

TP-00720

TP-00720

NOAA FORM 76-35 (3-76)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No. TP-00720	Edition No. 1
Job No. CM-7215	
Map Classification Final Field Edited Map	
Type of Survey Shoreline	
LOCALITY	
State Hawaii	
General Locality Kaneohe Bay, Oahu Island	
Locality Mokapu Point	
1975 TO 1976	
REGISTRY IN ARCHIVES	
DATE	

TP-00720
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				ZONE Hawaii MERIDIAN 150th	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
75TNHY 3769(P) - 3771(P)	1/17/75	10:05	1:15,000	0.7 ft. above MLLW	
75TNHY 3752(P) - 3758(P)	1/17/75	10:00	1:15,000	0.7 ft. above MLLW	
75TNHY 3862(P)	1/28/75	11:37	1:30,000	0.2 ft. above MLLW	

REMARKS

Subordinate tide station - Moku O Loe, Oahu.

Reference tide station - Honolulu, Hawaii.

M.H.W. = 1.6 ft.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was compiled from the above listed photographs.

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

No mean lower low water line was compiled

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	No Survey	No Survey	TP-00719

REMARKS

HISTORY OF FIELD OPERATIONS

1. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Melby	9/75
2. HORIZONTAL CONTROL	RECOVERED BY R. Melby	9/75
	ESTABLISHED BY R. Melby	9/75
	PRE-MARKED OR IDENTIFIED BY L. Riggers	9/75
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 R. Melby	9/75
	LOCATED (Field Methods) BY R. Melby	9/75
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
75TNHY 3864	PAPAA 2, 1932		
75TNHY 3862	MOKAPU, 1872		

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)

2 Form 76-53's

1 Form 76-40

TP-00720

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	C. Townsend	3-4/76
2. HORIZONTAL CONTROL	RECOVERED BY	J. Osborn
	ESTABLISHED BY	None
	PRE-MARKED OR IDENTIFIED BY	None
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	J. Osborn
	LOCATED (Field Methods) BY	J. Osborn
	IDENTIFIED BY	J. Osborn
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	J. Osborn
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
75TNHY(P) 3770	PYRAMID ROCK LIGHT, 1975		

3. PHOTO NUMBERS (Clarification of details)

75TNHY(P) 3768 thru 3770 and 3752 thru 3758

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
75TNHY(P) 3770	PYRAMID ROCK 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)

5 Form 76-40's
1 Field Edit Report OPR-419-RA-76
1 Field Edit Ozalid

TP-00720

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit.	Jan. 1976	Class III Manuscript	1/30/76	1/30/76
Field edit applied. Compilation complete.	Sept. 1976	Class I Manuscript	9/30/76	
Final Review	April 1978	Final	April, 1978	
<i>Examined in Quality Control June 1978</i>			<i>Shoreline changes made</i>	<i>Aug, 1978</i>

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
2		10/04/76	Aids to be charted (1 to be revised)
1		10/04/76	Aids to be deleted
2		10/04/76	Landmarks to be charted
1		10/04/76	Landmark to be deleted
			<i>A new listing is submitted to supersede</i>
			<i>the 76-40 forms forwarded on 10-4-76.</i>

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: October 4, 19763. ☐ 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 ⁷⁶⁻⁴⁸ ~~667~~ 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 MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

OFFICIAL MILEAGE FOR COST ACCOUNT

Sheet Number	Square Miles
TP-00718	2
TP-00719	6
TP-00720	6
TOTAL	14

TP-00718

TP-00720

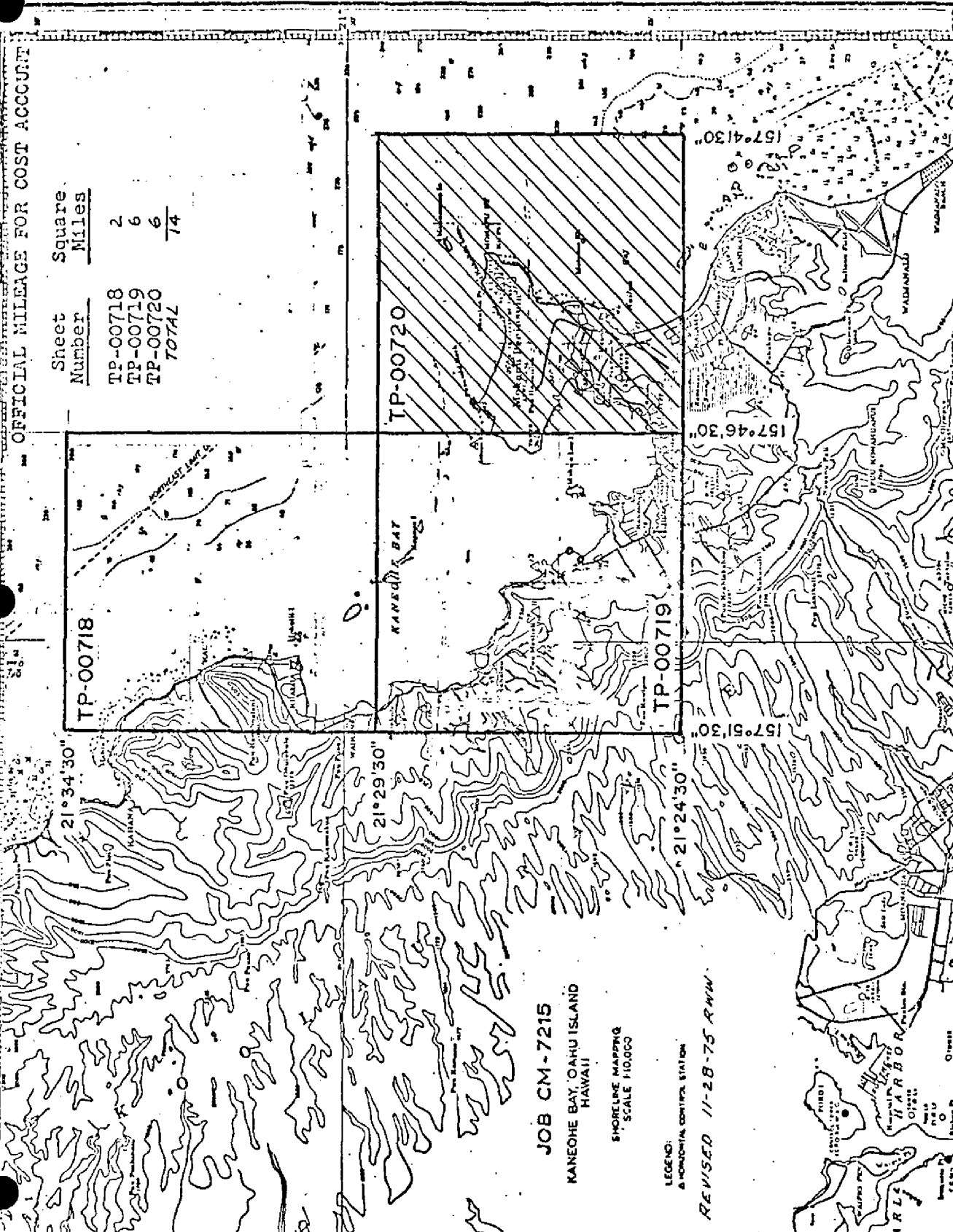
TP-00719

JOB CM-7215
KANEHOE BAY, OAHU ISLAND
HAWAII

SHORELINE MAPPING
SCALE 1:10,000

LEGEND:
A HORIZONTAL CONTROL STATION

REVISED 11-28-75 RWW



SUMMARY TO ACCOMPANY DESCRIPTIVE REPORTS**TP-00718 THROUGH TP-00720**

The maps included in this summary comprise all of Project CM-7215, Kaneohe Bay, Oahu Island, Hawaii. Each is a 1:10,000 scale standard shoreline map, the purpose of which is to provide shoreline and alongshore data in support of hydrographic operations and for nautical chart compilation.

The area covered is that of Kaneohe Bay extending from just below Mahie Point on the north southward to and including the Mokapu Peninsula. This project originally consisted of ~~nine~~ 1:5,000 scale maps (TP-00718 through TP-00727) covering about the same area. All instructions and correspondence dealing with map scale make reference to the 1:5,000 scale maps with the exception of the compilation instructions. The compilation instructions make reference only to the three 1:10,000 scale maps TP-00718 through TP-00720. These are the only maps compiled for the project.

Apparently, it was decided around November, 1975 to cancell all 1:5,000 scale maps in the project and replace them with 1:10,000 scale maps. Documents authorizing this change, however, are not available to this reviewer at this time.

Field work prior to compilation was limited to the recovery and identification of horizontal control necessary for bridging. It was begun under orders dated April 16, 1973. However, the photography obtained at that time was not suitable for compilation. This part of the job was redone in September, 1975.

Photography was flown by a private contractor in December, 1975 and January, 1976. It was flown with panchromatic film at 1:15,000 and 1:30,000 scale. Coverage was not extended to allow the delineation of the southern shoreline of Kailua Bay. The quality was excellent.

Bridging was done at the Washington Science Center in December, 1975. All maps were compiled at the Atlantic Marine Center using the Wild B-8 stereoplotter.

Field edit was performed in March, 1976 and applied to the maps in September, 1976 at the Atlantic Marine Center. Final Review also took place at the Atlantic Marine Center in April, 1978.

The original base map and all pertinent data is forwarded to the Washington Science Center for reproduction and final registration.

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FIELD INSPECTION

TP-00720

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal control necessary for the bridging.

Photogrammetric Plot Report
Kaneohe Bay, Oahu Island, Hawaii
Job CM-7215
December 1975

21. Area Covered: This report covers three 1:10,000 sheets, TP-00718, TP-00719, and TP-00720 of Kaneohe Bay, Oahu Island, Hawaii.

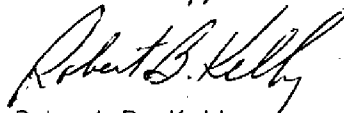
22. Method: Three strips of 1:30,000 photography and one strip of 1:15,000 photography were bridged by analytic aerotriangulation methods and adjusted to ground on the Hawaii State Plane Coordinate System, Zone three. The attached two sketches shows the placement of horizontal control, bridging photographs, and photographs to be used for compilation. Bridge points were drilled on the 1:15,000 scale photography and measured on 1:30,000 scale bridging photography for ratioing photographs to be used in compilation. Ratios were ordered and sheets were plotted on the Coradomat.

23. Adequacy of Control: The horizontal control provided was adequate except for Pahu, 1910 home station which could not be seen. All other control held within the accuracy required by National Standards of Map Accuracy at 1:10,000.

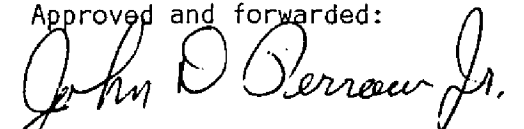
24. Supplemental Data: Local shoreline and U.S. Geological Survey quadrangles were used to provide elevations for vertical adjustments of bridges.

25. Photography: RC-8 black-and-white film positives were adequate as to coverage, overlap, and definition.

Submitted by,


Robert B. Kelly

Approved and forwarded:


John D. Perrow, Jr.
Chief, Aerotriangulation Section

INDEX TO CONTROL

- 5 State Survey 5-1, 1969
- 6 State Survey 4-29, 1969
- 7 State Survey 4-32, 1969
- 8 State Survey 4-24, 1969
- 9 Pahu, 1910
- 10 Papaa, 1932
- 11 Pyramid Rock Light, 1975
- 12 Mokapu, 1872

JOB CM-7215

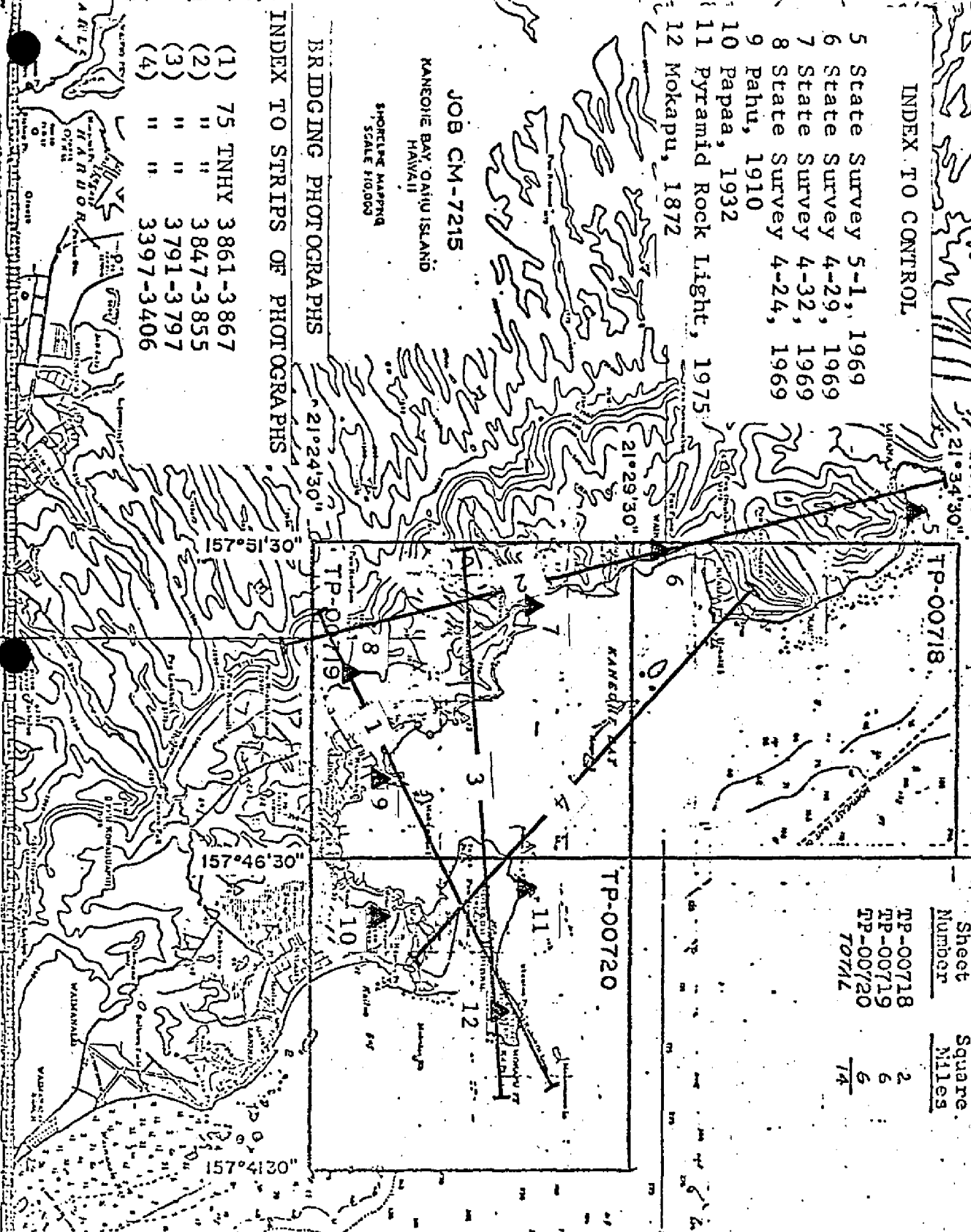
KANEHIE BAY OAHU ISLAND
HAWAII

SHORTLY MAPING
SCALE 1:10,000

BRIDGING PHOTOGRAPHS

INDEX TO STRIPS OF PHOTOGRAPHS

- | | | | |
|-----|----|------|-----------|
| (1) | 75 | TNHY | 3861-3867 |
| (2) | " | " | 3847-3855 |
| (3) | " | " | 3791-3797 |
| (4) | " | " | 3397-3406 |



OFFICIAL MILEAGE FOR COST ACCOUNT

Sheet Number	Square Miles
TP-00718	2
TP-00719	6
TP-00720	6
TOTAL	14

<u>Sheet Number</u>	<u>Square Miles</u>
TP-00718	2.
TP-00719	6
TP-00720	6
<i>TOTAL</i>	<u>14</u>

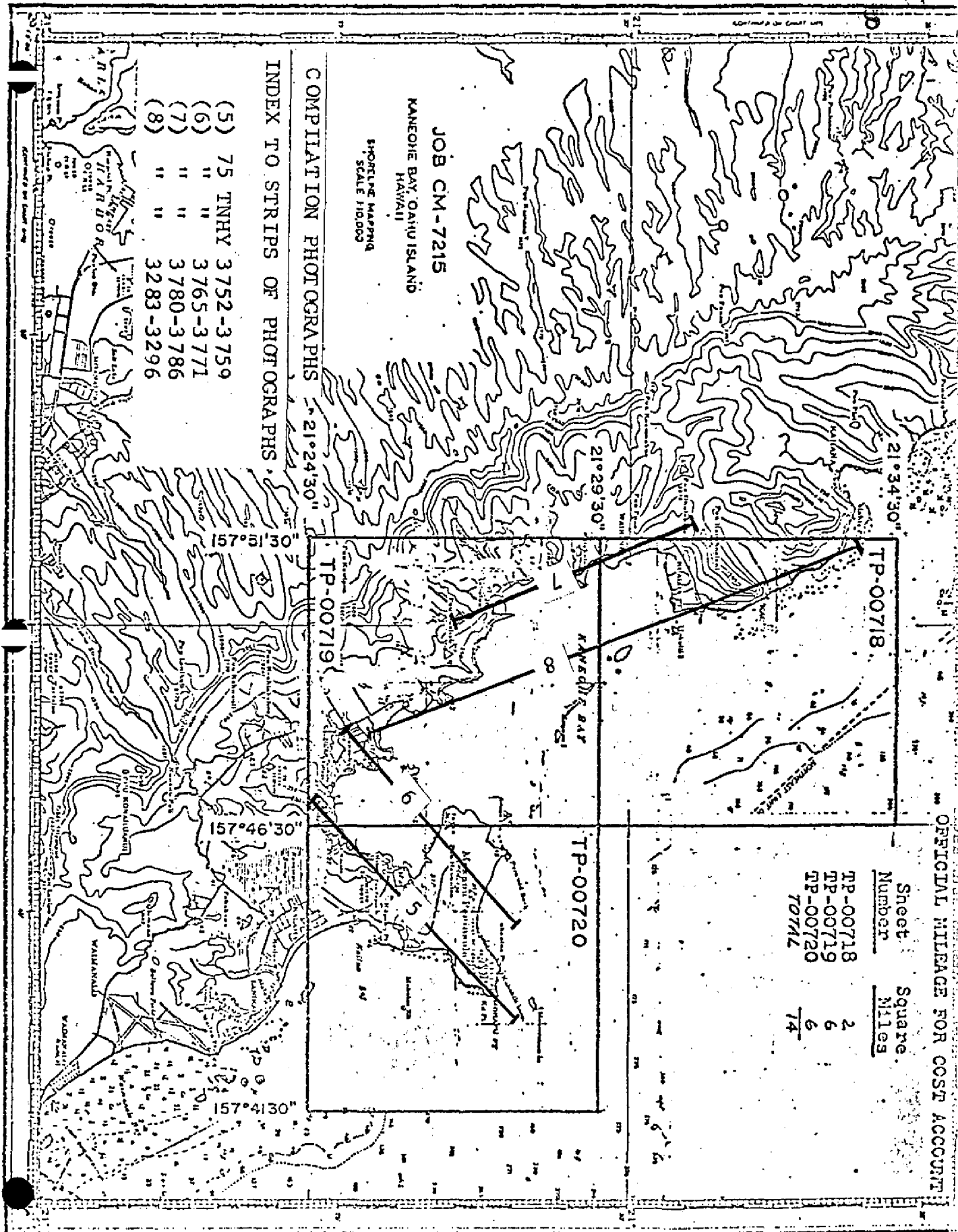
KANEORIE BAY, OAHU ISLAND
HAWAII

SHORTLINE MAPPING SCALE 1:10,000

COMPILATION PHOTOGRAPHS $\approx 21^{\circ}24'30''$

INDEX TO STRIPS OF PHOTOGRAPHS

(5)	75	TNHY	3 752-3 759
(6)	"	"	3 765-3 771
(7)	"	"	3 780-3 786
(8)	"	"	3 283-3 296



MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY	Coastal Mapping Division, AMC, Norfolk, Virginia
TP-00720	CM-7215	Old Hawaiian		

STATION NAME	SOURCE OF INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	COORDINATES IN FEET		GEOGRAPHIC POSITION		REMARKS	
			STATE	Hawaii	φ	λ	FORWARD	BACK
			ZONE	3				
			x=		φ			
			y=		λ			
PYRAMID ROCK LIGHT, 1975	Form 76-40 PMC Photo Party, 1975	F-3-6-L	x=		φ	21 27 55.542	1708.2	(137.1)
			y=		λ	157 45 58.577	1686.5	(40.9)
KANEHOE BAY, MCAS, HAWAIILOA HILL BEACON, 1952	Quad 211573 P. 1150		x=		φ	21 27 04.39602	135.2	(1710.1)
			y=		λ	157 45 34.42812	991.3	(736.3)
STATE SURVEY 4-20, 1969	Quad 211573 P. 1023		x=		φ	21 26 34.69916	1067.2	(778.1)
			y=		λ	157 45 27.66537	796.7	(931.0)
MOKAPU, 1872	Quad 211573 P. 1021		x=		φ	21 27 26.77673	823.5	(1021.8)
			y=		λ	157 44 04.66576	134.3	(1593.2)
STATE SURVEY 4-15, 1969	Quad 211573 P. 1022		x=		φ	21 25 17.06615	524.9	(1320.4)
			y=		λ	157 44 50.60042	1457.2	(270.8)
KANEHOE, HAWAIIAN TELEPHONE CO., MICROWAVE TOWER, 1969	Quad 211573 P. 1025		x=		φ	21 25 32.18045	989.7	(855.6)
			y=		λ	157 45 35.15498	1012.4	(715.5)
STATE SURVEY 4-22, 1969	Quad 211573 P. 1029		x=		φ	21 25 48.27240	1484.6	(360.7)
			y=		λ	157 45 53.32904	1535.8	(192.1)
STATE SURVEY 4-21, 1969	Quad 211573 P. 1028		x=		φ	21 26 09.67067	297.4	(1547.9)
			y=		λ	157 45 48.10515	1385.3	(342.5)
PAPAA 2, 1932	Quad 211573 P. 1024		x=		φ	21 25 32.23069	991.3	(854.0)
			y=		λ	157 45 34.73979	1000.5	(727.4)

COMPUTED BY	DATE	COMPUTATION CHECKED BY	DATE
LISTED BY	DATE	LISTING CHECKED BY	DATE
A. C. Rauck, Jr.	1/06/76	F. Mauldin	1/07/76
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY	DATE
J. Roderick	1/09/76	D. Butler	1/09/76

COMPILATION REPORT

TP-00720

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter. Photography was adequate.

32. CONTROL:

See the Photogrammetric Plot Report dated December, 1975.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. Drainage was delineated by office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and all alongshore details were delineated by office interpretation of the photographs.

36. OFFSHORE DETAILS:

Mokumanu Island and Mokolea Rock were compiled from office interpretation of the photographs.

37. LANDMARKS AND AIDS:

Appropriate copies of Form 76-40, Landmarks and Nonfloating Aids to Navigation, were forwarded to the field editor and hydrographer for further processing.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See the Form 76-36B, Item #5 of this Descriptive Report concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No Statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with USGS Quadrangle MOKAPU, HAWAII, scale 1:24,000, dated 1968.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the Charts 19359, scale 1:15,000, dated September, 1974, 6th edition, and 19357, scale 1:80,000, 13th edition, dated December 14, 1974.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Submitted by:

Albert C. Rauck, Jr. For
Charles Parker
Cartographic Technician
January 29, 1976

Approved:

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

April 20, 1978

11

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7215 (Kaneohe Bay, Hawaii)

TP-00720

Fort Hase Cove

Halekou Pond

Kahekili Leap

Kailua Bay

Kaluapuhi Pond

Kaneohe Bay

Kapoho Point

Kawainui Canal

Keaalu

Kii Point

Mahinui

Malae

Mokumanu Islands

Mokapu Peninsula

Mokapu Point

Nuupia Pond

Pacific Ocean

Pali Kilo

Pukaulua Point

Puu Hawaiiiloa


Puu Papaa

Pyramid Rock

Ulupau Crater

Ulupau Head

Approved by:


Charles E. Harrington, C3x8
Chief Geographer

PHOTOGRAMMETRIC OFFICE REVIEW

T. 00720

1. PROJECTION AND GRIDS JLB	2. TITLE JLB	3. MANUSCRIPT NUMBERS JLB	4. MANUSCRIPT SIZE JLB
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY JLB	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES JLB	10. PHOTOGRAMMETRIC PLOT REPORT JLB	11. DETAIL POINTS JLB
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE JLB	13. LOW-WATER LINE JLB	14. ROCKS, SHOALS, ETC. JLB	15. BRIDGES JLB
16. AIDS TO NAVIGATION JLB	17. LANDMARKS JLB	18. OTHER ALONGSHORE PHYSICAL FEATURES JLB	19. OTHER ALONGSHORE CULTURAL FEATURES JLB
PHYSICAL FEATURES			
20. WATER FEATURES JLB	21. NATURAL GROUND COVER NA		22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES JLB
CULTURAL FEATURES			
27. ROADS JLB	28. BUILDINGS JLB	29. RAILROADS JLB	30. OTHER CULTURAL FEATURES JLB
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES JLB	34. JUNCTIONS JLB		35. LEGIBILITY OF THE MANUSCRIPT JLB
36. DISCREPANCY OVERLAY JLB	37. DESCRIPTIVE REPORT JLB	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS JLB
40. REVIEWER J. Byrd J. Byrd		SUPERVISOR, REVIEW SECTION OR UNIT A. C. Rauck, Jr. 1/29/76	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER J. R. Minton J.R. Minton 9/76		SUPERVISOR A. C. Rauck, Jr.	
Reviewer A. L. Shands A.L. Shands 1/76		A. C. Rauck, Jr.	
43. REMARKS			

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey FIELD EDIT: KANEHOE BAY

Job No. CM 7215 Map No.

Classification No. Edition No.

LOCALITY

State HAWAII

General Locality OAHU

Locality KANEHOE BAY

19 76 TO 1976

REGISTRY IN ARCHIVES

DATE

FIELD EDIT: KANEOHE BAY

OPR-419-RA-76

MANUSCRIPT NO. TP-00718-00720

CHARLES K. TOWNSEND
CDR., NOAA
COMMANDING OFFICER

INTRODUCTION AND METHODS

Field Edit for the RAINIER's spring project, OPR-419-RA-76 began March 1st and was completed April 15, 1976. Normally only one field unit performed field edit but on occasion, early in the project, two field units operated simultaneously. The field edit was accomplished by walking, driving GSA vehicles, and in RAINIER skiffs. Field edit is complete and thorough for the three manuscripts that cover Kaneohe Bay.

Field Edit operations began first in south Kaneohe Bay area on T-Sheet TP-00720 in order to facilitate commencement of hydrographic operations there. Simultaneous with these operations, field edit was begun at the southern edge of T-Sheet TP-00718 and moved northward to completion. After completing the initial photogrammetric support for hydrography on TP-00720, field edit progressed on this sheet around Mokapu Peninsula to the limits of the manuscript. Finally, the field work at the junction of TP-00720 & TP-00719 was undertaken and this work moved north to the junction with TP-00718. Questions from the Master Field Edit Sheets requiring geodetic locations were accomplished on all T-Sheets at the outset of the field edit.

All deletions, additions, and corrections to the final shoreline manuscript appear on the Master Field Edit Sheets and on the processed cronapaque photographs. The Master Field Edit Sheets are indices of all field edit work carried out. All discrepancies and questions listed on the Master Field Edit Sheet and film and paper ozalids are completely and thoroughly answered on the Master. Proper references are included. Special violet ink field notes on the Master Field Sheets are items that were verified by field edit. In addition, the photo number is given as a reference. Special red ink was used to indicate changes or additions found during field edit and have position and location references. Finally, those field notes inked in green are deletions. References, where needed, are included. All notes on the Master Field Edit Sheets which are identified on the cronapaque photographs, include the description, height (if a rock) and the photo number on which they were located. All Field Edit information on the smooth boatsheets for H-9593 and H-9594 which were verified by field edit was inked in black, while changes or additions were inked in special red. Unverified items would have been inked in blue, however, verification is complete for all manuscripts and blue was not used.

For a reference of photographs-T-Sheet Manuscripts, refer to "Separates Following the Text". Height data on rocks was estimated to plus or minus 1/2 foot and on bluffs and cliffs to plus or minus 10 feet. Times were referenced to 0° Longitude.

ADEQUACY OF COMPILATION

The compilation of the Manuscripts were adequate and complete. Compilation of the MHWL was generally very good. The MLLWL was compiled, wherever physically possible, by hydrographic Survey Operations and is not discussed in this text. There were numerous discrepancies, other than scale difference distortion, between the photo compiled T-Sheets and the 1:15,000 existing chart of Kaneohe Bay (NOS 19359; C&GS 4134). Except as noted on pages three(3) & five(5) T-Sheets were compiled correctly, with only minor changes verified by field edit. All rocks offshore, and inshore features are labeled and/or discussed on the Master Field Edit Sheet, and wherever possible, verified on the photographs.

Kaneohe Bay has numerous coral reefs both awash, submerged, and exposed. The obtain accurate and detailed depth delineation of these many shoal areas visual walk hydro crews obtained numerous detached pole soundings throughout these areas.

Quality and contrast of the reefs on the cronapaque photographs is excellent and was compared against actual reef conditions during field edit and against the hydrographic data. Some revisions to reef outlines and conditions were made, and are noted and referenced on the Master Field Edit Sheets. A combination of both photograph interpretation and hydrographic survey information is necessary for complete and adequate delineation of the shoal areas. For further information on survey operations, refer to Descriptive Reports, H-9593 and H-9594.

SHORELINE SUMMARIES

TP-00718: Field edit by LTJG Andreen commenced at the junction of TP-00718 and TP-00719 at latitude $21^{\circ} 29' 30''$ N, progressed northward to the manuscript limits at latitude $21^{\circ} 33' 40''$ N, and is complete. The shoreline compilation is generally excellent, with only very minor revisions directly north and south of latitude $21^{\circ} 30' 30''$, and the left tip of Kualoa Point.

The dams in the Molii Pond are verified as being constructed of rock, rip-rap, and small boulders. This area is in the process of becoming a wildlife refuge to adjoin the state park at Kualoa Point.

A small foul area was investigated off the central tip of Kualoa Point. It is small and the surrounding water is shallow, thus this area is not a serious hazard to navigation. The rock off shore, located at approximately $21^{\circ} 30' 30''$ N, $157^{\circ} 50' 15''$ W, was searched for and not found photogrammetrically but the hydrographer did locate this rock. The recommendation is for retention of the rock as shown in the hydrographic records.

The MHWL for Mokolii Island was compared visually with the photograph # 3291 and found accurate. The pipe charted at approximately $21^{\circ} 31' 15''$ N, $157^{\circ} 50' 05''$ W, was search for by the field editor and not found. Heavy surf in this region hampered the investigation process. A change to the hydrographic instructions put this outside the hydrographic projected area and therefore it was not searched for by the hydrographer. It is recommended that

the pipe be retained in its present location.

The region of piers and rip-rap beach between Latitudes $21^{\circ} 31' 15''$ and $21^{\circ} 32' 00''$ was inaccurately compiled. The shoreline is correct, however in the lower portion of this latitude span, the piers are in actuality rock groins extending approximately 8 feet out from the MHWL. The upper portion of this latitude span shows no discrepancies in either shoreline compilation or fore-shore characteristics, thus no field notes were necessary. Finally the tanks in question, charted at approximate latitude and longitude $21^{\circ} 32' 40''$ N, $157^{\circ} 51' 15''$ W were searched for thoroughly and not found. Deletion is recommended.

The coral reef lines showed generally good agreement in manuscript compilation and visual verification in the field. For further information on reef delineation, refer to DESCRIPTIVE REPORT: H-9594, OPR-419-RA-76.

All non-floating aids to navigation and landmarks for charts have been thoroughly researched and answered for this manuscript. Refer to "Separates Following the Text" for Form 76-40's.

TP-00719: Shoreline verification for this manuscript was begun by ENS OSBORN and Mr. MELBY at its junction with TP-00720 at approximate Latitude $21^{\circ} 24' 53''$ N and proceeded northwesterly to the junction with TP-00718. Inshore work was carried out in conjunction with the shoreline edit. Field Edit is complete for this manuscript.

Two small islands not previously compiled or charted were discovered at these approximate positions: 1) $21^{\circ} 24' 50''$ N, $157^{\circ} 47' 05''$ W, and 2) $21^{\circ} 25' 40''$ N, $157^{\circ} 47' 40''$ W. A minor revision of the MHWL is also noted at this first position. The islands are very small earthen masses with sparse grassy growth.

Seven concrete pilings that bare 3 feet were discovered on either side of the pier that serves the shuttling students to Moku-O-Loe-Island ($21^{\circ} 25' 55''$ N, $157^{\circ} 47' 42''$ W). These piles are a potential hazard to mariners unfamiliar with this region. A small inlet located on the southwestern tip of Moku-O-Loe Island was verified to exist. It was not previously compiled on the T-Sheet or charted. Two additional cement blocks at approximate position $21^{\circ} 25' 50''$ N, $157^{\circ} 48' 20''$ W that were not compiled were verified, and should be added to the one presently shown on the T-Sheet. Compilation on the concrete footings was verified. The masts no longer exist on these footings.

A 25 foot bluff was verified at the seaward tip of Kealohi Point. It is rocky in nature with grassy growth extending downward. This bluff is of landmark value to small boaters in the near vicinity. Also note Kaneohe Fishing Pier, just to the northeast of Kealohi Point, at approximate location $21^{\circ} 26' 50''$ N, $157^{\circ} 48' 45''$ W, is now called Heeia Kea Small Boat Harbor. For further information refer to Coast Pilot Report: Kaneohe Bay, OPR-419-RA-76.

Fixed platform ruins were discovered on both sides of the

small boat channel which is cut or dredged through coral reef at approximate position $21^{\circ} 27' 25''$ N, $157^{\circ} 49' 40''$ W. These fixed ruins appear from their location to mark the channel. Their fixed nature warrants charting, and they can be used as an aids to navigation in this area.

The "T" shaped object at the far northern tip of Kahaluu Landing is in actuality a sea wall that has been filled, landscaped, and has a boat landing and covered storage added on its western side. The whole structure is a major portion of a large estate on the point. A small earth filled and landscaped circular seawall that can be interpreted as an island was located and verified 20 meters to the west of the tip of the "T".

A large foul area, within the limits of the main shoreline reef, was verified at approximate location, $21^{\circ} 28' 34''$ N, $157^{\circ} 50' 45''$ W. There are numerous small rocks baring, awash, and submerged within the limits defined on the Master Field Edit Sheet. An acceptable number were photo identified, and form an outline for the foul area. Further to the northeast, along the shoreline, a rocky region awash was verified seaward from a point of land just to the right of a stream outflow, at approximate position $21^{\circ} 29' 15''$ N, $157^{\circ} 50' 45''$ W.. This presents a hazard to small boat navigators who presently moor a short distance up the stream. Small skiffs were observed tied up in the stream, but none were seen to actually make the transit past the rocky region awash.

The Master Field Edit Sheet position of Ahu-O-Laka Island, $21^{\circ} 28' 19''$ N, $157^{\circ} 49' 10''$ W, is grossly inaccurate. Three point sextant fixes were taken at high tide at the water line of Ahu-O-Laka and another island off the tip of the Kaneohe Marine Corps Air Station runway. Geographic positions were computed for each sextant fix. Ahu-O-Laka is actually two small sand islands at high water and is situated in the center of a large sandy reef area. The region between the two portions of island is submerged 1 to 2 feet at high tide. The island near the MCAS runway does not cover as extensive an area as is shown on the Master Field Edit Sheet or on the existing chart. Representative 3 point sextant fixes were also taken on Kapapa Island to verify its geographic position and that of the ledge on the western tip of the island. For further information refer to the Master Sheet and to the "Separates Following the Text".

All Aero Obstructions Lights as well as other non-floating aids to navigation and landmarks that required information as per instructions in the notes to the field editor have been completely answered. Refer to the Master Field Edit Sheet and to the "Separates Following the Text" for position information and Form 76-40's. For a more detailed discussion of survey methods used for location, Horizontal Control Report: Kaneohe Bay, OPR-419-RA-76, can be referenced.

On TP-00719 as on TP-00718, the reef delineation showed good agreement when manuscript and photography were compared.

For further information on the coral reef survey methods used for delineation, refer to Descriptive Reports: H-9593 and H-9594, OPR-419-RA-76.

TP-00720: Shoreline verification began by ENS OSBORN and Mr. MELBY at the tip of the Kaneohe MCAS runway. First priority was to finish the inside bay shore to the junction with TP-00719. Once this was accomplished, field edit continued around the northern shoreline past Pyramid Rock and around Mokapu Point, then southward to the manuscript limits in Kailua Bay at approximate position $21^{\circ} 25' 25''$ N, $157^{\circ} 44' 48''$ W. Field edit is complete on this manuscript.

The mooring pier at Kaneohe Bay Yacht Club at Latitude $21^{\circ} 25' 15''$ N, $157^{\circ} 46' 15''$ W is back with earth that is grown over. The MHWL was verified along this pier and is noted on the Master Field Edit Sheet. It should be charted as shown.

Two small islands that previously were not charted or compiled were verified to exist along the eastern shore of the inner bay region. The approximate locations are 1) $21^{\circ} 25' 28''$, $157^{\circ} 46' 04''$ W and 2) $21^{\circ} 25' 14''$ N, $157^{\circ} 46' 05''$ W. Both are earth in composition with small mangrove growths. They should not however be considered as mangrove islands.

A small boat wreck was discovered and verified in the small bay that comprises the Marine Corps Air Station Marina, at approximately $21^{\circ} 26' 35''$ N, $157^{\circ} 45' 52''$ W. It is in very shallow water and appears to be no serious danger to navigation in the Marina. It should however, be charted for completeness.

The waters north of Pali Kilo are an extremely heavy surf zone. Boat investigations here were inconclusive due to the areas inaccessability. The region was visually inspected from the shoreline south of Pyramid Rock where the height gave a good vantage point. A breaker and foul area was outlined from this vantage point. The region is extremely foul with submerged rocks and boulders. It should be charted as such. This area is a definitely a dangerous area for all vessel traffic. Survey operations could not be undertaken due to its foul and dangerous nature.

All the shoreline surrounding Ulupau Crater is foul with ledges baring and awash plus regions of beach and rock shoreline. Specific rocks in the entire region were adequately searched for and either not found or not photographically identified. It is recommended that the ledges identified on the Master Field Edit Sheet and cronapaque photographs be charted and that specific rocks be retained. It is believed that they are portions of the ledges that extend the highest above the waterline.

A sewer outfall is under construction on the eastern shore of the Mokapu Peninsula at approximate position $21^{\circ} 27' 12''$ N, $157^{\circ} 43' 40''$ W. For final information on its position for charting purposes contact LT Robert Braddock, Assistant Public works Officer, Kaneohe, M.C.A.S., Phone 808-257-2521. The outfall will be of definite landmark value for both large and

small scale charts of Oahu and the northern islands in general.

All non-floating aids to navigation and landmarks for charts have been thoroughly researched and answered for this manuscript. For further information, refer to the Master Field Edit Index and the "Separates Following the Text". Reference the Horizontal Control Report; Kaneohe Bay, OPR-419-RA-76, for a discussion of the geodetic surveying techniques used for location of aids and landmarks.

Except for a small discrepancy at approximate position $21^{\circ} 26' 15''\text{N}$, $157^{\circ} 45' 37''\text{W}$ that is noted on the Master Field Edit Sheet and referenced photograph, the coral reef delineation shows good agreement with actual field observations. For further reef information, reference Descriptive Report: H-9593, OPR-419-RA-76.

ADDITIONAL INFORMATION

Visual Hydrography and photo located signals were a necessary part of the Kaneohe Bay portion of OPR-419-RA-76 to obtain adequate reef delineation in regions too shallow for electronic survey craft. Separate film ozalids for photogrammetrically located signals have been submitted. Information contained on the ozalids are: the number of the signal on the Master List, the photographs used for each ray transferred, and a reference to the "Separates Following the Text", PHOTO SIGNAL COMPUTATIONS. Field computations such as: the meters forward and backward that were scaled, conversion to seconds, and latitude and longitude computations will be found in these separates. Signal locations are listed on the Master Field Edit Sheet, and referenced to the Photo Signal Film Ozalid.

DATA PROCESSING

Position information for the Ahu-O-Laka, Runway, and Kapapa Island location was logged in visual hydrographic format and punched on paper tape. Geographic positions were computed using the ships PDP8/e computer. Data being submitted include visual master and corrector tapes for automated plotting, printouts of the tapes, and printouts of the geographic position computations for each 3 point sextant fix taken. A list of computer programs used follows:

RK 300 UTILITY COMPUTATIONS
Version 2/10/76

AM 602 "ELINORE" (EXTENDED LINE ORIENTED EDITOR)
Version 5/22/76

RECOMMENDATIONS

Hydrographic survey data must be used in conjunction with photographic analysis to obtain coral reef delineation. "Walk Hydro" was done over each reef to obtain sounding coverage, and

electronic survey vessels circled and transversed reefs to the extent that was permitted by safety. Coupling the two information sources will not only give excellent delineation but will facilitate the development of adequate depth curves along the steeply sloping sides of the reefs.

Photograph quality was generally very good. Clarity and contrast facilitated good identification for shoreline verification and photo identification of visual signals. Coverage was lacking in some areas however. Excessive area gaps between certain photograph pairs forced six(6) visual signals to be located with only two positioning rays. There were three areas where lacking coverage existed. The first which has already been discussed earlier in this report was the lack of photo coverage for the islands in central Kaneohe Bay. The second was the North-South shoreline on TP-00718. A change in Hydrographic Project Instruction's project limits eliminated the need for photo picked signals in this area. Signals 310 and 316 were picked on the upper limits of TP-00719 using only two rays and they form the boundary of another region of limited coverage. When photo picking with two rays, every attempt was made to locate signals that were easily identifiable and provided strong intersection for the positioning rays. This was accomplished in all cases. However, it is recommended that either future photographs taken be provided for field work, especially, where photo identified signals are going to be used for hydrography.

Respectfully submitted:

John C. Osborn Jr.

John C. Osborn Jr.

ENS., NOAA

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION									
LANDMARKS FOR CHARTS										ORIGINATING ACTIVITY									
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED										<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input checked="" type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)									
REPORTING UNIT (Field Party, Ship or Office)		STATE		LOCALITY		DATE													
Coastal Mapping Div. Rockville, Md.		HAWAII		Kaneohe Bay, Oahu		June 1978													
OPR PROJECT NO.		JOB NUMBER		SURVEY NUMBER		DATUM		POSITION		METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED							
419		CM-7215		TP-00720		Old Hawaiian													
CHARTING NAME		DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)		LATITUDE		LONGITUDE													
				° / ' " D.M. Meters		° / ' " D.P. Meters													
MICRO TOWER	(Kaneohe, Hawaiian Telephone Company, Microwave Tower, 1969) Ht. = 590	21 25	32.180	157 45	35.155					F-3-6-V March 1976		19359 19357 19340							
RADAR DOME		21 27	39.25	157 45	56.33					F-3-6-L March 1976		" " "							
RADAR DOME		21 27	42.19	157 46	00.11					F-V-P March 1976		" " "							
RADIO TOWER		21 27	42.84	157 46	04.27					" "		19359							
RADIO TOWER		21 27	41.38	157 46	03.99					" "		"							
AERO	(Kaneohe, Hawaiian Telephone Company Microwave Tower, 1969)	21 25	32.180	157 45	35.155					F-V-Vis March 1976		19359 19357 19340							
AERO	Lighted	21 25	46.10	157 45	42 92					F-3-6-L March 1976		19359							
AERO	Lighted	21 24	46 97	157 46	06.65					F-3-6-L March 1976		" "							
AERO	Lighted	21 27	39.25	157 45	56.33					" "		19359 19357							
AERO	Lighted	21 27	42.19	157 46	00.11					F-V-P March 1976		"							

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions* require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - field P - Photogrammetric L - Located Vis - Visually V - Verified 1 - Triangulation 5 - Field identified 2 - Traverse 6 - Theodolite 3 - Intersection 7 - Planetable 4 - Resection 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	<div> <div> <div> <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify) </div> <div>FIELD ACTIVITY REPRESENTATIVE</div> </div> <div> <input type="checkbox"/> OFFICE ACTIVITY REPRESENTATIVE </div> </div>
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) 8. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	

Replaces C&GS Form 567,

NON-FLIGHTING AIDS OR LANDMARKS FOR CHARTS

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**ORIGINATING ACTIVITY**

- ☐ HYDROGRAPHIC PARTY
☐ GEODETIC PARTY
☐ PHOTO FIELD PARTY
☒ COMPILATION ACTIVITY
☐ FINAL REVIEWER
☐ QUALITY CONTROL & REVIEW GRP.
☐ COAST PILOT BRANCH

<input type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED	REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
	Coastal Mapping Div.	Hawaii	Kaneohe Bay, Oahu	Sept. 1976
	A.M.C. Norfolk, Va.			

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
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JOB NUMBER

SURVEY NUMBER

DATE

METHOD AND DATE OF LOCATION
(See instructions on reverse side)

DESCRIPTION

LATITUDE		LONGITUDE	
° /	"	° /	"
D.M. Meters		D.P. Meters	

FIELD

OFFICE

AFFECTED

RADIO TOWER	(Kaneohe Bay, MCAS, East Radio Tower of Three, 1957) Destroyed
-------------	--

21.27	17.848	157.45	19.288
...	548.9		555.4

F-V-Vis...
March, 1976

19357
19359

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'	
(Consult Photogrammetric Instructions No. 64.)	
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	ORIGINATOR <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify) FIELD ACTIVITY REPRESENTATIVE OFFICE ACTIVITY REPRESENTATIVE <input type="checkbox"/> REVIEWER <input checked="" type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection P - Photogrammetric Vis - Visually 5 - Field identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75 *FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982 II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

REVIEW REPORT
TP-00720

SHORELINE

April 18, 1978

61. GENERAL STATEMENT:

See Summary, page 6 of this Descriptive Report.

The north and south ranges of the $\frac{1}{2}$ nautical mile course in Kaneohe Bay do not form parallel azimuths. The positions of the markers shown on the map and reported on Form 76-40 are those submitted by the field editor. These features are not visible on the photographs.

Photograph coverage was not sufficient along the eastern shoreline to extend that shoreline to the southern limit of the map.

The mean lower low water line shown on the Class I Map was deleted during final review. That line was traced from a copy of Boatsheet H-9593.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No comparison was made.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

No comparison was made.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with a copy of Final Verified Smoothsheet H-9593 (RA-10-1-76). No significant differences were found.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 19359, 1:15,000 scale, 6th edition dated September 28, 1974 and Chart 19357, 1:80,000 scale, 13th edition dated December 14, 1974.

The $\frac{1}{2}$ nautical mile range markers plot in different positions on the chart than on the map. Several mangrove islands shown on the map along the shoreline of Kaneohe Bay are not shown on the chart.

A wreck charted east of Pyramid Rock is not visible on the photographs and was not investigated by the field editor or hydrographer.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the Project Instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Submitted by:

A. L. Shands

A. L. Shands
Final Reviewer

Approved for forwarding:

Bill H. Barn

for Jeffrey G. Carlen, Cdr.
Chief, Coastal Mapping Division, AMC

Approved:

Bill H. Barn

Chief, Photogrammetric Branch

John D. Perreco Jr.

James C. Allen

Chief, Coastal Mapping Division