

12816

12816

FORM C&GS-504  U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY	
<h2>DESCRIPTIVE REPORT</h2>	
<i>Type of Survey</i> Shoreline (Photogrammetric)	
<i>Field No.</i> .....	<i>Office No.</i> T-12816
<b>LOCALITY</b>	
<i>State</i> .....	Alaska
<i>General locality</i> .....	Keku Strait
<i>Locality</i> .....	Beck Island
<u>1961-69</u>	
<b>CHIEF OF PARTY</b>	
Alfred C. Holmes, Director AMC	
<b>LIBRARY &amp; ARCHIVES</b>	
DATE .....	

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR  
TO REGISTRATION

DESCRIPTIVE REPORT - DATA RECORD

T = 12816

PROJECT NO. (II):  PH-6206		
FIELD OFFICE (III):  Atlantic Marine Center Norfolk, Va.	CHIEF OF PARTY  Alfred C. Holmes, Director	
PHOTOGRAMMETRIC OFFICE (III):  Atlantic Marine Center Norfolk, Va.	OFFICER-IN-CHARGE  Alfred C. Holmes, Director	
INSTRUCTIONS DATED (II) (III):  OFFICE INSTRUCTIONS January 18, 1965 " SUPPLEMENT III December 19, 1967 " " IV April 14, 1970 FIELD INSTRUCTIONS February 11, 1969		
METHOD OF COMPILATION (III):  Wild B-8 and Graphic		
MANUSCRIPT SCALE (III):  1:5,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):  1:7,500 Pantographed to 1:5,000	
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):  N.A. 1927	VERTICAL DATUM (III) <sup>PMHW</sup> <del>MEAN SEA LEVEL</del> EXCEPT AS FOLLOWS: Elevations shown as (25) refer to mean high water Elevations shown as (5) refer to sounding datum i.e., <del>mean low water</del> or mean lower low water	
REFERENCE STATION (III):  NEXT 1927		
LAT.: 56°40'04.541" (140.5m)	LONG.: 133°42'55.024" (937.1m)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV):  y = 1,765,891.69 ft.    x = 2,675,863.93 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 - 12816

FIELD INSPECTION BY (III):

None

DATE:

MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):

AIR PHOTO COMPILATION  
Date of Photography: June 16, 1964

PROJECTION AND GRIDS RULED BY (IV):

L.F. Van Scoy

DATE

Sept. 20, 1967

PROJECTION AND GRIDS CHECKED BY (IV):

R. Glaser

DATE

Sept. 21, 1967

CONTROL PLOTTED BY (III):

L.O. Neterer

DATE

Nov. 15, 1967

CONTROL CHECKED BY (III):

B.L. Barge

DATE

Nov. 15, 1967

RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):

W. Heinbaugh

DATE

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STEREOSCOPIC INSTRUMENT COMPILATION (III):

PLANIMETRY

DATE

Reviewed by: J.R. Minton

May 1968

CONTOURS

DATE

Not Applicable

MANUSCRIPT DELINEATED BY (III):

R.R. White

DATE

July 11, 1968

SCRIBING BY (III):

F.P. Margiotta

DATE

Feb. 3, 1972

PHOTOGRAMMETRIC OFFICE REVIEW BY (III):

C.H. Bishop

DATE

July 11, 1968

REMARKS:

**DESCRIPTIVE REPORT - DATA RECORD**  
T-12816

INSTRUMENT (KIND OR SOURCE) (III):  
Wild RC-8 "W"

**PHOTOGRAPHS (III)**

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64-W(c)-1164Thru1166	16 June 1964	10:52	1:15,000	4.2 Ft. Above MLLW
61 W 9547	16 July 1961	10:36	1:20,000	0.9 Ft. Above MLLW

Predicted TIDE (III) Diurnal

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

Atlantic Marine Center  
WASHINGTON OFFICE REVIEW BY (IV): C.H. Bishop  
DATE: Sept. 11, 1972

PROOF EDIT BY (IV):  
DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 2  
RECOVERED: 2  
IDENTIFIED: 2

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

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): None

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

REMARKS:

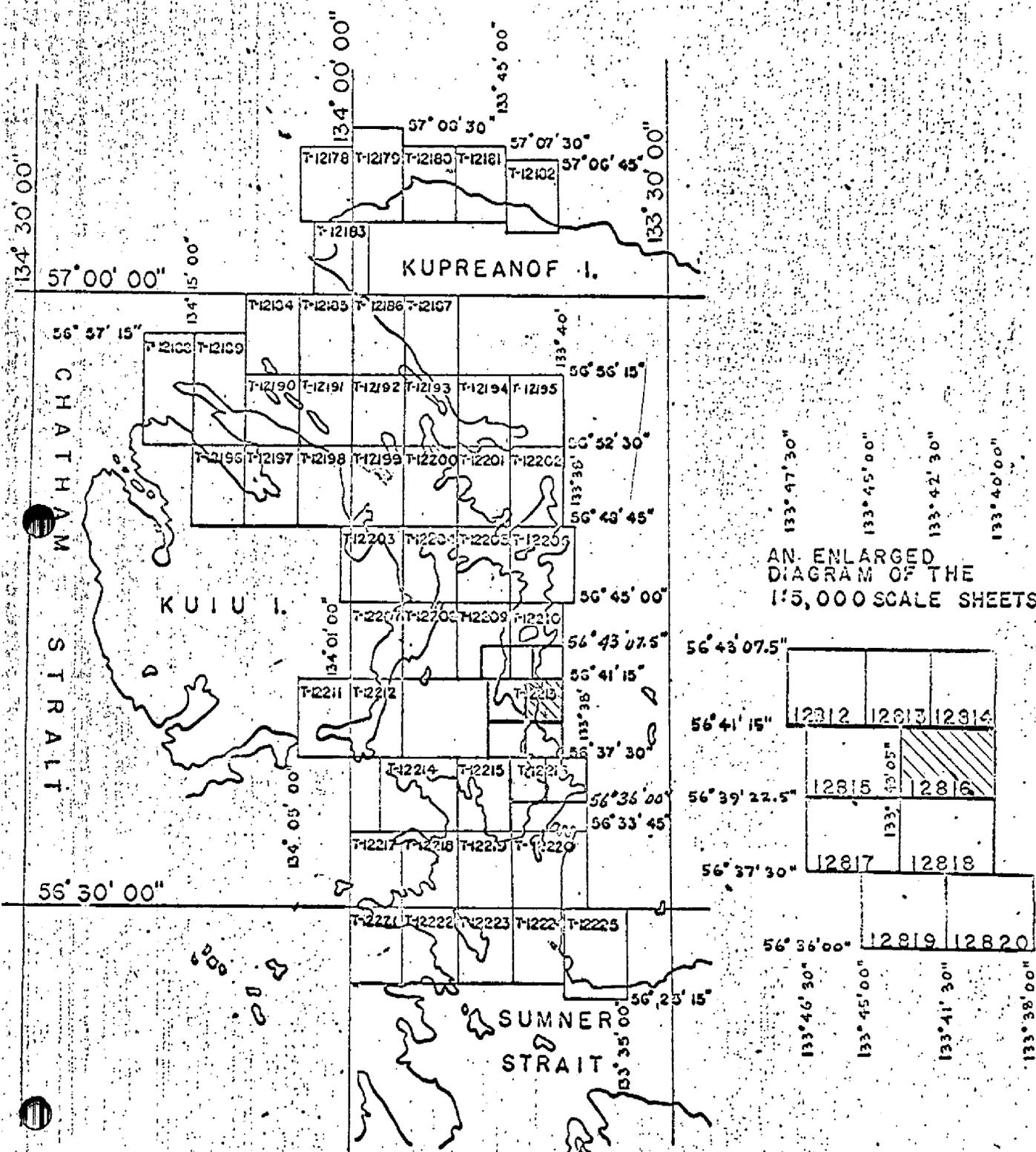
COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation Complete Pending field edit	July, 1968	Superseded
Field Edit Applied	Dec. 1968	Superseded
Final review	Sept. 1972	

# SHORELINE MAPPING PROJECT

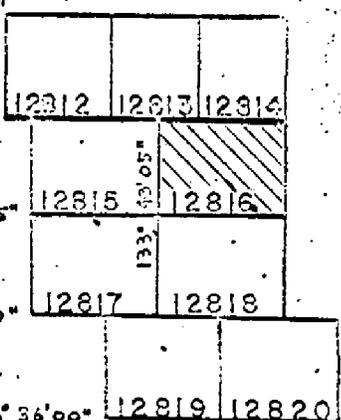
Ph-6206

## KEKU STRAITS, ALASKA

### SCALE 1:10,000



AN ENLARGED  
DIAGRAM OF THE  
1:5,000 SCALE SHEETS



REV. 9-65 R.G.  
REVISED 1-6-65

A.R.

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12816

This 1:5,000 scale shoreline manuscript is one of 53 maps that comprise Project PH-6206, Keku Strait, Alaska. The project diagram indicates the location of T-12816 in the project.

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

Compilation was by Wild B-8 Plotter and graphic methods, using panchromatic photographs taken in 1961 and color photographs taken in 1964. Control was based on a stereoplanigraph 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 1969. 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 August 1972.

The compilation manuscript was a vinylite sheet 1 minute 52.5 seconds in latitude by 2 minutes 30 seconds in longitude.

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

## FIELD INSPECTION REPORT

Project PH-6206

T-12816

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° 33' 45" and 56° 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.

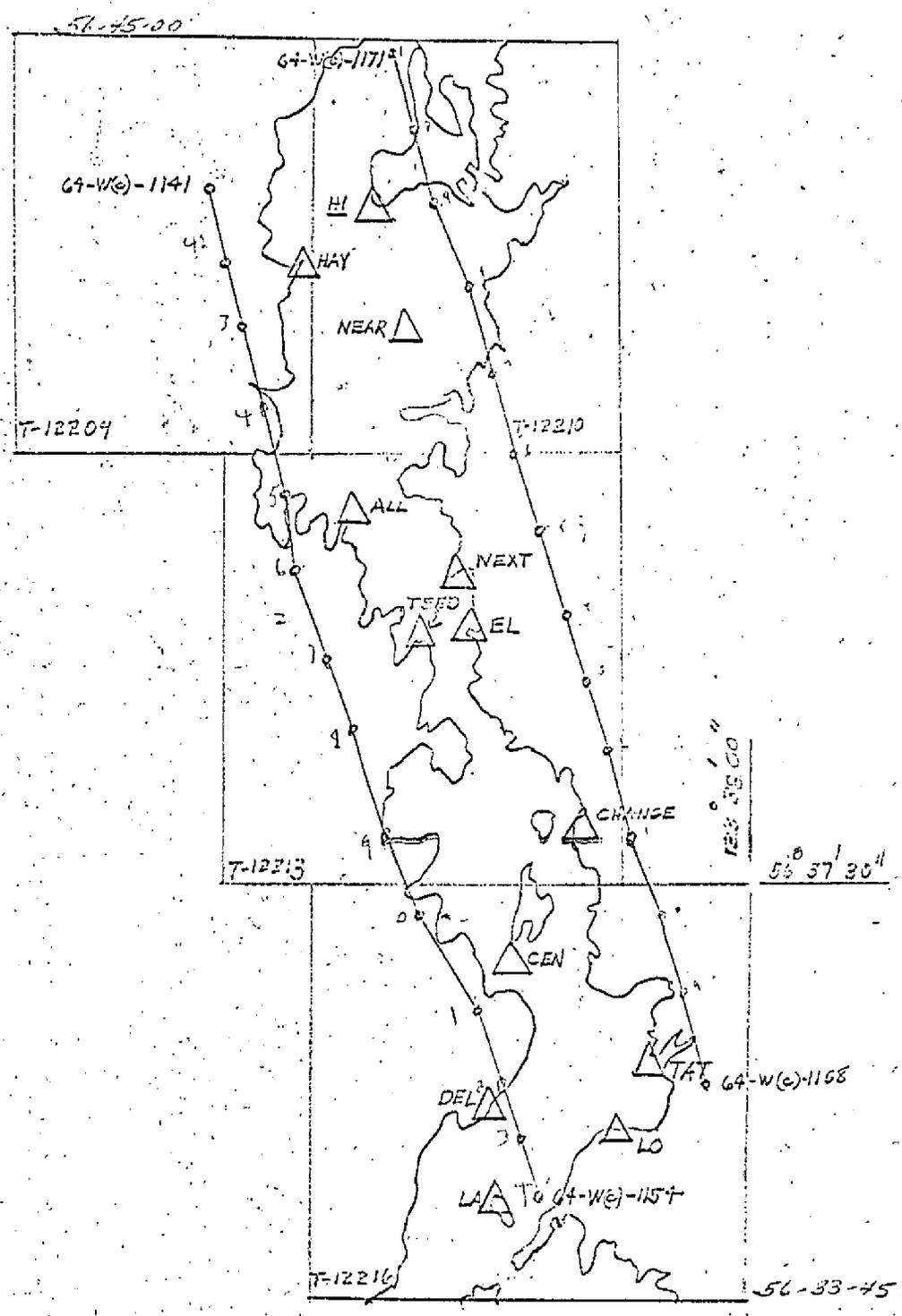
Respectfully submitted:

*W. Heinbaugh*  
W. Heinbaugh

Approved by:

*John D. Perrin Jr.*

# KEKU STRAITS, ALASKA PH. - 6206





## COMPILATION REPORT

T-12816

31. DELINEATION

All detail was compiled from 1964 color photography using the Wild B-8 stereo-plotter except the mean lower low water line, Beck Island and the small Island south of Beck Island which were compiled graphically. See Item 35.

32. CONTROL

See "Aerotriangulation Report". (not dated)

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 line, rocks, reefs, and channel lines of larger streams through the mud flats were delineated from office interpretation of the 1:15,000 scale photographs taken in 1964. Photo 61 W 9547 was used for office interpretation and delineation of the approximate mean lower low water line, Beck Island, and the small island south of Beck Island.

36. OFFSHORE DETAILS:

Offshore details were delineated from office interpretation of the photographs.

37. LANDMARKS AND AIDS:

None

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

Junctions are in agreement with T-12813 and T-12814 to the north, T-12815 to the west, and T-12818 to the south. There is no contemporary survey to the east.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with U.S.G.S. Quadrangle PETERSBURG (C-6), ALASKA, scale 1:63,360, dated 1948.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 8272, scale 1:20,000, 2nd Edition, dated November 14, 1960, revised March 18, 1963.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None

ITEMS TO BE CARRIED FORWARD:

None

Submitted by:

*R. R. White*R. R. White  
Cartographic Aid

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

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6206 (Keku Strait, Alaska)

T-12816

Beck Island

Keku Strait

Kupreanof Island

Rocky Pass

*Summit Island-pp.*

Approved by:

*A. J. Wraight*  
A. Joseph Wraight  
Chief Geographer

Prepared by:

*Frank W. Pickett*  
Frank W. Pickett  
Cartographic Technician



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. 12816			
1. PROJECTION AND GRIDS CHB	2. TITLE CHB	3. MANUSCRIPT NUMBERS CHB	4. MANUSCRIPT SIZE
<b>CONTROL STATIONS</b>			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY CHB	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) None	7. PHOTO HYDRO STATIONS None	
8. BENCH MARKS None	9. PLOTTING OF SEXTANT FIXES None	10. PHOTOGRAMMETRIC PLOT REPORT Bridge-W.O.	11. DETAIL POINTS CHB
<b>ALONGSHORE AREAS (Nautical Chart Data)</b>			
12. SHORELINE CHB	13. LOW-WATER LINE CHB	14. ROCKS, SHOALS, ETC. CHB	15. BRIDGES None
16. AIDS TO NAVIGATION None	17. LANDMARKS None	18. OTHER ALONGSHORE PHYSICAL FEATURES CHB	19. OTHER ALONGSHORE CULTURAL FEATURES None
<b>PHYSICAL FEATURES</b>			
20. WATER FEATURES CHB	21. NATURAL GROUND COVER X		22. PLANETABLE CONTOURS X
23. STEREOSCOPIC INSTRUMENT CONTOURS X	24. CONTOURS IN GENERAL X	25. SPOT ELEVATIONS X	26. OTHER PHYSICAL FEATURES CHB
<b>CULTURAL FEATURES</b>			
27. ROADS None	28. BUILDINGS None	29. RAILROADS None	30. OTHER CULTURAL FEATURES None
<b>BOUNDARIES</b>			
31. BOUNDARY LINES X		32. PUBLIC LAND LINES X	
<b>MISCELLANEOUS</b>			
33. GEOGRAPHIC NAMES CHB	34. JUNCTIONS CHB		35. LEGIBILITY OF THE MANUSCRIPT CHB
36. DISCREPANCY OVERLAY FIELD EDIT OZALID CHB	37. DESCRIPTIVE REPORT CHB	38. FIELD INSPECTION PHOTOGRAPHS NONE	39. FORMS CHB
40. REVIEWER C.H. Bishop		SUPERVISOR, REVIEW SECTION OR UNIT Albert C. Rauck, Jr.	
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 C.H. Bishop		SUPERVISOR Dec. 14, 1969	
43. REMARKS Field edit applied from: Field Edit Ozalid, Film ozalid (field), Field Photos 64 W 1164, 1165, & 1166			

## FIELD EDIT REPORTS

Keku Strait  
Southeast Alaska  
OPR-448

## MAPS

T-12812  
T-12813  
T-12814  
T-12815  
T-12816  
T-12817  
T-12818  
T-12819  
T-12820

June-August 1969

## FIELD EDIT REPORTS

Keku Strait  
 Southeast Alaska  
 OPR-448

June-August 1969

INTRODUCTION

Field edit reports are attached for the following maps:

T-12812	T-12817
T-12813	T-12818
T-12814	T-12819
T-12815	T-12820
T-12816	

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-5-2-69  
 DA-5-3-69  
 DA-5-4-69  
 DA-5-5-69

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

Notes have been made in violet 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.

Generally compilation of the maps is good. It is recommended that the maps be revised in accordance with the notes on the photographs and that the maps, with the exceptions of T-12813, T-12815, and T-12818, be accepted as advance manuscripts. Maps T-12813, T-12815, and T-12818 should be compiled using the recent photographs. It is recommended that the compiler obtain copies of the above boat sheets and use them in compiling the advance manuscripts.

Field inspection of these maps is complete except for map T-12820.

Copies of "Nonfloating Aids or Landmarks for Charts", form C&GS 567, are attached.

FIELD EDIT REPORT  
MAP T-12816

Keku Strait  
Southeast Alaska  
OPR-448

June-July 1969

Field edit of map T-12816 was done by LT(jg) Glenn Endrud and LT(jg) Bruce Fisher between 25 June and 30 July 1969. Inspection was done on foot and in a 12-foot whaler.

METHOD

Field photographs and a copy of the field edit ozalid were taken into the field. Verification was done primarily by visual inspection in the field. In order to locate the island at triangulation station EL 1927, three-point fixes with check angles were taken and then plotted on boat sheet DA-5-4-69. The island has been pricked on to the field edit ozalid.

Notes have been made in violet on the field photographs and have been cross-referenced on the "Field Edit Ozalid" by photograph number. All times are based on 105° West meridian. Notes are on the following photographs:

64W1165  
64W1166

ADEQUACY OF COMPILATION

Compilation of this map appears to be good. Hydrographic location of reefs compares well with the photogrammetric location of the same reefs. No isolated boulders were located with three-point fixes.

Indicated marsh areas are covered with grass, however, they are not spongy. These areas would be better described as grass areas.

The mean high water line on the map looks good.

Field inspection of this map is complete.

RECOMMENDATIONS

It is recommended that the map be revised in accordance with the notes on the photographs and that the map be accepted as an advance manuscript.

Respectfully submitted

*Bruce W. Fisher*

Bruce W. Fisher  
LTJG USESSA

APPROVAL SHEET  
for  
FIELD EDIT  
Keku Strait  
Southeast Alaska  
OPR-448  
June-August 1969

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

T-12812	T-12817
T-12813	T-12818
T-12814	T-12819
T-12815	T-12820
T-12816	

Frequent inspections of the field edit work and of plotted comparisons on the boat sheets were made.

*Ray E. Moses*

Ray E. Moses  
CDR, USESSA  
Commanding Officer  
USC&GSS DAVIDSON

## REVIEW REPORT T-12816

## SHORELINE

September 11, 1972

61. GENERAL STATEMENT:

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

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with copies of Survey No. 4341, scale 1:10,000, dated September-October 1927 and Survey No. 4331, scale 1:10,000, dated August-September 1927. Shoreline is in poor agreement; it is the same as shoreline on Chart 8272. Any shoreline difference between the registered topographic surveys and T-12816 also exists between Chart 8272 and T-12816.

Shoreline differences between Surveys 4341 and 4331 and T-12816 are shown in blue on the comparison print. No other significant differences were noted.

Survey Nos. 4341 and 4331 are now obsolete and the compared areas are superseded by T-12816 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

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

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with copies of Boat Sheets H-9079 (DA 5-3-69) and H-9080 (DA 5-4-69), both 1:5,000 scale and both surveyed in 1969. Shoreline is in good agreement; a copy of the incomplete manuscript for T-12816 was the source for shoreline in the area compared.

The MLLWL is not in complete agreement. It is office interpretation of the compilation photographs. It has been labeled approximate and retained on the map for whatever use it may be to the nautical chart compiler.

There is one discrepancy in elevation of a reef on the east side of Summit Island at Lat. 56°40.6', Long. 133°43.1'. The elevation determined from field edit data is eleven feet above MLLW; the elevation of the same reef on H-9079 is one foot above MLLW. Examination of the photographs indicates that the reef is much higher than the elevation given on H-9079. The field edit elevation, eleven feet above MLLW, is obviously to be preferred.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 8272, scale 1:20,000, 4th edition dated November 21, 1970. No significant differences were noted, except shoreline. Shoreline on the nautical chart and registered topographic surveys closely agree with each other and are in very poor agreement with T-12816. Differences are shown in blue on the comparison print. See Item 62.

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

COMPARISON PRINT

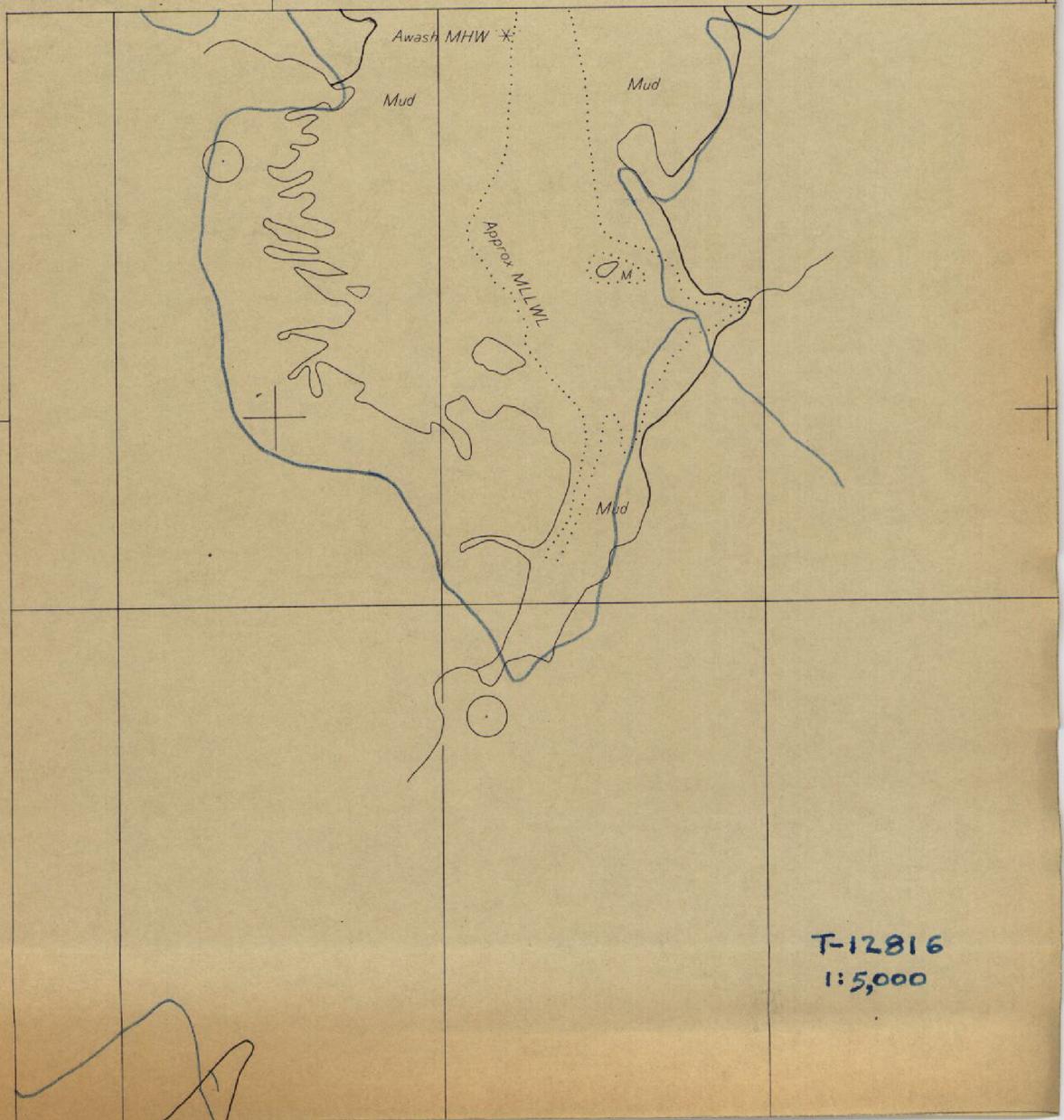
Blue = T-4341 and Chart 8272

133° 43' 05" 43' 00" | x=2,676,000 FT. 42' 45" 42' 30" x=2,678,000 FT.

56° 41' 15"

y=1,772,000 FT.

41' 00"



T-12816  
1:5,000

y=1,770,000 FT.

133° 42' 45"

42' 30"

56° 40' 45"

Gravel and mud

COMPARISON PRINT

Blue = T-4341 and Chart 8272  
Purple = H-9079

\* Awash MHW

(1)

\* (7)

Gravel and mud  
Examination of compilation photos indicates that (1) is correct.

40' 30"

y=1,768,000 FT.

Summit Island  
Mud

Approx MLLWL

Gravel bars awash MHW

\* Awash MHW

Mud

K

56° 40' 15"

\* (9)

Gravel and mud

y=1,766,000 FT.

Mud

T-12816  
1:5,000

Boulders

\* Awash MHW

NEXT 1927

\*

COMPARISON PRINT

Blue = T-4341 & T-4331  
and Chart 8272

40'00"

y = 1.764.000 FT.

39'45"

39'30"

y = 1.762.000 FT.

56° 39' 22.5"

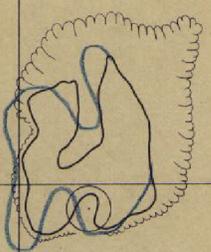
133° 43' 05" 43'00"

x = 2.676.000 FT. 42'45"

42'30"

x = 2.678.000 FT.

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Beck Island

Approx. MLLWL

Rocky

Mud

Mud

Mud

EL 1927

T-12916  
1:5,000