

12204

12204

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. Office No. T-12204

LOCALITY

State ALASKA

General locality KEKI STRAIT

Locality POINT CAMDEN

1961-1970

CHIEF OF PARTY  
Alfred C. Holmes  
Director, Atlantic Marine Center

LIBRARY & ARCHIVES

DATE

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR  
TO REGISTRATION

DESCRIPTIVE REPORT - DATA RECORD

T - 12204

PROJECT NO. (II):

PH-6206

FIELD OFFICE (III):

NONE

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

ATLANTIC MARINE CENTER, NORFOLK, VA.

OFFICER-IN-CHARGE

Alfred C. Holmes

INSTRUCTIONS DATED (III) (III):

OFFICE SUPPLEMENT III DECEMBER 19, 1967

OFFICE SUPPLEMENT IV APRIL 14, 1970

FIELD INSTRUCTIONS FEBRUARY 11, 1969

OFFICE INSTRUCTIONS JANUARY 18, 1965

METHOD OF COMPILATION (III):

WILD B-8 STEREOPLOTTER

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:20,000 PANTOGRAPHED TO 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

Sept. 4, 1975

GEOGRAPHIC DATUM (III):

NA 1927

VERTICAL DATUM (III):

Mean High Water  
MEAN SEA LEVEL EXCEPT AS FOLLOWS:  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

REFERENCE STATION (III):

DEN, 1927

LAT.:

56°48'39.544"(1223.2)m

LONG.:

133°52'15.636"(265.3)m

ADJUSTED

UNADJUSTED

PLANE COORDINATES (IV):

1,818,208.98 FT. x = 2,644,696.35 FT.

STATE

ALASKA

ZONE

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ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE.

WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

DESCRIPTIVE REPORT - DATA RECORD

T-12204

FIELD INSPECTION BY (II):  NONE		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  AIR PHOTO COMPILATION  DATE OF PHOTOGRAPHY: Aug. 24, 1969		
PROJECTION AND GRIDS RULED BY (IV):  J. Dempsey		DATE April 10, 1970
PROJECTION AND GRIDS CHECKED BY (IV):  E. Homick		DATE April 10, 1970
CONTROL PLOTTED BY (III):  A. Shands		DATE June 11, 1970
CONTROL CHECKED BY (III):  F. Margiotta		DATE June 11, 1970
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  Robert E. Fisher		DATE Feb. 19, 1970
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY A. Shands Reviewed A. C. Rauck, Jr.	DATE June 15, 1970 June 15, 1970
	CONTOURS  INAPPLICABLE	DATE
MANUSCRIPT DELINEATED BY (III): Frank P. Margiotta		DATE June 29, 1970
SCRIBING BY (III):  R. White		DATE July 16, 1971
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): R. J. Pate		DATE July 9, 1969

REMARKS:  
FIELD EDIT BY: LCDR F. T. SMITH

DESCRIPTIVE REPORT - DATA RECORD

T-12204

CAMERA (KIND OR SOURCE) (III):

Wild RC-8 "E" and "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
69 E(c)-1958	Aug. 24, 1969	1311 PST	1:40,000	9.6 ft. above MLLW
69 E(c)-1935	Aug. 24, 1969	1242 PST	"	10.3 ft. above MLLW
61-W-9584-9585	July 16, 1961	1108 PST	1:20,000	0.8 ft. above MLLW
61-W-9600-9604	July 16, 1961	1117 PST	1:20,000	+1.7 ft. above MLLW

PREDICTED TIDE (III)

Diurnal

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Ketchikan, Alaska		13.0	15.4
COORDINATE STATION: Port Camden		11.5	13.9
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): *Leo F. Beugnet, AMC* DATE: *April 1972*

PROOF EDIT BY (IV): DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 1 RECOVERED: 1 IDENTIFIED: 1

NUMBER OF BM(S) SEARCHED FOR (II): NONE RECOVERED: NONE IDENTIFIED: NONE

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): NONE

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): NONE

REMARKS:

T-12204

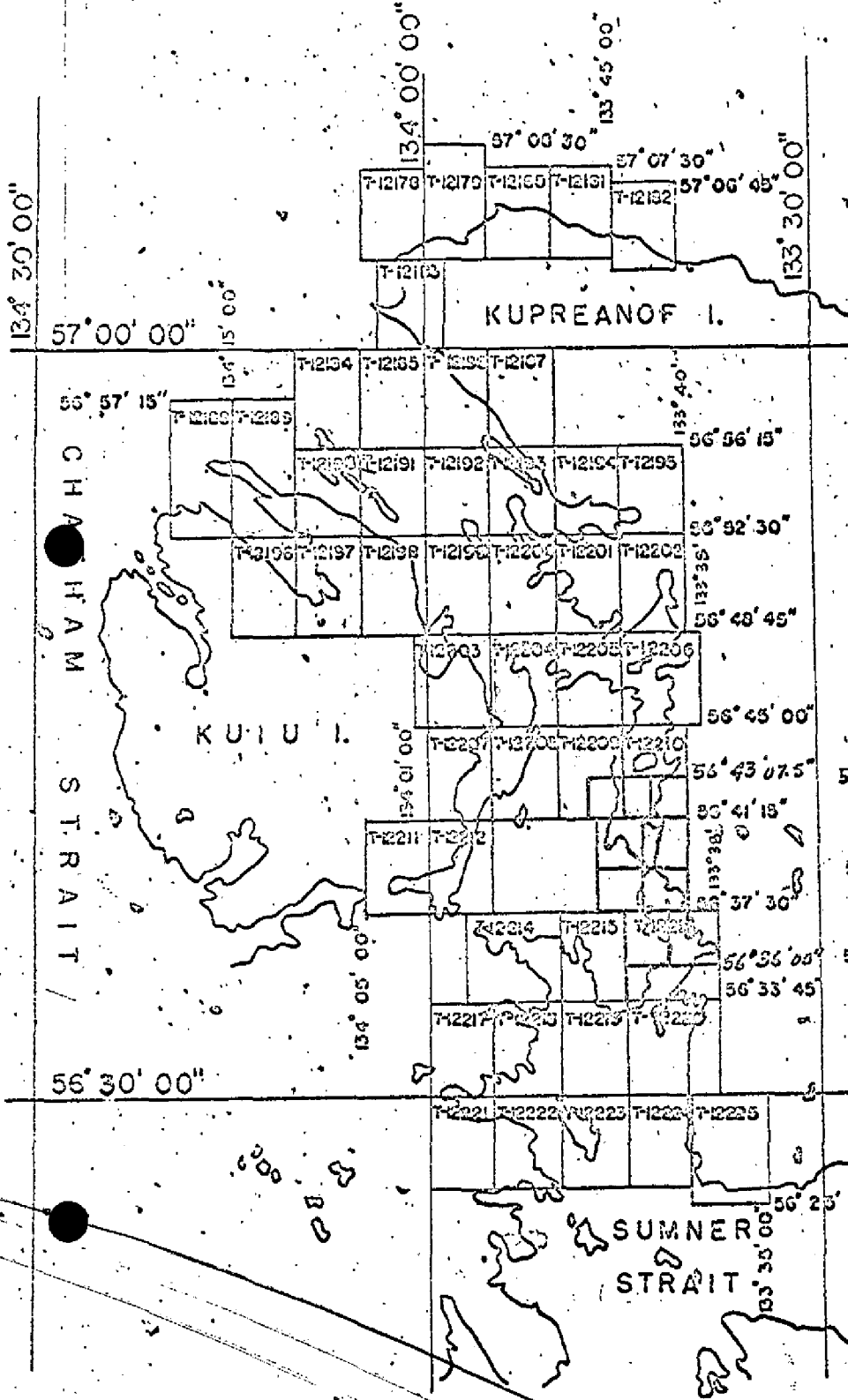
COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation Complete, Pending Field Edit	June 29, 1970	Superseded
Field Edit Applied	July 6, 1970	
<i>Final Review</i>	<i>April 1972</i>	

# SHORELINE MAPPING PROJECT

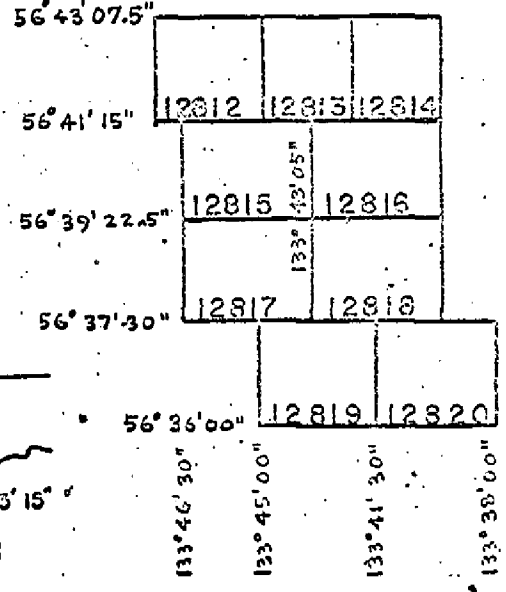
Ph-6206

KEKU STRAITS, ALASKA

SCALE 1:10,000



AN ENLARGED  
DIAGRAM OF THE  
1:15,000 SCALE SHEETS



Rev 3-3-59 P.H.  
Rev. 9-65 R.G.  
Revised 1-6-65

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SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12204

Shoreline survey T-12204 is one of 53 similar surveys in project PH-6206. The primary purpose of the survey was to provide modern shoreline for nautical charts and photo-hydro support data for hydrographic surveys in the Keku Strait area. Because of difficulty during Aerotriangulation the compilation of the manuscript was delayed and it was not furnished for hydro support use.

There was no field work prior to compilation with the exception of identification of horizontal control for aerotriangulation. The survey was subsequently field edited during the 1970 field season.

Compilation was at 1:10,000 scale by Wild B-8 plotter methods using the photography of July 1961 and August 1969. The manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 5 minutes in longitude. After application of field edit data the survey was scribed and reproduced on cronaflex. Final review was in the Atlantic Marine Center in April 1972. One cronaflex positive and a negative of the final reviewed survey are forwarded for record and registry.



FIELD INSPECTION REPORT

JOB PH-6206

There was no field inspection prior to compilation.

Aerotriangulation Report  
PH-6206  
Keku Strait, Alaska

February 19, 1970

21. Area Covered

This project covers areas in the vicinity of Keku Strait - Kuiu Island, Alaska. T-sheets covered are as follows:

T-12203 thru T-12225  
all T-sheets are at 1:10,000 scale

22. Method

Five strips were bridged to provide horizontal positions of pass points needed for compilation. Strip #12 was bridged in two parts, 12a and 12b, because of open water. Strip #14 was not bridged due to satisfactory pass point coverage from Strips 13, 15 and 16.

Strip #11 was bridged on the C-5. Strips 12a, 12b, 13, 15 and 16 were bridged on the C-8. All were adjusted by electronic computer.

Strip #11 used seven control points and a tie point in a third degree adjustment.

Strip #12a used a first degree adjustment with two control points. One tie point was available for a check.

Strip #12b used a third degree adjustment with five control points.

Strip #13 used three control points in a second degree adjustment.

Strips 15 and 16 used four control points in third degree adjustments.

All pass points, except one in Strip #16, were drilled.

Corresponding tie point values were averaged.

This project was tied through common control stations with the 1966 project in this area.

23. Adequacy of Control

Horizontal control was adequate in all strips. However station "SPIT 1927" and its subpoint appearing in both Strip #11 of this project and in Strip #1 of the adjacent "Sumner Strait" project had residual errors on the order of 15 feet in X. These errors were similar in direction and magnitude for both points and in both strips. The reason for not obtaining a better check with these points is not known.

Many control stations in this project were recovered in 1965 and pricked on 1964, 1:20,000 scale photography. The 1970 bridge was run with new 1:40,000 scale photography, therefore, much of the old control was not visible in these bridges. All 1969 identified control used in this project was targeted.

The RMS errors in fit to control for the 1969 identified control, (except "SPIT 1927") and including the 1965 identified control "ALL 1927" and "CEN 1927" were 2.5 feet in X and 1.2 feet in Y. The maximum errors were 6.8 feet in X and 3.3 feet in Y.

24. Supplemental Data

U. S. Geological Survey quadrangles were used to provide elevations for vertical adjustment of the bridges.

25. Photography

Photography was satisfactory with regards to coverage, overlap and definition.

Submitted by,

*Robert E. Fisher*  
Robert E. Fisher  
Cartographer (Photo)

Approved and forwarded,

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

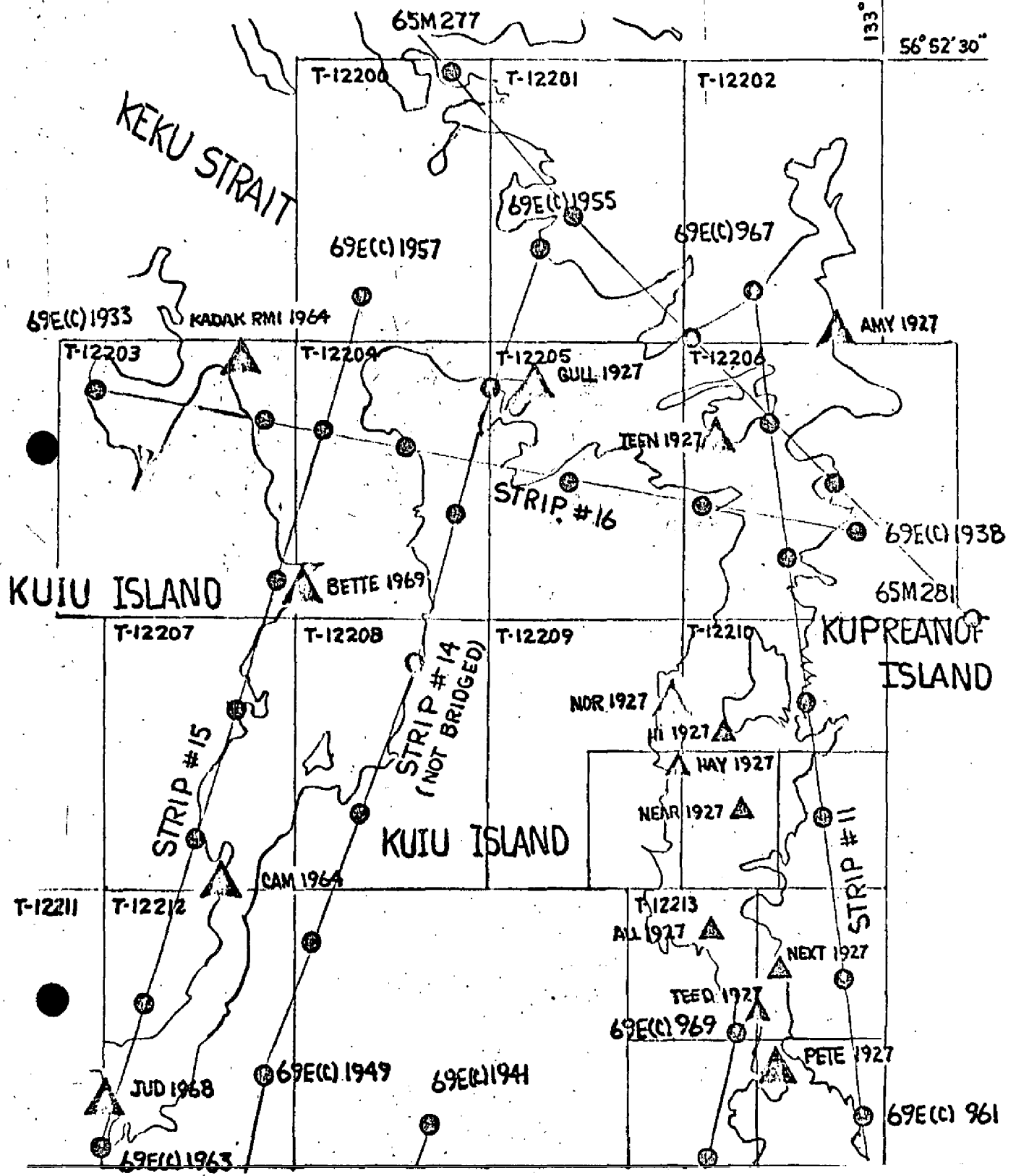
# KEKU STRAIT ALASKA

PH 6206 FEB 1970

▲ 1969 Identification

▲ 1965 Identification

133° 40' 00"  
56° 52' 30"



# KEKU STRAIT ALASKA

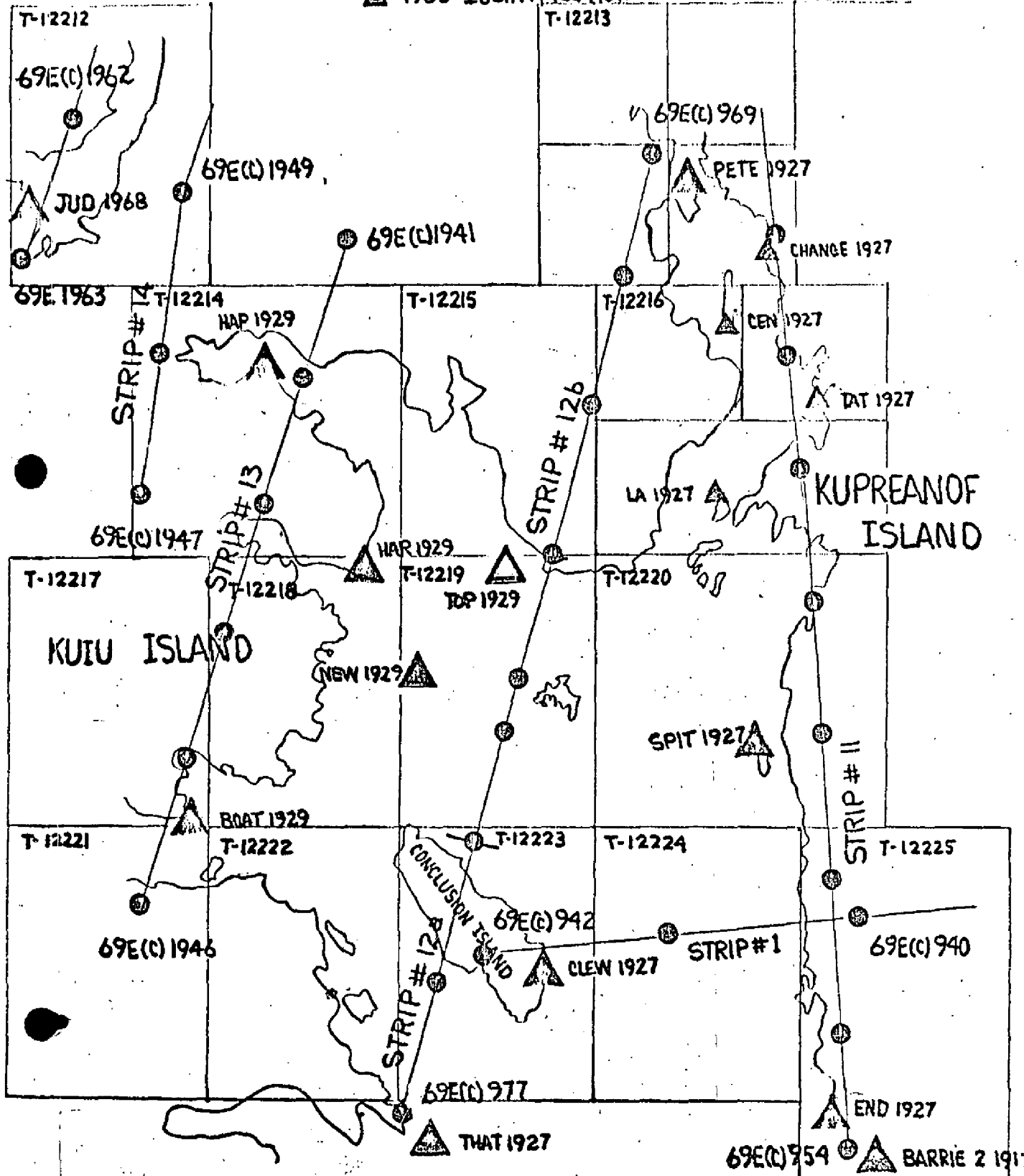
PH 6206

▲ 1969 Identification

△ 1965 Identification

133° 40' 00"

56° 41' 15"





## COMPILATION REPORT

T-12204

31. DELINEATION

The Wild B-8 plotter was used. Photographic coverage was adequate. There was no field inspection prior to office compilation.

32. CONTROL

See "Aerotriangulation Report", dated February 19, 1970.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

The mean high water, mean lower low water line and all alongshore details were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

A satisfactory function was made with T-12200 to the north, T-12205 to the east, T-12208 to the south and T-12203 to the west.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle Petersburg (D-6), Alaska, scale 1:63,360, dated 1951, with minor revisions 1963.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 8201, scale 1:217,828, 15th edition, dated November 15, 1967 (corrected thru NM 46/69).

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

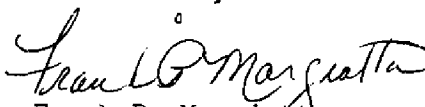
None

ITEMS TO BE CARRIED FORWARD

None

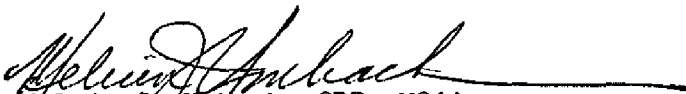


Submitted by:



Frank P. Margiotta  
Cartographic Technician  
6/29/70

Approved for forwarding:



Melvin J. Umbach, CDR, NOAA  
Chief, Photogrammetry Division, AMC

Approved:



Alfred C. Holmes  
RADM, NOAA  
Director, AMC

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6206 (Keku Strait, Alaska)

T-12204

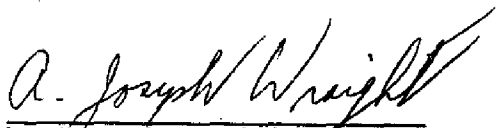
Keku Strait

Kuiu Island

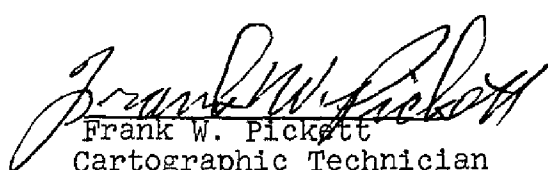
Point Camden

Port Camden

Approved by:

  
A. Joseph Wraight  
Chief Geographer

Prepared by:

  
Frank W. Pickett  
Cartographic Technician  
o.k. 4-4-72

T-12204

49. NOTES FOR THE HYDROGRAPHER

None

## PHOTOGRAMMETRIC OFFICE REVIEW

T-12204

1. PROJECTION AND GRIDS RJP	2. TITLE RJP	3. MANUSCRIPT NUMBERS RJP	4. MANUSCRIPT SIZE RJP
<b>CONTROL STATIONS</b>			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX	7. PHOTO HYDRO STATIONS XX	
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT Bridge W.O.	11. DETAIL POINTS
<b>ALONGSHORE AREAS (Nautical Chart Data)</b>			
12. SHORELINE RJP	13. LOW-WATER LINE RJP	14. ROCKS, SHOALS, ETC. RJP	15. BRIDGES XX
16. AIDS TO NAVIGATION XX	17. LANDMARKS XX	18. OTHER ALONGSHORE PHYSICAL FEATURES RJP	19. OTHER ALONGSHORE CULTURAL FEATURES XX
<b>PHYSICAL FEATURES</b>			
20. WATER FEATURES RJP	21. NATURAL GROUND COVER XX		22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES
<b>CULTURAL FEATURES</b>			
27. ROADS XX	28. BUILDINGS XX	29. RAILROADS XX	30. OTHER CULTURAL FEATURES XX
<b>BOUNDARIES</b>			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
<b>MISCELLANEOUS</b>			
33. GEOGRAPHIC NAMES RJP	34. JUNCTIONS RJP		35. LEGIBILITY OF THE MANUSCRIPT RJP
36. DISCREPANCY OVERLAY RJP	37. DESCRIPTIVE REPORT RJP	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
40. REVIEWER R.J. Pate July 9, 1970		SUPERVISOR, REVIEW SECTION OR UNIT	
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 Field Edit: Thomas Bulfer July 6, 1971		SUPERVISOR	
43. REMARKS Field Edit applied from: Field Edit Ozalid, Field Photos 61 W 9584 & 69 E 1958			

FIELD EDIT REPORT  
OPR-448  
Port Camden  
Southeast Alaska

INTRODUCTION

Field edit reports are attached for the following maps:

- T-12203
- T-12204
- T-12207
- T-12208
- T-12211
- T-12212

Field photographs and copies of the field edit ozalid were taken into the field. The mean high water line was verified by visual inspection of the shoreline and ozalids in the field and paced distances from photo-identifiable objects.

Notes have been made in red-violet ink on the photographs and cross-referenced with the ozalids. All times are based on 105° W meridian.

Field inspection of these maps is completed and it is recommended that they be revised in accordance with this field edit and accepted as advance manuscripts.

FIELD EDIT REPORT  
MAP-T-12204  
Southeast Alaska  
OPR-448  
Port Camden

The field edit was performed by LCdr. F.T. Smith. The work was conducted from a small boat.

METHOD

The field edit ozalid and field photographs were taken to the area of the map and the specific items investigated. Information on the specific items is shown on the ozalid and cross referenced to the photographs. Field measurements were made by pacing, taping or estimating. Vertical measurements were made with a hand level and a tape. Since hydrographic control from the previous season was mostly down or missing it was not possible to use sextant fixes for positioning. The 69E photographs were very difficult to use in the field due to their size and lack of resolution. They could not be used with pocket stereo viewers. The mylar T sheet was compared to the hydrography from the 1969 season and any discrepancies were noted on the ozalid. Notes are on photographs 69E1958, 61W9382, 61W9383, 61W9583 and 61W9584. All times are on the 105° W meridian.

ADEQUACY OF COMPILATION

The general area marked with note A at 56°48'30"N and 133°52'30"W has a MHW line that is formed by the seaward most trees. The foreshore is very steep and the trees overhang the shore. There were no photoidentifiable points in this area and as a result the shoreline is sketched in on the photographs by observation.

Those items marked B which appear to be sand ridges are, with one exception, rock ledges covered with sea poppies. The sea poppies are light yellow colored sea weed which grows on rocks which are exposed in the tidal cycle.

The compilation appears to be adequate.

RECOMMENDATIONS

It is recommended that this manuscript be revised in accordance with the notes on the ozalid and photographs and the map be accepted as an advance manuscript. There were no aids to navigation on this map.

Respectfully submitted,



F.T. Smith  
LCdr. NOAA

APPROVAL SHEET FOR FIELD EDIT  
OPR-448  
Port Camden

The field edit of the following manuscripts was accomplished under my supervision:

- T-12203
- T-12204
- T-12207
- T-12208
- T-12211
- T-12212

Inspection of the work was made.

*Ray E. Moses*  
Ray E. Moses  
CDR. NOAA  
Commanding Officer  
NOAA Ship DAVIDSON

REVIEW REPORT T-12204

SHORELINE

April 20, 1972

61. GENERAL STATEMENT

See Summary, which is page 6 of the Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A visual comparison was made with a copy of registered survey No. 2116. This is a 1:80,000 scale survey made in 1893. It is now obsolete and is superseded by T-12204 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. PETERSBURG (D-6), ALASKA, 1:63,360 scale quadrangle, edition of 1948. The two surveys are in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with copies of boat sheets H-9041 (DA-10-5-68), H-9082 (DA-10-4-69) and H-9158 (DA-10-4-70). The hydrography on H-9082 was accomplished prior to the compilation of survey T-12204. No mean high water line, rocks, ledges or foul areas are shown on that boat sheet nor on H-9041 in the small area of that survey which is common to T-12204.

Special attention is called to two areas on H-9082. At latitude 56°45'27" longitude 133°51'50" several minus soundings plot upon a small island, or peninsula, with trees visible on the photographs. Near latitude 56°48'35", longitude 133°53'05" several soundings plot inshore of the mean high water line. From examination of the photographs it appears that the mean high water line as shown on T-12204 is correct.



The mean lower low water line as shown on T-12204 is not in complete agreement with that of the hydrographic survey. It has been indicated as approximate and retained on the shoreline survey for any value it may be to the nautical chart compiler.

65. COMPARISON WITH NAUTICAL CHARTS

A visual comparison was made with Chart 8201, 16th edition, dated November 7, 1970. No major discrepancies between the two surveys were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standards of Map Accuracy.

Reviewed by:

*Leo F. Beugnot*  
Leo F. Beugnot  
Cartographer

Approved for forwarding:

*Melvin J. Umbach*  
Melvin J. Umbach, CDR, NOAA  
Chief, Photogrammetry Division, AMC

Approved:

*Alfred C. Holmes*  
Alfred C. Holmes, RADM, NOAA  
Director, Atlantic Marine Center

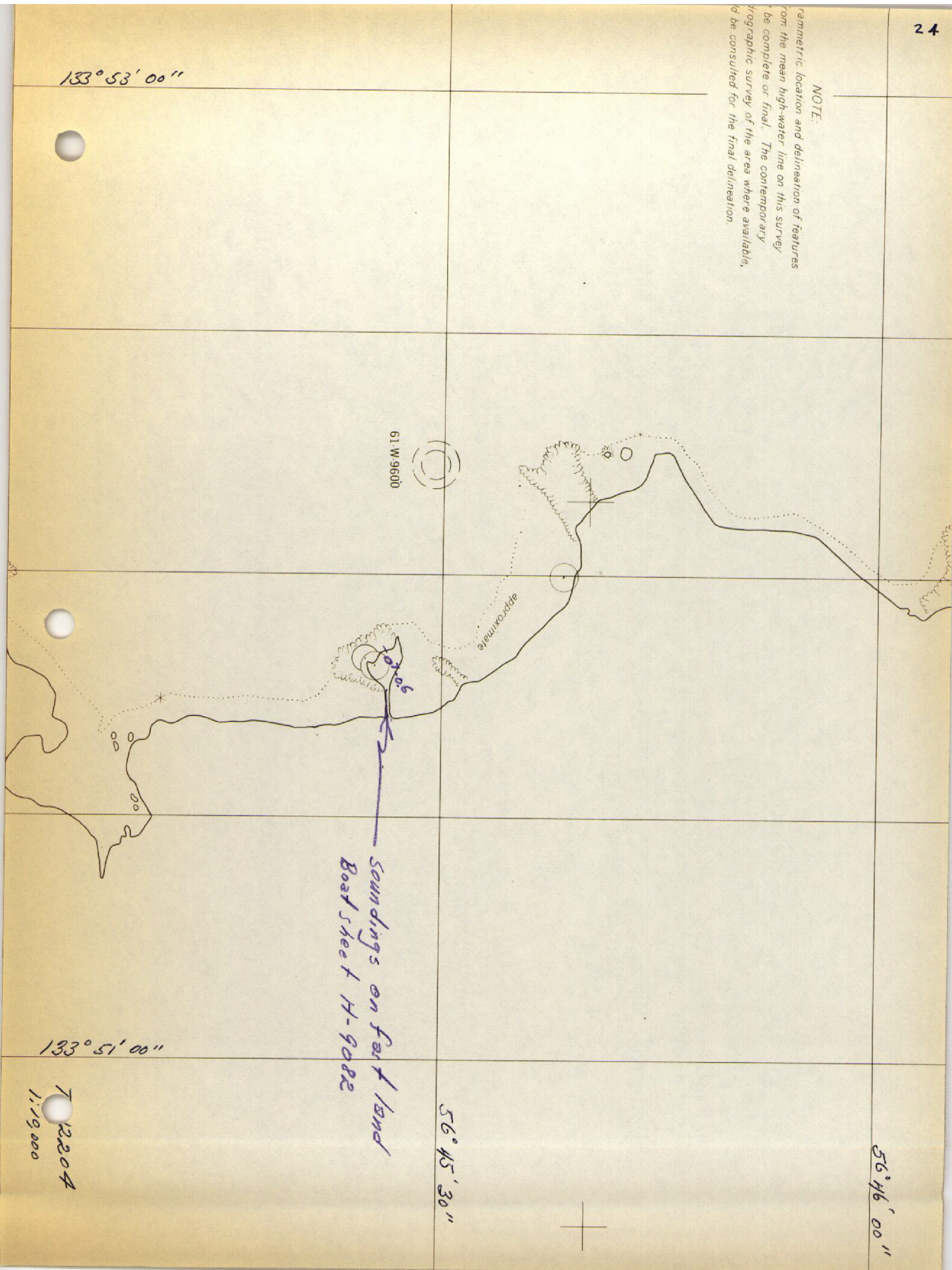
Approved:

Chief, Photogrammetric Branch      Chief, Coastal Mapping Division





NOTE:  
parametric location and delineation of features  
from the mean high-water line on this survey  
to be complete or final. The contemporary  
topographic survey of the area where available,  
should be consulted for the final delineation.



$133^{\circ}53'00''$

61 W 9600

approximate

SOUNDINGS ON FAR LAND  
Boat sheet H-9082

$133^{\circ}51'00''$

$56^{\circ}45'30''$

$56^{\circ}46'00''$

T 12204  
1:19,000