

12209

12209

FORM C&GS-504  U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETTIC SURVEY	
<h2>DESCRIPTIVE REPORT</h2>	
<i>Type of Survey</i> SHORELINE (Photogrammetric)	
<i>Field No.</i>	<i>Office No.</i> T-12209
<b>LOCALITY</b>	
<i>State</i> ALASKA	
<i>General locality</i> KEKU STRAIT	
<i>Locality</i> HIGH ISLAND, WEST OF	
<hr/> 19.6L-70	
<b>CHIEF OF PARTY</b> Alfred C. Holmes Director, Atlantic Marine Center	
<b>LIBRARY &amp; ARCHIVES</b>	
DATE	

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR  
TO REGISTRATION

DESCRIPTIVE REPORT - DATA RECORD

T- 12209

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, DIRECTOR	
INSTRUCTIONS DATED (II) (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 AND GRAPHIC		
MANUSCRIPT SCALE (II):  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, 1925
GEOGRAPHIC DATUM (III):  N.A. 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):  HAY, 1927		
LAT.:  56°42'53.324"(1649.4m)	LONG.:  133°45'21.423"(364.4m)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV):  y = 1,783,026.93 FT.    x = 2,667,706.33 FT.		STATE  ALASKA
		ZONE  1
<p>MAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE.</p> <p>WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.</p>		

## DESCRIPTIVE REPORT - DATA RECORD

T-2209

FIELD INSPECTION BY (II):  NONE		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): AIR PHOTO COMPILATION DATE OF PHOTOGRAPHY: AUGUST 5, 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):  CORADOMAT	DATE April 10, 1970	
CONTROL CHECKED BY (III):  CORADOMAT	DATE April 10, 1970	
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):  Robert E. Fisher	DATE February 19, 1970	
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY L. O. Neterer, Jr. Reviewed: A. L. Shands	DATE May 19, 1970 May 19, 1970
	CONTOURS  NOT APPLICABLE	DATE
MANUSCRIPT DELINEATED BY (III):  L. O. Neterer, Jr.	DATE June 12, 1970	
SCRIBING BY (III):  H. GANN	DATE Aug. 3, 1971	
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):  L. L. Graves	DATE June 18, 1970	
REMARKS:  FIELD EDIT BY LTCDR F. T. SMITH June-Oct. 1970		

DESCRIPTIVE REPORT - DATA RECORD  
T-12209

MERA (KIND OR SOURCE) (III):

Wild RC-8 "E" and "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
69 E(O) 963 and 964	5 Aug. 1969	12:02	1:40,000	above MLLW 5.3 feet
61 W 9424 and 9425	16 July 1961	09:02	1:20,000	1.2 feet

TIDE (III) (Predicted)

diurnal

	RATIO OF RANGES	MEAN RANGE	SPRINGS RANGE
REFERENCE STATION: Ketchikan, Alaska		13.0	15.4
SUBORDINATE STATION: The Summit, Keku Strait		13.2	15.7
SUBORDINATE STATION:			

Atlantic Marine Center  
~~XXXXXXXXXXXXXXXXXXXX~~ REVIEW BY (IV):

O. H. Bishop

DATE:  
March 1973

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III): 2

RECOVERED:  
2

IDENTIFIED:  
2

NUMBER OF BM(S) SEARCHED FOR (III):

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

T-12209

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation Complete Pending Field Edit	June, 1970	Superseded
Field Edit Applied	July, 1971	Superseded
Final Review	March 1973	



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12209

This 1:10,000 scale shoreline manuscript is one of 53 maps that comprise Project PH-6206, Keku Strait, Alaska. The project diagram indicates the location of T-12209 in the project.

There was no field work prior to compilation, except the identification of horizontal control for aerotriangulation.

Only the area north of  $56^{\circ}43'07.5''$  was compiled on T-12209. The area south of that latitude was compiled at 1:5,000 scale on T-12812. Compilation was by Wild B-8 Plotter and graphic methods, using panchromatic photographs taken in 1961 and color photographs taken in 1969. Control was based on a stereoplani-graph bridge. Stable transparent copies of the map manuscript, ozalids, and specially prepared photographs were furnished for transfer of shoreline to the boat sheet, location of photo-hydro signals, and field edit.

Field edit was done in conjunction with hydrography in 1970. After application of field edit data to the map, it was scribed and reproduced on cronaflex.

Final review was done at the Atlantic Marine Center in March 1973.

The compilation manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 5 minutes in longitude.

A cronaflex copy of the final reviewed manuscript and a negative have been forwarded for record and registry.



PH-6206

T-12209

FIELD INSPECTION REPORT

There was no field inspection prior to compilation.

AEROTRIANGULATION REPORT  
Keku Straits, Alaska  
Job PH-6206

21. Area Covered

This report pertains to that portion of Keku Straits between  $56^{\circ} 33' 45''$  and  $56^{\circ} 45' 00''$ .

22. Method

Two strips of photography were bridged using stereoplani-graph and emulsion-drilled diapositives. Measurements made by the stereoscopic instruments were adjusted using 1620 IBM programs.

23. Adequacy of Control

Number and location of field-identified horizontal control stations were adequate to control the bridges with sufficient accuracy to comply with National Standards of Map Accuracy. Station LO 1927 did not hold in the adjustment but closer investigation revealed that an apparent transposition of distances to the substitute stations had occurred. After re-computing the positions all control held satisfactorily.

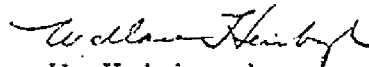
24. Supplemental Data

U.S.G.S. quadrangles, Petersburg (C-5 and C-6), Alaska, scale 1:63,360, 1948 edition, were used to determine elevations to provide vertical control where required.

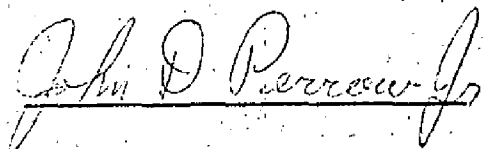
25. Photography

Photography was adequate for coverage, definition and endlap.

Respectfully submitted:

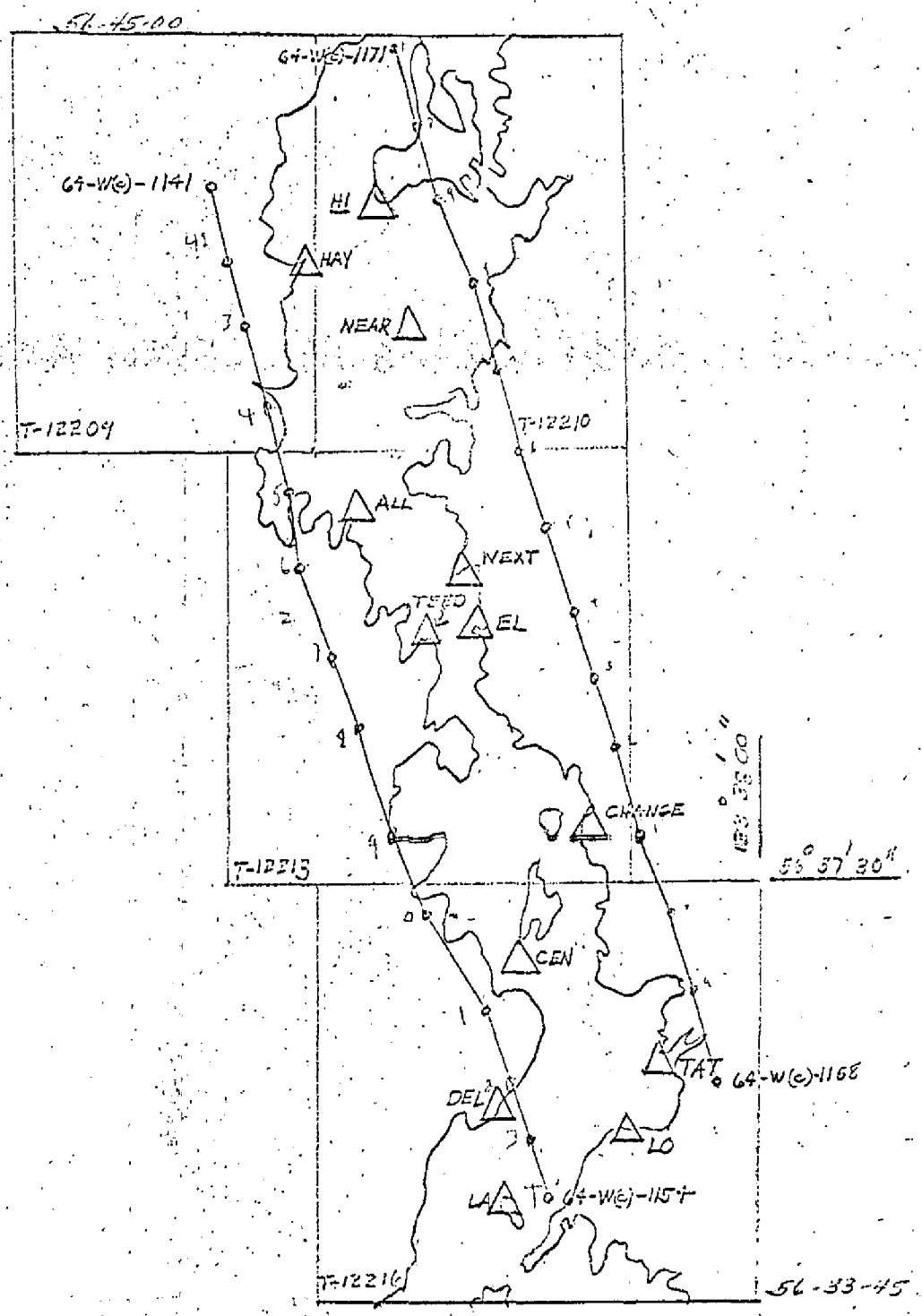
  
W. Heinbaugh

Approved by:

  
John D. Pierce

# KEKU STRAITS, ALASKA

PH - 6206



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.

-2-

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,

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

Approved and forwarded,

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

Saturday \_\_\_\_\_ at \_\_\_\_\_ a.m. and \_\_\_\_\_ p.m.

\_\_\_\_\_ at \_\_\_\_\_ a.m. and \_\_\_\_\_ p.m.

Sunday \_\_\_\_\_ at \_\_\_\_\_ a.m. and \_\_\_\_\_ p.m.

# KEKU STRAIT ALASKA

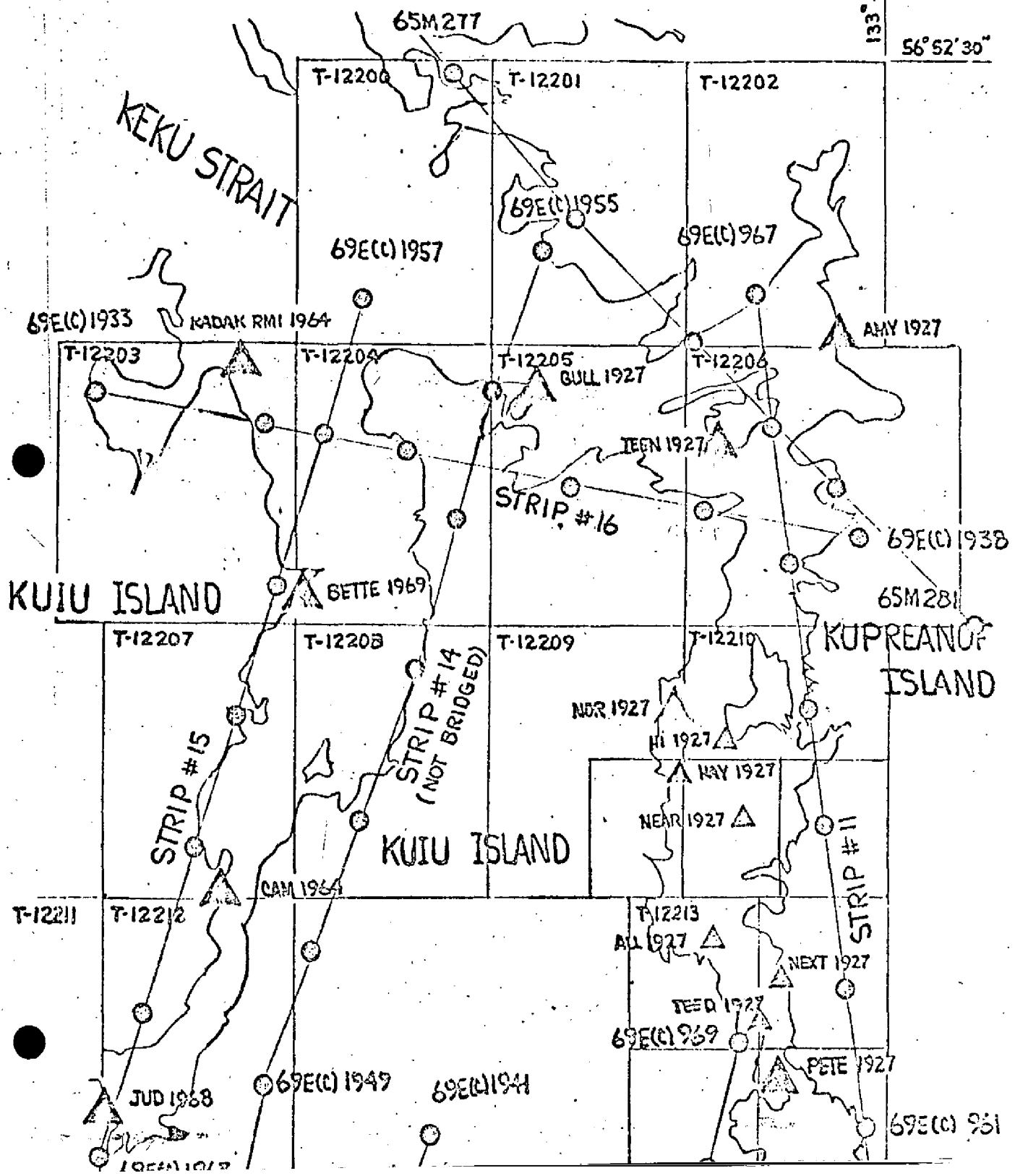
PH 6206 FEB 1970

▲ 1969 Identification

△ 1965 Identification

133° 40' 00"

56° 52' 30"



# KEKU STRAIT ALASKA

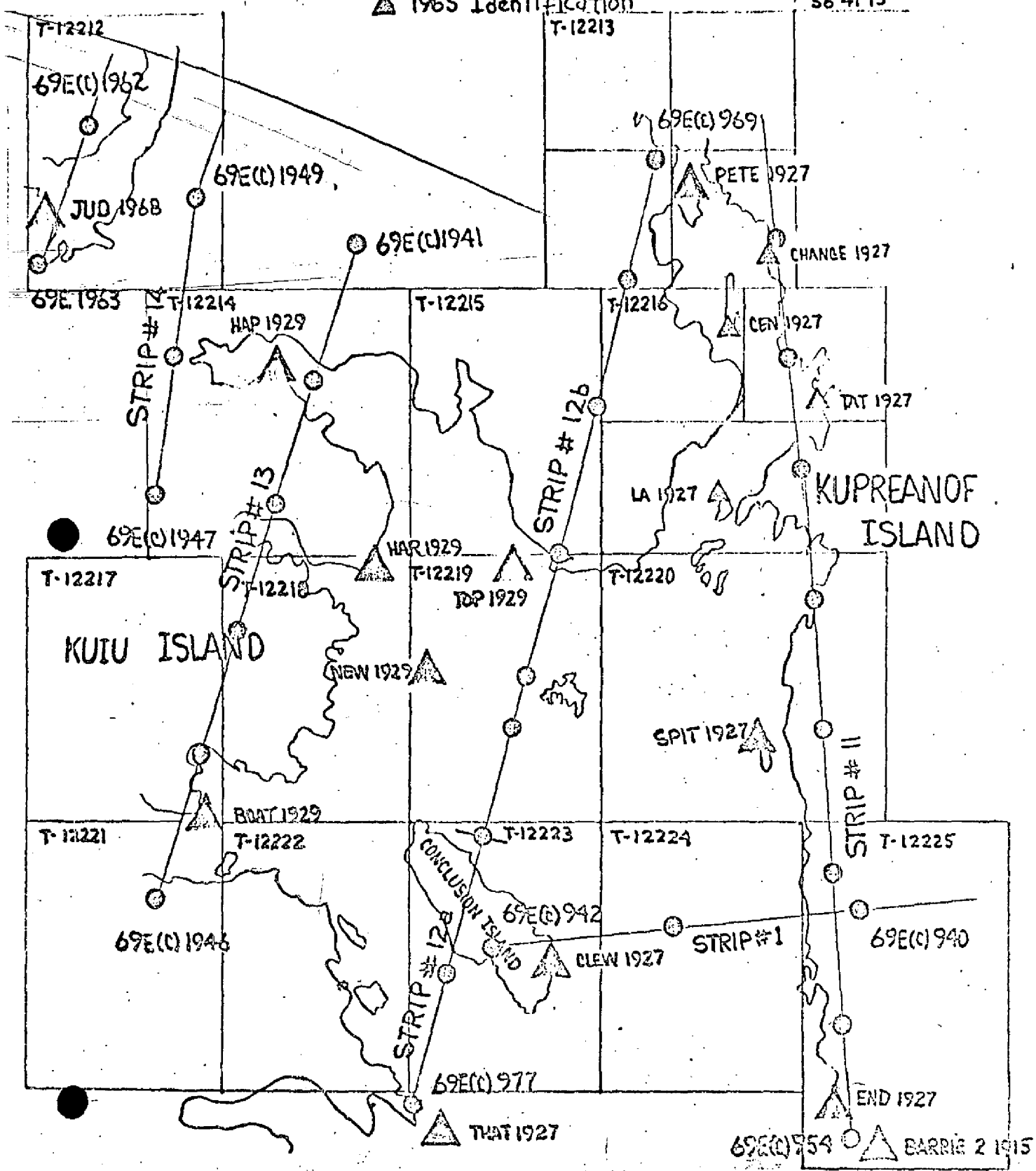
PH 6206

▲ 1969 Identification

▲ 1965 Identification

133° 40' 00"

56° 41' 15"







## COMPILATION REPORT

T-12209

31. DELINEATION

There was no field inspection preceding compilation. Details were office interpreted and delineated by Wild B-8 plotter.

No compilation was done south of Lat.  $56^{\circ}43'07.5''$ ; this area was mapped on Contemporary Survey T-12812 at 1:5,000 scale.

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 MHW line was delineated from office interpretation of photographs taken August 5, 1969.

Photographs of July 16, 1961, taken at 1.2 ft. stage of tide was used to delineate the MLLW line.

36. OFFSHORE DETAIL

Offshore detail was compiled from office interpretation of the photographs.

37. LANDMARKS AND AIDS

Copies of Form 76-40 have been forwarded to the appropriate divisions.

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Satisfactory junctions have been made with T-12205 to the North, T-12210 and T-12813 1:5,000 scale to the East, T-12815 1:5,000 scale to the south and T-12208 to the west.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison has been made with U.S.G.S. Quadrangle PETERSBURG (C-6) ALASKA, Scale 1:63,360, dated 1948 with minor revisions in 1963.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with Chart 8201, scale 1:217,828 11th Ed. dated Mar. 4, 1963 Revised July 20, 1964 and chart 8272 scale 1:20,000 3rd Ed. dated Oct. 17, 1966.

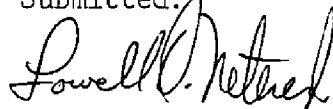
ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:



Lowell O. Neterer, Jr.  
Cartographic Technician  
June 12, 1970

Approved for forwarding:



Melvin J. Umbach, CDR, NOAA  
Chief, Photogrammetry Division  
Atlantic Marine Center

Approved:



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

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6206 (Keku Strait, Alaska)

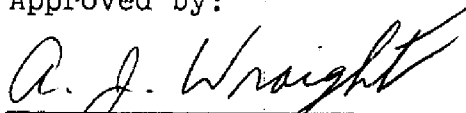
T-12209

Keku Strait

Kuiu Island

Rocky Pass

Approved by:



A. Joseph Wraight  
Chief Geographer

Prepared by:



Frank W. Pickett  
Cartographic Technician

O.K. 4-4-72

T-12209

49. NOTES FOR THE HYDROGRAPHER

None

FORM C&GS-1002 (9-66)		U.S. DEPARTMENT OF COMMERCE ESSA COAST AND GEODETIC SURVEY	
<b>PHOTOGRAMMETRIC OFFICE REVIEW</b>			
T- 12209			
1. PROJECTION AND GRIDS  LLG	2. TITLE  LLG	3. MANUSCRIPT NUMBERS  LLG	4. MANUSCRIPT SIZE  LLG
<b>CONTROL STATIONS</b>			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY  LLG	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	11. DETAIL POINTS  LLG
<b>ALONGSHORE AREAS (Nautical Chart Data)</b>			
12. SHORELINE  LLG	13. LOW-WATER LINE  LLG	14. ROCKS, SHOALS, ETC.  LLG	15. BRIDGES  XX
16. AIDS TO NAVIGATION  XX	17. LANDMARKS  XX	18. OTHER ALONGSHORE PHYSICAL FEATURES  LLG	19. OTHER ALONGSHORE CULTURAL FEATURES  XX
<b>PHYSICAL FEATURES</b>			
20. WATER FEATURES  LLG	21. NATURAL GROUND COVER  XX	22. PLANETABLE CONTOURS  XX	
23. STEREOSCOPIC INSTRUMENT CONTOURS  Inapplicable	24. CONTOURS IN GENERAL  Inapplicable	25. SPOT ELEVATIONS  XX	26. OTHER PHYSICAL FEATURES  LLG
<b>CULTURAL FEATURES</b>			
27. ROADS  XX	28. BUILDINGS  XX	29. RAILROADS  XX	30. OTHER CULTURAL FEATURES  XX
<b>BOUNDARIES</b>			
31. BOUNDARY LINES  Inapplicable		32. PUBLIC LAND LINES  Inapplicable	
<b>MISCELLANEOUS</b>			
33. GEOGRAPHIC NAMES  LLG	34. JUNCTIONS  LLG	35. LEGIBILITY OF THE MANUSCRIPT  LLG	
36. DISCREPANCY OVERLAY  LLG	37. DESCRIPTIVE REPORT  LLG	38. FIELD INSPECTION PHOTOGRAPHS  XX	39. FORMS  LLG
40. REVIEWER  L.L. Graves June 19, 1970		SUPERVISOR, REVIEW SECTION OR UNIT	
41. REMARKS (See attached sheet)			
<b>FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT</b>			
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  L. O. Neterer, Jr. July 20, 1971		SUPERVISOR	
43. REMARKS  Field edit applied from: Field Edit Ozalid and Photo 61 W 9426.			

FIELD EDIT REPORT  
 Keku Strait  
 Southeast Alaska  
 OPR-448

June - October 1970

INTRODUCTION

Field edit reports are attached for the following maps:

T-12205	(TP-00205)
T-12206	(TP-00206)
T-12209	(TP-00209)
T-12210	
T-12216	
T-12220	
T-12224	
T-12225	

Field photographs and copies of the field edit ozalids were taken into the field. The mean high water line was verified by visual inspection of the shoreline and ozalids in the field. Isolated rocks, high points of ledges, ledge limits, and some shoreline were located by three-point fixes with check angles. Fixes were plotted on boat sheets:

DA-10-4-70  
 DA-10-5-70  
 DA-10-6-70  
 DA-10-7-70

and then transferred to the T-sheets and ozalids for comparison.

Notes have been made in red on the field photographs and have been cross referenced on the Field Edit Ozalids by photograph number. All times are based on 105° West meridian. Individual reports by manuscripts are attached.

TIDE NOTES

The following tide stations were used for hydrography in the Keku Strait area:

Pup Island  
 High Island  
 Eagle Island  
 Monte Carlo Island

Manuscripts T-12201 and T-12202 were inspected. Since no field edit was requested by the compilers the inspection was to check the manuscript in general. The manuscripts agreed quite well with the field inspection.

FIELD EDIT REPORT  
MAP-T-12209  
Southeast Alaska  
North Keku Straits

The investigation was performed by LCdr. F.T. Smith from a small boat.

METHOD

The field edit ozalid and a field photograph were taken into the field and the items in question were visited. All inspections were by visual means. Information on items in question is given on the ozalid and cross referenced to photo 61W9426.

ADEQUACY OF COMPILATION

The map compilation appears to be adequate.

RECOMMENDATIONS

It is recommended that the manuscript be corrected according to the notes on the ozalid and photograph and be accepted as an advance manuscript.

Respectfully submitted,



F.T. Smith  
LCdr. NOAA



## APPROVAL SHEET FOR FIELD EDIT

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

T-12205.....TP-00205  
T-12206.....TP-00206  
T-12209.....TP-00207  
T-12210  
T-12216  
T-12220  
T-12224  
T-12225

Inspection of the work was made.

*Ray E. Moses*

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

## REVIEW REPORT T-12209

## SHORELINE

March 2, 1973

61. GENERAL STATEMENT

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

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with a copy of Survey No. 4341, 1:10,000 scale, dated September-October 1927. Significant differences between this survey and T-12209 are shown on the comparison print in blue. Survey No. 4341 is now obsolete for nautical chart construction purposes and the compared area is now superseded by T-12209.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with USGS Quadrangle PETERSBURG (C-6), scale 1:63,360, dated 1948. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with a copy of the boat sheet for Survey H-9159, scale 1:10,000, dated 1970. Differences between this survey and T-12209 are shown in purple on the comparison print.

The reef at Lat.  $56^{\circ}43'05''-30''$ , Long.  $133^{\circ}45'05''-30''$  was minimized on H-9159. This feature was compiled on T-12209 as it was inspected by the field editor on Photo 61 W 9426.

The small peninsula 200 meters southwest of Station NOR is mapped on T-12209 as it was inspected by the field editor.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart 8272, scale 1:20,000, 4th Edition, dated November 21, 1970. Shoreline differences between this chart and T-12209 were found to be approximately the same as shoreline differences between T-4341 and T-12209. These differences are shown in blue on the comparison print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with project instructions and the National Standards for Map Accuracy.

Reviewed by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer

Approved for forwarding:

*Melvin J. Umbach*

Melvin J. Umbach, CDR, NOAA  
Chief, Coastal Mapping Division, AMC

Approved:

*Alfred C. Holmes*

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

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

y = 1.790.000 FT.

44'00"

COMPARISON PRINT

Purple = H-9159  
Red = Chart 8272  
Blue = T-4341

KEKU STRAIT

Rocky Pass

43'30"

xx Not on B.S.  
Visible on 61W 9424

y = 1.785.000 FT.

Islets not  
on B.S.

NOR. 1927

46'00"

45'30"

56°43'00"  
133°45'00"

T-12209  
1:10,000

