21 17 28.10 ✓	157 50 19.70 ✓	7 ✓	03-09-86 ✓
CUPOLA ✓	086 ✓	21 17 14.90 ✓	157 50 28.70 ✓	7 ✓	03-09-86 ✓
BUILDING ✓	086 ✓	21 16 53.70 ✓	157 50 02.30 ✓	7 ✓	03-09-86 ✓
STACK ✓	086 ✓	21 18 31.90 ✓	157 51 19.60 ✓	7 ✓	03-09-86 ✓
CUPOLA ✓	086 ✓	21 18 30.90 ✓	157 51 35.60 ✓	7 ✓	03-09-86 ✓

FLAGSTAFF ✓	086 ✓	21 18 31.40 ✓	157 51 45.30 ✓	7 ✓	03-09-86 ✓
FLAGPOLE ✓	086 ✓	21 18 35.60 ✓	157 51 41.70 ✓	7 ✓	03-09-86 ✓
BUILDING AT HONOLULU (KING STREET) ✓	086 ✓	21 18 41.90 ✓	157 51 54.10 ✓	7 ✓	03-09-86 ✓
TOWER AT HONOLULU ✓	086 ✓	21 18 47.30 ✓	157 51 35.70 ✓	7 ✓	03-09-86 ✓
STACK/HAWAII ELEC(N) ✓	139 ✓	21 18 32.15 ✓	157 51 58.21 ✓	3 ✓	03-09-86 ✓
STACK HAWAII ELEC(SE) ✓	139 ✓	21 18 31.53 ✓	157 51 57.81 ✓	3 ✓	03-09-86 ✓
POLE (LIGHTED) AT KEWALO BASIN ✓	086 ✓	21 17 39.10 ✓	157 51 42.80 ✓	7 ✓	03-09-86 ✓
ALA WAI BOAT HARBOR ✓ CHANNEL RANGE FRONT LIGHT ✓	208 ✓	21 17 27.83 ✓	157 50 47.18 ✓	4 ✓	03-09-86 ✓
RANGE REAR LIGHT ✓	209 ✓	21 17 30.58 ✓	157 50 46.47 ✓	4 ✓	03-09-86 ✓
DAYBEACON 3 ✓	767 ✓	21 16 58.80 ✓	157 50 55.70 ✓	7 ✓	03-09-86 ✓
DAYBEACON 4 ✓	224 ✓	21 16 58.40 ✓	157 50 53.60 ✓	7 ✓	03-09-86 ✓
DAYBEACON 5 ✓	767 ✓	21 17 07.40 ✓	157 50 53.50 ✓	7 ✓	03-09-86 ✓
DAYBEACON 6 ✓	224 ✓	21 17 06.80 ✓	157 50 51.60 ✓	7 ✓	03-09-86 ✓
DAYBEACON 7 ✓	767 ✓	21 17 18.90 ✓	157 50 50.70 ✓	7 ✓	03-09-86 ✓
DAYBEACON 8 ✓	224 ✓	21 17 16.40 ✓	157 50 49.10 ✓	7 ✓	03-09-86 ✓
KEWALO BASIN ENTRANCE RANGE REAR LIGHT ✓	209 ✓	21 17 51.95 ✓	157 51 36.32 ✓	4 ✓	03-09-86 ✓
RANGE FRONT LIGHT ✓	208 ✓	21 17 50.10 ✓	157 51 37.80 ✓	7 ✓	03-09-86 ✓
HONOLULU HARBOR- ENTRANCE LIGHT ✓	200 ✓	21 17 56.09 ✓	157 52 18.32 ✓	4 ✓	03-09-86 ✓
CHANNEL RANGE FRONT LIGHT ✓	208 ✓	21 18 30.42 ✓	157 52 05.55 ✓	4 ✓	03-09-86 ✓
CHANNEL RANGE REAR LIGHT ✓	209 ✓	21 18 34.60 ✓	157 52 03.30 ✓	7 ✓	03-09-86 ✓

Listing approved by:



FINAL REVIEWER



DATE

