

T 11796

T-11796

NOAA FORM 76-35 (3-76)	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Map No.	Edition No.
T-11796	1
Job No.	PH-6402
Map Classification	FINAL FIELD EDITED MAP
Type of Survey	SHORELINE
LOCALITY	
State	HAWAII
General Locality	HAWAII ISLAND, WEST COAST KAILUA TO SOUTH CAPE
Locality	KEALAKEKUA BAY
1963 TO 1972	
REGISTRY 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 <input checked="" type="checkbox"/> ORIGINAL SURVEY XX-T-11796 <input type="checkbox"/> RESURVEY MAP EDITION NO. (1) <input type="checkbox"/> REVISED MAP CLASS FINAL LAST PRECEDING MAP EDITION TYPE OF SURVEY JOB PH- <input type="checkbox"/> ORIGINAL MAP CLASS <input type="checkbox"/> RESURVEY SURVEY DATES: <input type="checkbox"/> REVISED 19 TO 19																																																																																		
PHOTOGRAMMETRIC OFFICE Coastal Mapping Div. Atlantic Marine Center, Norfolk, VA																																																																																				
OFFICER-IN-CHARGE R. Matsushige																																																																																				
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T-11796
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" & "S"
E=152.71mm, S=152.29mm

TIDE STAGE REFERENCE

 PREDICTED TIDES REFERENCE STATION RECORDS TIDE CONTROLLED PHOTOGRAPHYTYPES OF PHOTOGRAPHY
LEGEND

TIME REFERENCE

ZONE

Hawaii

STANDARD

MERIDIAN

150th

DAYLIGHT

NUMBER AND TYPE

DATE

TIME

SCALE

STAGE OF TIDE

63S(C) 8136-8139**	Sept. 1, 1963	10:24	1:15,000	1.0 Ft, above MLLW
69E(C) 9334-9336**	Mar. 13, 1969	09:53	1:15,000	1.1 Ft, above MLLW
63S(C) 8073-8074*	Sept. 1, 1963	09:13	1:30,000	0.4 Ft, above MLLW

Mean Tide Range = 1.4 Ft

REMARKS

*Bridging photographs, **Compilation/hydro support photographs

2. SOURCE OF MEAN HIGH-WATER LINE

The mean high water line was compiled from office interpretation of the compilation photographs using stereo instrument and graphic methods.

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
H-9308	1972	Registered			
H-9346					

5. FINAL JUNCTIONS

NORTH None	EAST T-12547	SOUTH T-12547	WEST T-12546
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REMARKS
This inset map is contained within portions of 1:10,000 scale maps T-12546 and T-12547.

T-11796

HISTORY OF FIELD OPERATIONS

I. FIELD INSPECTION OPERATION FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Newsom	Feb.-Sept. 1964
2. HORIZONTAL CONTROL	Cline	Sept. 1964
RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None	
3. VERTICAL CONTROL	None	
RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None	
4. LANDMARKS AND AIDS TO NAVIGATION	E. Cline	Sept. 1964
RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None E. Cline	Sept. 1964
5. GEOGRAPHIC NAMES INVESTIGATION	<input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	BY
6. PHOTO INSPECTION	E. Cline	Aug/Sept 1964
7. BOUNDARIES AND LIMITS	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
None2. VERTICAL CONTROL IDENTIFIED
None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)
63(S) 8085, 8086 (1:30,000 scale matte contacts)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
63(S)8085 "	Napoopoo Light Cooks Monument		

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 Project field report

T-11796
HISTORY OF FIELD OPERATIONSI. FIELD INSPECTION OPERATION FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	(NOAA Ship RAINIER) G. Haraden	Sept. 1972
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	S. Hollingshead None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY. IDENTIFIED BY	S. Hollingshead None S. Hollingshead
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	S. Hollingshead
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED None	2. VERTICAL CONTROL IDENTIFIED None		
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

63(S) 8138 (Matte ratio, 1:5,000 scale)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
63(S)8138 "	Napoopoo Light Cooks Monument		

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 Field edit paper print
- 1 Field edit report
- 1 Form 76-40

T-11796
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	Mar. 1972	Class II manuscript	None	July 1972
Field edit applied, compilation complete	Apr. 1974	Class I manuscript	June 1980	May 1974
Final Review	Apr. 1987	Final Map	July 1987	July 1987

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER PAGES	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
2		June 1980	Landmarks & Aid. for Charts

2. REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: June 19803. REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: None

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)

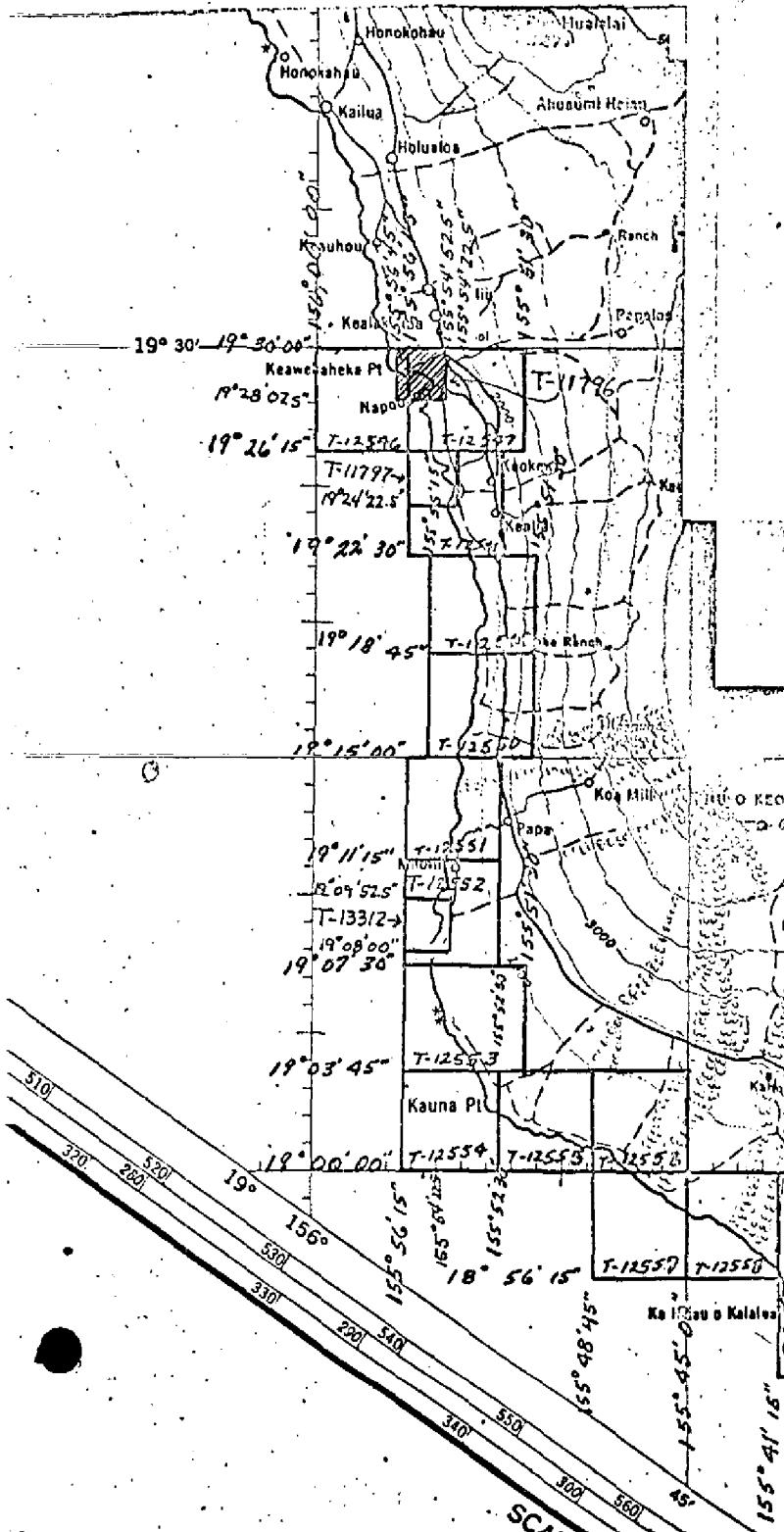
SECOND EDITION	SURVEY NUMBER TP - (2)	JOB NUMBER PH -	TYPE OF SURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	<input type="checkbox"/> REVISED	<input type="checkbox"/> RESURVEY
THIRD EDITION	SURVEY NUMBER TP - (3)	JOB NUMBER PH -	<input type="checkbox"/> II.	<input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	<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	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	<input type="checkbox"/> REVISED	<input type="checkbox"/> RESURVEY
			<input type="checkbox"/> II.	<input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL

JOB PH-6402

SHORELINE MAPPING

HAWAII IS. WEST COAST
KAILUA TO SOUTH CAPE

SCALE 1:10,000



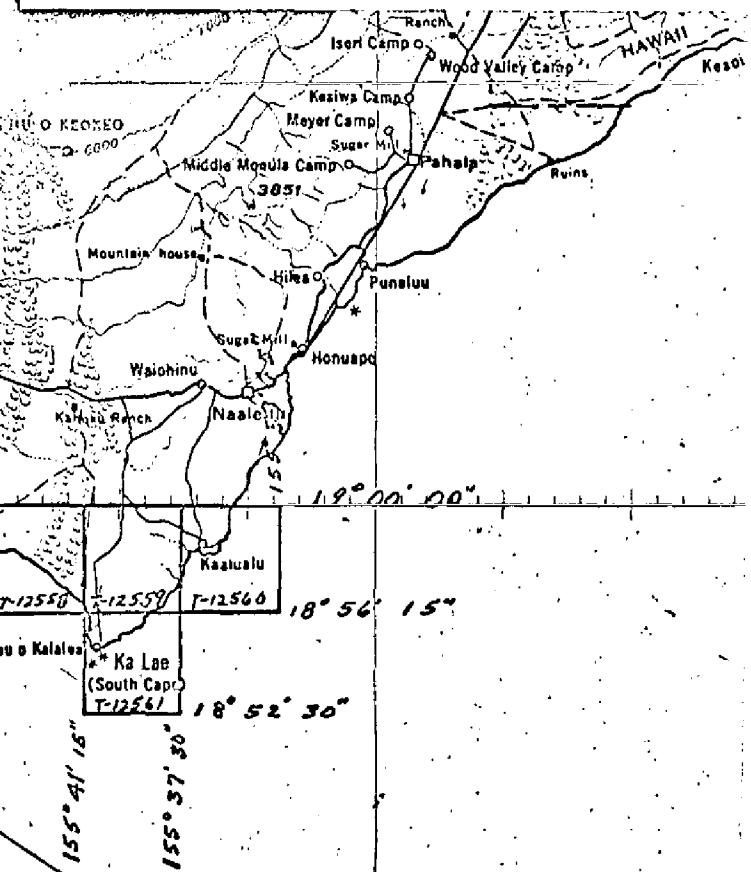
JOB PH-6402

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No. Area Sq. Miles

T-12546	1
T-12547	3
T-12548	3
T-12549	3
T-12550	3
T-12551	3
T-12552	3
T-12553	3
T-12554	1
T-12555	3
T-12556	1
T-12557	2
T-12558	3
T-12559	2
T-12560	3
T-12561	3
T-11796	2
T-11797	2
T-13312	2

Total : 46



SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT

T-11796

This 1:5,000 scale Final Field Edited Inset Map is one of nineteen maps that comprise PH-6402, Hawaii Island, West Coast, Kailua to South Cape. The project consists of sixteen 1:10,000 scale maps (T-12546 thru T-12561) and three 1:5,000 scale inset maps (T-11796, T-11797, T-13312).

The purpose of this map was to furnish data in support of hydrographic operations and to provide current shoreline data for marine charts.

This map provides a large scale portrayal of Kealakekua Bay and vicinity. This inset map is contained within the northern segment of maps T-12546 and T-12547.

Photo coverage for the project was adequately provided in August/September 1963 using the Wild RC-8 "S" camera. Photography consisted of 1:30,000 scale panchromatic photographs used for field inspection, aerotriangulation, and compilation. Color photographs at 1:15,000 scale were obtained for compilation and hydro support. Additional color photographs at 1:15,000 scale were obtained in March 1969 with the Wild RC-8 "E" camera. These supplemental photographs were used to compile inset maps T-11796 and T-11797. The stage of tide for all project photographs was based upon predicted tide data. No infrared photographs were provided.

Field work prior to aerotriangulation consisted of the recovery and establishment of horizontal control by photoidentification methods. In addition, a field inspection was performed for the project area utilizing the 1:30,000 scale contact photographs. This activity was conducted in February thru September 1964 in conjunction with adjoining project PH-6401.

Analytic aerotriangulation for the 1963 photography was adequately provided by the Washington Science Center in June 1969. Tie points from photo strip #4 contained in adjoining project PH-6401 were included in this bridge. Results from the bridge were used indirectly to control this inset map. Since the 1969 photographs, used to compile this map, were not included in the bridge, compilation was task with determining

T-11796

1963 bridging photographs and the 1963 color photographs were used to supplement the photointerpretation. Copies of the initial compilation and hydrographic support data were forwarded to the hydrographer for field edit.

Field edit was conducted in conjunction with hydrographic survey H-9308 by NOAA Ship RAINIER personnel in September 1972.

Application of field edit was completed at the original compilation office in April 1974 and the manuscript was advanced to Class I. Map copies were submitted to the hydrographer for smooth sheet application.

Final review was performed at the Atlantic Marine Center in April 1987. A comparison was made with the common hydrographic surveys and nautical chart. The original base manuscript and related data along with a final Chart Maintenance Print and a Hydrographic Print were forwarded to the Washington Science Center for registration and distribution.

FIELD INSPECTION

T-11796

Field activity prior to compilation included a field inspection of the shoreline and the recovery/photoidentification of horizontal control necessary for project aerotriangulation. Field inspection consisted of an evaluation of the 1963 1:30,000 scale contact photographs. The 1969 photographs used to compile this manuscript were not field inspected.

UNITED STATES GOVERNMENT

C. S. S. 631W
U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

40

631W

Memorandum

TO : Chief, Photogrammetric Field Operations DATE: August 5, 1964
THRU : Honolulu Field Officer *✓*

FROM : Lt(jg) Edward P. Cline

SUBJECT: Control Identification Project No. 21413

No problems were found in the control identification on Project 21413. The following is a list of the stations identified on the various Flight Lines:

FLIGHT STRIP NO. 5

WAIKAKUU, 4, 1951
KAPUKAWAA, 1884
OHEPUUPUU, 1890

FLIGHT STRIP NO. 6

KAMOI, 1948
NA PUU a PELE, 1891
PUU KI, 1914
TANK, 1948

Supplemental Station Pricked:
KAUNA POINT LIGHT, 1949

FLIGHT STRIP NO. 7

KALAE 2, 1948
PALAHEMO 1898
KAMILO, 1898
KIPAKPAE, 1898

Supplemental Stations Pricked:
KALAE LIGHT, 1948
KALAE, 1887
MAHANA, 1898

The ratio prints provided by the Washington Office were of great assistance in the identification of the stations and they were very well placed.

Edward P. Cline
Edward P. Cline

8

Photogrammetric Plot Report
Hawaii Island, Hawaii
PH-6402

June 10, 1969

21. Area Covered

This project extends along the southwest shore of Hawaii Island. It includes T-sheets 12546 through 12561 at 1:10,000 and T-sheets 11796, 11797 and 13312 at 1:5,000. This project joins PH-6401 which extends along the northwest shore of the island.

22. Method

Strips were bridged on the stereoplaniograph and adjusted by IBM 1620 methods. Strip #4 discussed in the report for PH-6401. Strip #10 was adjusted on five triangulation stations with tie points from Strips #4 and #11 as checks. Strip #11 was adjusted on five stations with one station and tie points as checks. The adjustment of Strip #12 met with considerable problems. These problems were due to control identification on stations KAMILO, KIPAEPAE on the northeast end of the strip. Points were dropped from Strip #11 to enable model 63-S-7964 and 7965 to be set, thus enabling T-sheet 12561 to be completed.

T-sheets 12559 and 12560 must await further field work. Difficulties were also experienced in bridging Strip #13. This problem was resolved by dropping enough points from Strips #4 and #10 to set individual models between 63-S-8080 and 8085. All points between strips were averaged. Points were drilled by using the Wild PUG.

23. Adequacy of Control

Control provided by the field was adequate. The following stations could not be held in the bridging adjustments.

1. KEEI SOUTH BASE, 1948, SS #1 and SS #2, could not be held in Strip #13, as was the case of Strip #4 in PH-6401. No reasons could be determined for the lack of adjustment with other points.

2. KAMILO, 1949 and SS #1 3. KIPAEPAE, 1948
and SS #1. Problems with these two stations could
not be resolved. Re-identification of the stations
is planned at the same time that work continues
to the east.

4. McCANDLESS, 1948 SS #1 and SS #2 altho . . . held
in the bridging could be seen on only one photograph
in Strip #10 due to cloud coverage.

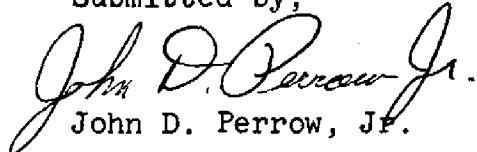
24. Supplemental Data

Ratio prints will be provided to aid in compilation.
Local USGS quads were used to provide vertical points
needed for the strip adjustment program.

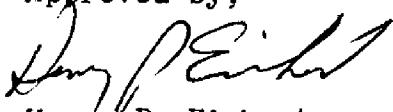
25. Photography

Photography was not adequate to provide coverage of
the 1:5,000 scale sheets. This inadequate coverage was
caused by a change in the limits of the 1:5,000 areas
after bridging was nearing completion. Photography was
adequate in regard to definition and overlap.

Submitted by,


John D. Perrow, Jr.

Approved by,


Henry P. Eichert
Chief, Aerotriangulation Section

Notes to Compiler
PH-6402
Hawaii Island, Hawaii

The following points should be used in setting individual models along Strips #12 and #13.

(1) 63-S-7964-7965

Points 68803, 68804, 67100, 67101, 64100, 64101, 64102 and 64103.

(2) 63-S-8080-8081

Points 22330, 23310, 23800, 23801

(3) 63-S-8081-8082

Points 77331, 78333, 22801, 23800, McCANDLESS SS #1 and SS #2

(4) 63-S-8082-8083

Points 76331, 77331, 77333

(5) 63-S-8083-8084

Points 75331 HONAUNAU ST. BENEDICT CATH. CH. SPIRE, 1948 plus points dropped from model 8082-8083.

(6) 63-S-8084-8085

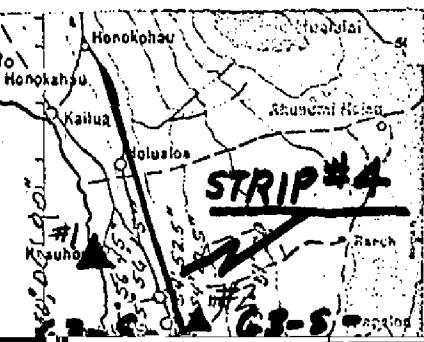
Points 75331, 75333 plus points dropped from model 8083-8084.

Plates 63-S-7821 and 7824 were not used in bridging Strip #10.

Plates 63-S-7976, 7978, 7880, 7982 and 7984 were not used in Strip #11.

11
JOB PH-6402
SHORELINE MAPPING
HAWAII IS. WEST COAST
AILUA TO SOUTH CAPE
SCALE 1:10,000

48



JOB PH-6402

OFFICIAL MILEAGE FOR COST ACCOUNT

Sheet
No.

1. POINT, 1928
2. KANAKU, 1948
3. HONAUNAU ST. BENEDEKT
CATH. CH. SPIRE, 1948
4. KEEI S. BASE, 1948
5. McCANDLESS, 1948
6. WAIKAKUU 7, 1951
7. KAPUKAWAA, 1962-1884
8. KAMOI, 1948
9. NA PUUA PELE 1949
10. PUU KI, 1949

12

Photogrammetric Plot Report

PH-6401

Hawaii Island, Hawaii

Feb. 4, 1969

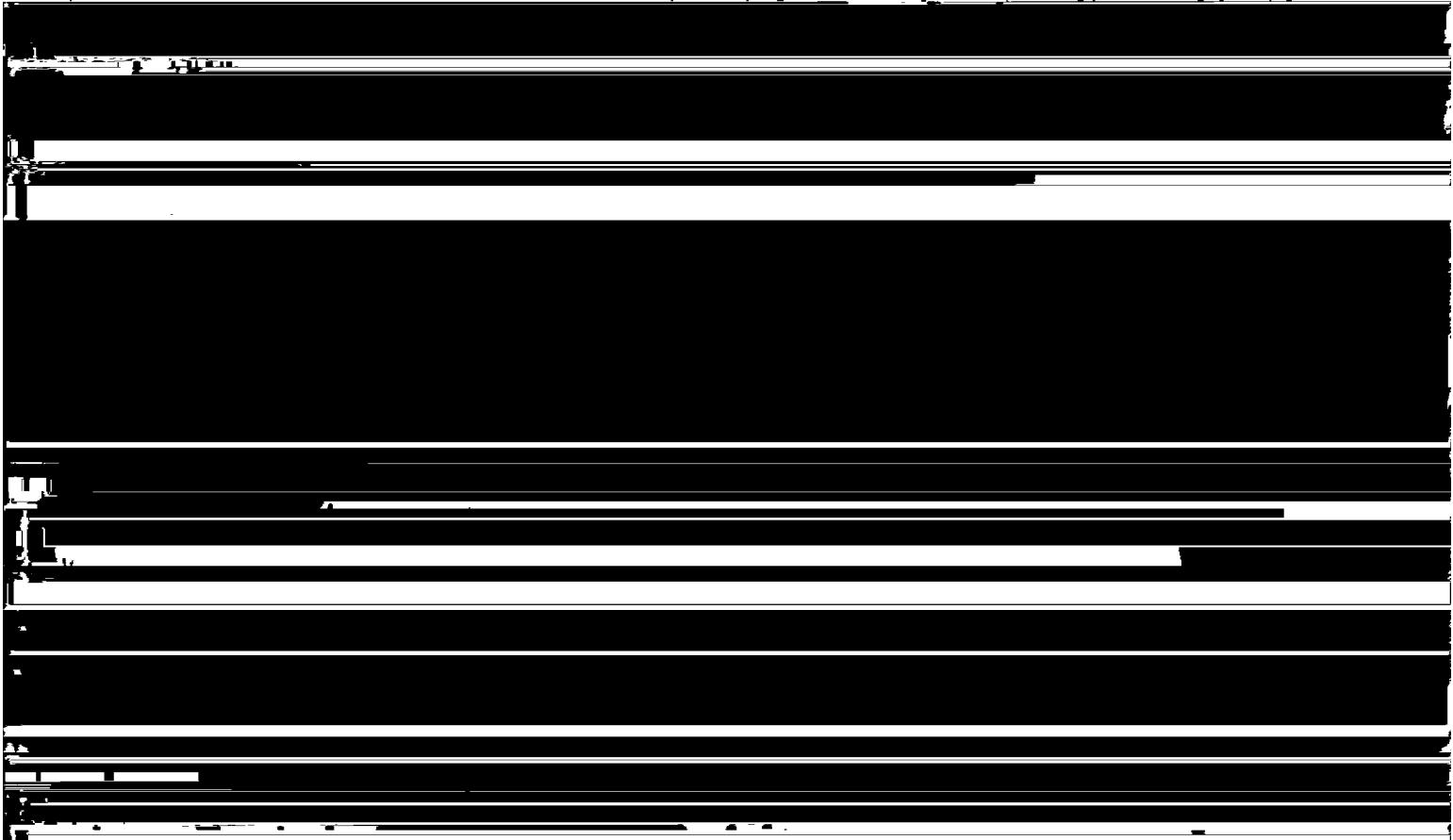
21. Area Covered

The area covered by this report is along the northwest coast of Hawaii Island. T-sheets in this area are numbered 12534 thru 12541, 12543, and 12545 at 1:10,000 scale. T-sheets 12542, 12544, 12635, 13131 and 13132 at 1:5,000 scale. Sheets T-12527 thru 12533 and 13154 were covered by a previous report on Strips #1 and #2.

22. Method

All strips were bridged on the stereoplaniograph and adjusted by IBM 1620 methods. Strip #3 was adjusted on four stations with two additional stations as checks. Strip #4 was adjusted on seven stations with two additional stations as checks. Strip #6 was adjusted on two control points plus 7 tie points. Strip #7 was adjusted on one control station and three tie points. Strip #8 was adjusted on three control stations and three tie points. All tie points between strips were averaged. Points were drilled using the Wild PUG.

23. Adequacy of Control



-2-

24. Supplemental Data

Local USGS quads were used to provide vertical points needed for the strip adjustment program.

25. Photography

Photography was not adequate to provide coverage of the 1:5,000 scale sheets with the exception of T-12542. This inadequate coverage was caused by a change in the limits of the 1:5,000 areas after bridging was nearing completion. Photography was adequate in regard to definition and overlap.

Submitted by,

John D. Perrow Jr.
John D. Perrow, Jr.

Approved by,

Henry P. Eichert
Henry P. Eichert
Chief, Aerotriangulation Section

per phone call John Perrow 3/5/69

Old Hawaiian Dates

60021
6-5-77772847802
60022
6-5-77772847815
STR1522
6-5-78192847939
STR1521
6-5-78192847939

1. KEPULU, 1978
2. KEPULU, 1913
3. KELALIHEWA 2, 1968
4. LOKAN TOWER, 1975
5. PUU ULA, 1913
6. RED TANK, 1968
7. KEAWANUI, 1978

14

COMPIILATION REPORT

T-11796

31. DELINEATION:

Delineation was accomplished by stereo instrument methods using the 1969 1:15,000 scale compilation photographs. Ratio prints of the 1:15,000 scale 1963 photographs along with the 1969 photographs were used graphically to supplement the compilation of minor detail and to assist in photointerpretation. Field inspected data, annotated on the 1963 1:30,000 bridging photographs, was applied where the features could be accurately identified and transferred to the 1969 compilation photographs. Individual rocks that could not be clearly identified were not compiled.

Photo coverage and quality were adequate.

32. CONTROL:

Control for this sheet was established by instrument compilation methods from the common 1:10,000 scale manuscript T-12547. When map T-12547 was compiled from 1963 photographs, common points were established on the 1969 photography and the positions were plotted on this manuscript. Refer to the Office Instruction dated October 28, 1969-Item 5.08 and Photogrammetric Plot Reports dated February 4, 1969 (PH-6401) and June 10, 1969.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was delineated from the compilation photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline, coral and foul limits were delineated from office interpretation of the 1969 compilation photographs and from the annotated 1963 photographs resulting from the precompilation field inspection. Because of the small tide range, no mean lower low water line was compiled.

36. OFFSHORE DETAILS:

Compilation of offshore detail was performed as described in Item 31.

T-11796

37. LANDMARKS AND AIDS:

Appropriate data was prepared for field edit.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

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

40. HORIZONTAL AND VERTICAL ACCURACY:

Refer to this report, Item 32.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS quadrangle Honaunau, Hawaii, dated 1959, scale 1:24,000.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with C. & G.S. Charts:

4123, 2nd edition, scale 1:10,000, June 12, 1967

4140, 3rd edition, scale 1:80,000, January 24, 1966.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Henry J. Hancock
for Arnold L. Shands
Cartographer
December 1969

Approved:

Henry J. Hancock
for Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

ADDENDUM TO THE COMPILATION REPORT

T-11796

Field edit was performed in conjunction with hydrographic surveys H-9308 and H-9346 in September 1972. Field edit did not resolve the difference between the published and photo position for Captain Cook's Monument and Napoopoo Light. The photo position for both features were submitted on the 76-40 forms. The manuscript was advanced to Class I.

19
October 24, 1969

GEOGRAPHIC NAMES

FINAL NAME STREET

PH-6402 Hawaii

T-11796

Captain Cook ----(Not Compiled)

Cook Point

Cooks Monument

Island of Hawaii

Kaawaloa

Kaawaloa Ccve

Kealakekua Bay

Manini Beach

Napoopoo

Napoopoo Lighthouse

Napoopoo Park

Pacific Ocean

Approved by:

A. J. Wright

A. Joseph Wright
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

FIELD EDIT REPORT

OPR-419, 1972

T-12539 through T-12550
7-13332 7-1796
Kona Coast, Hawaii

NOAA Ship RAINIER

CAPT G.E. HARADEN
Commanding

INTRODUCTION - METHODS

Field edit was accomplished between 14 September and 26 October 1972 by personnel of the NOAA Ship RAINIER.

Work was performed from a 16 foot skiff. Landings were made where necessary to verify shoreline character.

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

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

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

ADEQUACY OF COMPILATION

The compilation of the MHWL on the edited manuscripts was excellent and required very few corrections. In general the compilation of off-shore features was also excellent. Time and height data for rocks not identified on the manuscripts has been included on the photographs.

DISCUSSION AND RECOMMENDATIONS

T-12539 (completed) Mahailua Bay

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

T-12540 (completed) Makako Bay

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

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

T-13382 (completed) Honokohau Bay

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

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

T-12541 (completed) Kailua Bay

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

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

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

T-12542 (completed) Kailua Bay

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

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

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

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

T-12543 (completed) Keauhou Bay

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

New buildings at latitude $19^{\circ}35'52.50''$ N, longitude $155^{\circ}58'31.50''$ W and latitude $19^{\circ}34'39.60''$ N, longitude $155^{\circ}58'12.60''$ W are not of landmark value. A hotel just south of Kalaa o Kalakani and a blue church building at Kahaluu Bay are of landmark value.

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

T-12544 (completed) Keauhou Bay

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

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

T-12545 (completed) Keikiwaha Point

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

T-12546 (completed) Keawekahaka Bay

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

There are no objects of landmark value.

T-11796 (completed) Kealakekua Bay

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

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

T-12547 (incomplete) Kealakekua Bay

No field edit was done on this manuscript.

T-11797 (incomplete) Honaunau Bay

No field edit was done on this manuscript.

T- 12548 (completed) Kauhako Bay

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

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

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

T-12549 (completed) Kauluoa Point

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

T-12550 (incomplete) Puoa Point

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

Respectfully submitted,

Steven J. Hollinshead
Steven J. Hollinshead
LTJG, NOAA

MANUSCRIPT REFERENCE INDEX

OPR-419

FIELD EDIT

MANUSCRIPT NUMBER	REFERENCE PHOTO NUMBERS	REFERENCE DETATCHED POSITIONS
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T-12539 Mahailua Bay	63-S-7948 63-S-8060	
T-12540 Makako Bay	63-S-7943 63-S-8063*	
T-12541 Kailua Bay	63-S-8063* 63-S-8094	
T-13382 Honokohau Bay	69-E-9255 69-E-9254	
T-12542 Kailua Bay	63-S(C)-7913 63-S(C)-7915 63-S(C)-7917	Detatched Positions 10/05/72
T-12543 Keauhou Bay	63-S-8067 63-S-8068	
T-12544 Keauhou Bay	63-S(C)-8158 63-S(C)-8159 63-S(C)-8160	

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

MANUSCRIPT NUMBER	REFERENCE PHOTO NUMBERS	REFERENCE DETATCHED POSITIONS
T-12545 Keikiwaha Point	63-S-8088 63-S-8087*	
T-12546 Keawekaheka Bay	63-S-8087*	
T-11796 Kealakekua Bay	63-S-8138	Detatched Position 9/14/72
T-12547 Kealakekua Bay	**	
T-11797 Honaunau Bay	**	
T-12548 Honaunau Bay	63-S(C)-8027 63-S(C)-8026 63-S(C)-8025	
T-12549 Kauluoa Point	63-S(C)-8024 63-S(C)-8023 63-S(C)-7888 63-S(C)-7887 63-S(C)-7886	
T-12550	63-S(C)-7884	

*NOTE: Photo 63-S-8087 used on T-Sheets T-12545 and T-12546

**NOTE: No field edit done

REVIEW REPORT
SHORELINE
T-11796

61. GENERAL STATEMENT:

Final review for this Final Field Edited Inset Map was accomplished at the Atlantic Marine Center in April 1987. For a schedule of the office and field operations, refer to the Summary included with this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with USGS quadrangle Honaunau, Hawaii, dated 1959, scale 1:24,000.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

This map is common to hydrographic surveys H-9308, RA-5-2-72, 1:5,000 scale and H-9346, RA-10-9-72, 1:10,000 scale. A comparison with both surveys did not reveal any significant differences.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS charts:

19332, 6th edition, scale 1:10,000, February 15, 1986
19327, 8th edition, scale 1:80,000, September 5, 1981.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by:

Jerry L. Hancock
Jerry L. Hancock
Final Reviewer

Approved for forwarding:

R. Miss R.

RESPONSIBLE PERSONNEL		ORIGINATOR														
TYPE OF ACTION	NAME															
OBJECTS INSPECTED FROM SEAWARD	S. Hollinshead	<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify) _____														
POSITIONS DETERMINED AND/OR VERIFIED	S. Hollinshead	<input type="checkbox"/> FIELD ACTIVITY REPRESENTATIVE														
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	G. Vanderhaven	<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE														
<p>INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'</p> <p>(Consult Photogrammetric Instructions No. 64.)</p>																
<p>FIELD</p> <p>OFFICE</p> <p>I. OFFICE IDENTIFIED AND LOCATED OBJECTS</p> <p>Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.</p> <p>EXAMPLE: 75E(C)6042 8-12-75</p> <p>FIELD (Cont'd)</p> <p>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.</p> <p>EXAMPLE: P-8-V 8-12-75 74L(C)2982</p> <p>I. NEW POSITION DETERMINED OR VERIFIED</p> <p>Enter the applicable data by symbols as follows:</p> <table border="0"> <tr> <td>F - Field</td> <td>P - Photogrammetric</td> </tr> <tr> <td>L - Located</td> <td>V - Visually</td> </tr> <tr> <td>V - Verified</td> <td></td> </tr> <tr> <td>1 - Triangulation</td> <td>5 - Field identified</td> </tr> <tr> <td>2 - Traverse</td> <td>6 - Theodolite</td> </tr> <tr> <td>3 - Intersection</td> <td>7 - Planetable</td> </tr> <tr> <td>4 - Resection</td> <td>8 - Sextant</td> </tr> </table> <p>II. TRIANGULATION STATION RECOVERED</p> <p>When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.</p> <p>EXAMPLE: 'Triang. Rec. 8-12-75</p> <p>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH</p> <p>Enter 'V-Vis.' and date.</p> <p>EXAMPLE: V-Vis. 8-12-75</p> <p>A. Field positions* require entry of location and date of field work.</p> <p>EXAMPLE: F-2-6-L 8-12-75</p> <p>*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</p> <p>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</p>			F - Field	P - Photogrammetric	L - Located	V - Visually	V - Verified		1 - Triangulation	5 - Field identified	2 - Traverse	6 - Theodolite	3 - Intersection	7 - Planetable	4 - Resection	8 - Sextant
F - Field	P - Photogrammetric															
L - Located	V - Visually															
V - Verified																
1 - Triangulation	5 - Field identified															
2 - Traverse	6 - Theodolite															
3 - Intersection	7 - Planetable															
4 - Resection	8 - Sextant															

*FIELD
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FORMS ORIGIN
AND REVIEW
ACTIVITIES

POSITIONS DEF

OBJECTS INSPE

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11796, (PH-6402).

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Revision Notice.