

12819

12819

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-12819

LOCALITY

State Alaska

General locality Keku Strait

Locality South Of Eagle Island

1961-1969

CHIEF OF PARTY

Alfred C. Holmes, Director, AMC

LIBRARY & ARCHIVES

DATE .....

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR  
TO REGISTRATION

DESCRIPTIVE REPORT - DATA RECORD

T-12819

OBJECT 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, AMC	
INSTRUCTIONS DATED (II) (III):  OFFICE INSTRUCTIONS    January 18, 1965 "    SUPPLEMENT III    Decmeber 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): <i>Sept. 4, 1975</i>
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., <del>mean lower low water</del>	
REFERENCE STATION (III): CEN 1927		
LAT.: 56°36'48.190" (1490.6m)	LONG.: 133°41'51.881" (884.9m)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): y = 1,745,965.30 Ft.    x = 2,679,383.10 Ft.	STATE Alaska	ZONE 1
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-12819

FIELD INSPECTION BY (II):		DATE:
None		
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Air Photo Compilation Date of Photography		
PROJECTION AND GRIDS RULED BY (IV):		DATE
L. F. Van Scoy		Sept. 27, 1967
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. Glaser		Sept. 28, 1967
CONTROL PLOTTED BY (III):		DATE
L. O. Neterer		Nov. 14, 1967
CONTROL CHECKED BY (III):		DATE
B. L. Barge		Nov. 15, 1967
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
W. Heinbaugh (W.S.C.)		_____
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	B. L. Barge	April 12, 1968
	CONTOURS	DATE
	Inapplicable	
MANUSCRIPT DELINEATED BY (III):		DATE
B. L. Barge		May 31, 1968
SCRIBING BY (III):		DATE
F. P. Margiotta		Feb. 9, 1972
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
R. J. Pate		July 1968
REMARKS:		



DESCRIPTIVE REPORT - DATA RECORD

T-12819

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

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64-W(c)-1150 thru 1152	16 June 1964	10:44	1:15,000	4.0 Ft. above MLLW
61 W 9543 and 9544	16 July 1961	10:36	1:20,000	0.4 Ft. below MLLW

Predicted TIDE (III)

Diurnal

		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION:	Ketchikan, Alaska		13.0	15.4
SUBORDINATE STATION:	Beck Island, Keku Strait		11.5	13.8
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV):		DATE:		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	1	RECOVERED:	IDENTIFIED:	
		1	1	
NUMBER OF BM(S) SEARCHED FOR (III):	None	RECOVERED:	IDENTIFIED	
		None	None	
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):		None		
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):		None		

REMARKS:

T-12819

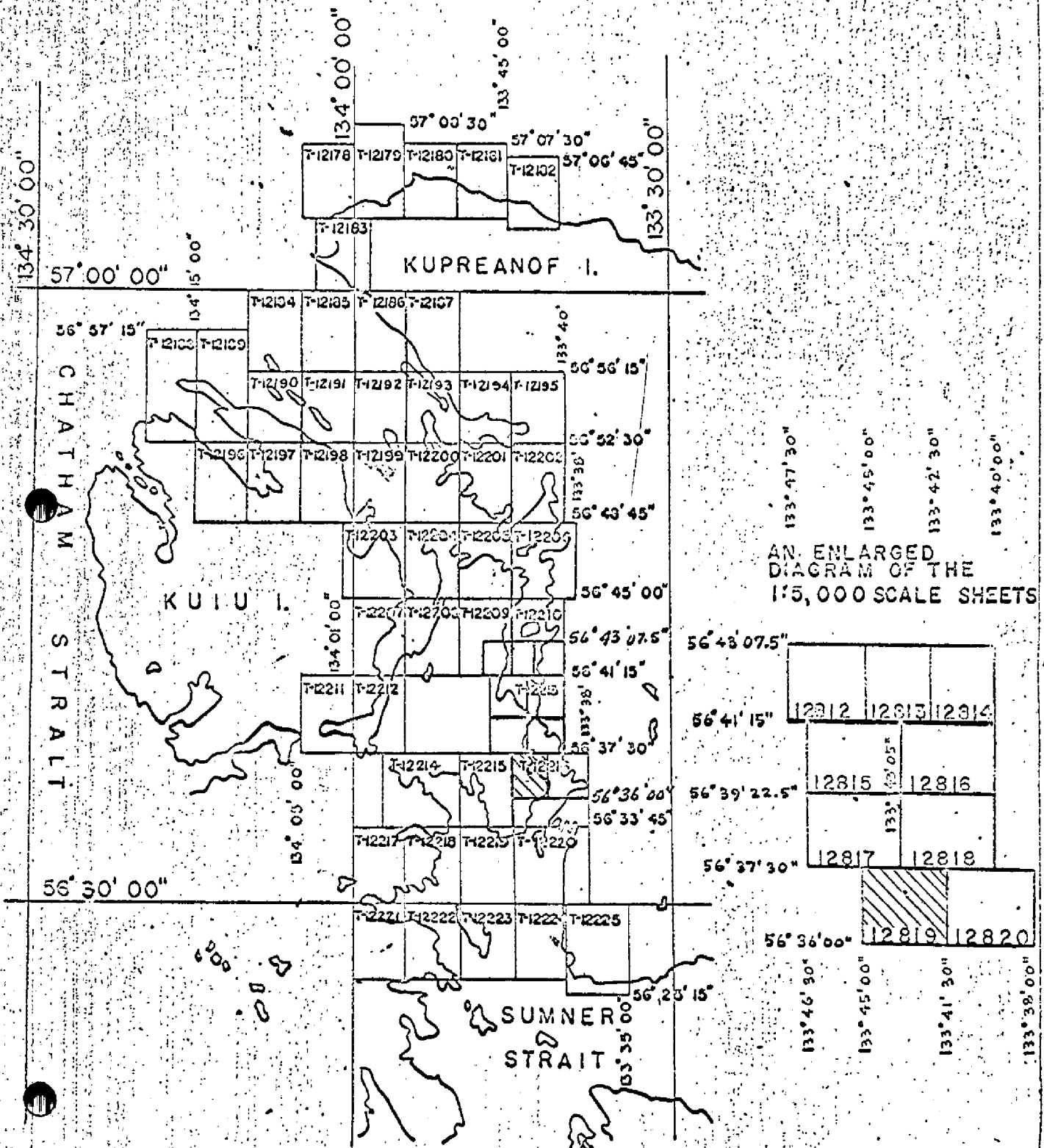
COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation Complete Pending Field Edit	May 31, 1968	Superseded
Field Edit Applied	Feb. 24, 1970	Superseded
Final Review	Feb. 1973	

# SHORELINE MAPPING PROJECT

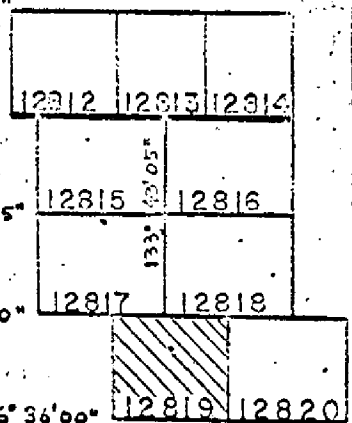
Ph-6206

## 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-12819

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-12819 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 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 February, 1973.

The compilation manuscript was a vinylite sheet 1 minute 30 seconds in latitude by 3 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-12819

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 IEM 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.

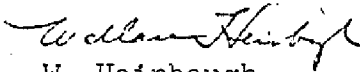
24. Supplemental Data

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.

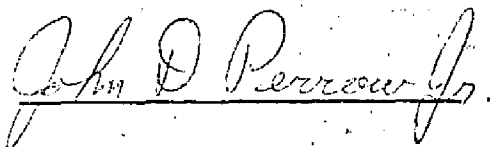
25. Photography

Photography was adequate for coverage, definition and endlap.

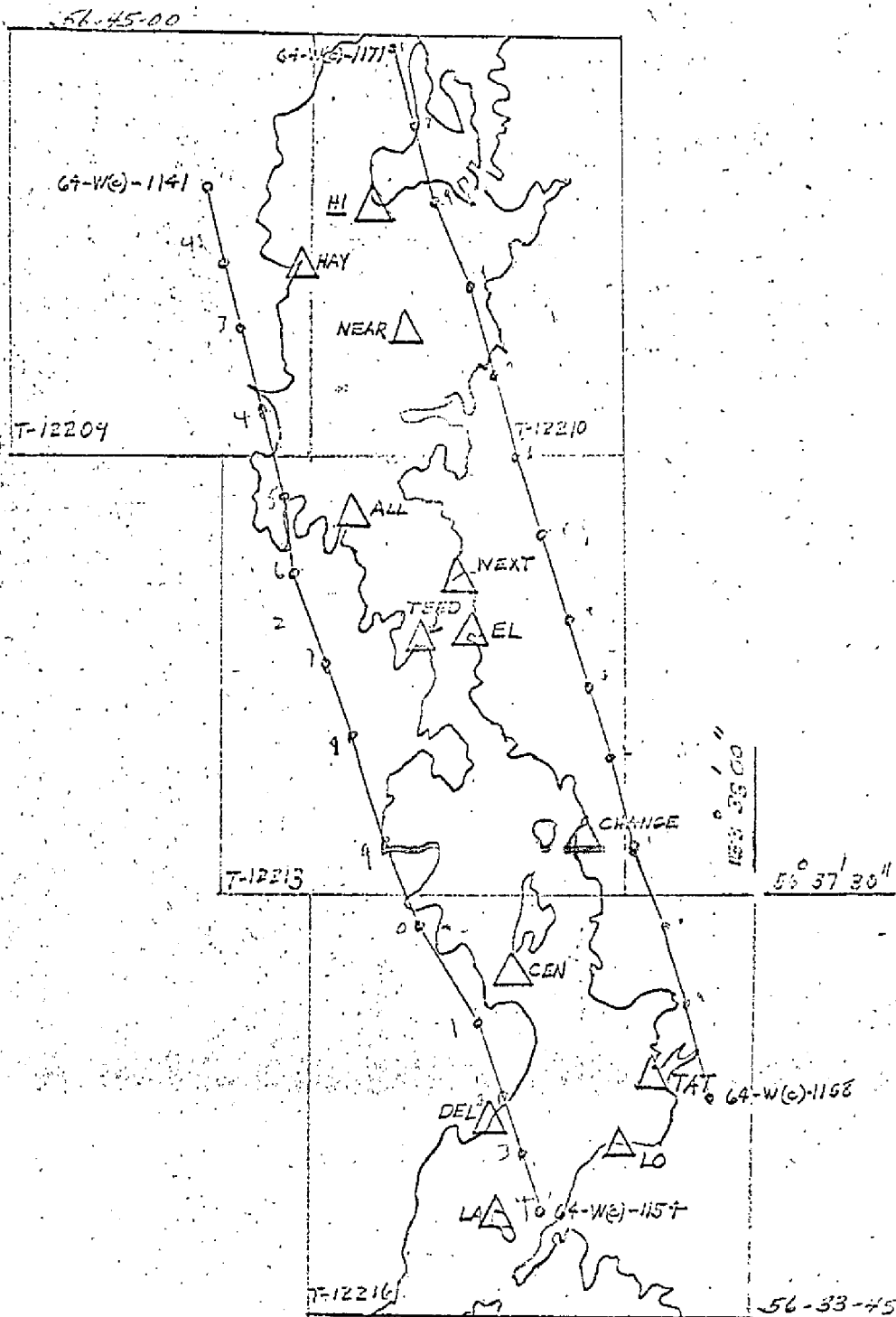
Respectfully submitted:

  
W. Heinbaugh

Approved by:

  
John D. Perrow

# KEKU STRAITS, ALASKA PH - 6206



DESCRIPTIVE REPORT CONTROL RECORD

MAP T. 12819

PROJECT NO. PH-6206

SCALE OF MAP 1:5,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter) FORWARD (BACK)	N.A. 1927 - DATUM
CEN, 1927	G.P. Vol. 2 P. 366	N.A. 1927	56° 36' 48.190"	1490.6 (365.3)	
WES, 1927	"	"	133° 41' 51.881"	884.9 (138.5)	
			56° 36' 38.33"	1185.6 (670.3)	
			133° 42' 16.49"	281.3 (742.2)	
COMPUTED BY	B. L. Barge	DATE	11/29/67	CHECKED BY	A. L. Shands
				DATE	4/26/67



## COMPILATION REPORT

T-12819

31. DELINEATION

The Wild B-8 was used. The compilation models consisted of two parallel flights of 1964 color photography with no side-lap. Details in the resulting hiatus were compiled graphically, using 1961 panchromatic photography.

32. CONTROL

See "AEROTRIANGULATION REPORT" by W. Heinbaugh. (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 was delineated from the color photography. The approximate mean lower low water line was located with the aid of the 1961 panchromatic photography, as were kelp areas. These photographs were taken at a predicted tide of 0.4 feet below mean lower low water.

36. OFFSHORE DETAILS

Offshore details were compiled in the same manner as the shoreline and alongshore details.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Satisfactory junctions have been made with sheet T-12817 to the northwest; T-12818 to the northeast, and T-12820 to the east. There are no contemporary 1:5,000 scale sheets to the west or south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with USGS Quadrangle PETERSEBURG, (C-6), scale 1:63,360, dated 1948.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart 8272, KEKU STRAIT, 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:   
*Charles H. Barge*

for B. L. Barge  
Cartographic Technician  
5-31-68

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-12819

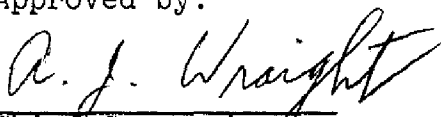
Eagle Island

Keku Strait

Kuiu Island

Rocky Pass

Approved by:

  
\_\_\_\_\_  
Chief Geographer  
A. Joseph Wright

Prepared by:

\_\_\_\_\_  
Frank W. Pickett  
Cartographic Technician

9. NOTES FOR THE HYDROGRAPHER:

- 1- There was no field inspection prior to compilation; therefore, occasional measurements should be made from identifiable points on the photographs to the MHWL to verify compilation.
- 2- If there are landmarks or fixed aids to navigation within the area of this map, investigate and submit Form 567.
- 3- Give character of foreshore areas (sand, mud, etc.).
- 4- Foul, shoal, and reef areas and rocks shown on this manuscript were determined by office interpretation of aerial photographs of the area. Their existence and extent should be verified by the hydrographer. If a foul, shoal, or reef area or rock does not exist, this fact should be noted on the Field Edit Ozalid.
- 5- See Field Edit Ozalid for other notes.

**PHOTOGRAMMETRIC OFFICE REVIEW**  
T12819

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 XX		11. DETAIL POINTS RJP	
<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 XX		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 RJP	
<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		37. DESCRIPTIVE REPORT		38. FIELD INSPECTION PHOTOGRAPHS XX		39. FORMS RJP	
40. REVIEWER RJP				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 Charles H. Bishop      2/24/70				SUPERVISOR Albert C. Rauck, Jr.			
43. REMARKS Field Edit applied from: Field Edit Ozalid, film ozalid, and Field Photo 64 W 1151							

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-12819

Keku Strait  
Southeast Alaska  
OPR-448

July-August 1969

Field edit of map T-12819 was done by LT Edward Gelb between 27 July and 11 August 1969. Inspection was done on foot and in a 12-foot whaler.

METHOD

Due to poor weather only copies of the "Field Edit Ozalid" could be taken into the field. Shoreline was verified by visual inspection of the shoreline and ozalid in the field. Isolated rocks, high points of ledges, and ledge limits were located by three-point fixes with check angles. Fixes were plotted on boat sheet DA-5-5-69 and then transferred to the T-sheet and ozalid for comparison.

All notes have been inked in violet on field photograph #64W1151.

ADEQUACY OF COMPILATION

Compilation of this map is good. Hydrographic location of isolated boulders compares well with the photogrammetric location of the same boulders.

Several islands near triangulation station CEN 1927 should be joined for clarity.

Field inspection of this map is complete.

RECOMMENDATIONS

It is recommended that the map be revised in accordance with the notes on the photograph 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-12819

## SHORELINE

February 5, 1973

61. GENERAL STATEMENT

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

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with Survey No. 4331, scale 1:10,000, dated August-September 1927. Significant differences between this survey and T-12819 were shown in blue on the comparison print.

Survey No. 4331 is now obsolete for Chart construction purposes. The compared area is superseded by T-12819.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

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

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with Survey H-9081, scale 1:5,000, dated July-August 1969.

Shoreline compared well, as T-12819 was the source for this feature. Differences between the hydrographer's determination and the compiler's photo interpretation of ledge limits on photos taken at -0.4 ft. predicted tide could not be resolved. The H-9081 limits could not be followed on the photographs.

The mean lower low water line on T-12819 was interpreted from low water photography (-0.4 ft) and was left on the map for whatever use it might be to the chart compiler.

Differences between T-12819 and H-9081 are shown in purple on the comparison print.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart 8272, scale 1:20,000, dated 21 Nov. 1970. Shoreline differences between this chart and T-12819 are the same as shoreline differences between T-4331 and T-12819.

65. COMPARISON WITH NAUTICAL CHARTS (cont'd)

Therefore, the blue line on the comparison print indicates differences between T-12819 and both Chart 8272 and T-4331. Other differences between T-12819 and Chart 8272 are shown in red on the comparison print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with Job Instructions and meets 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

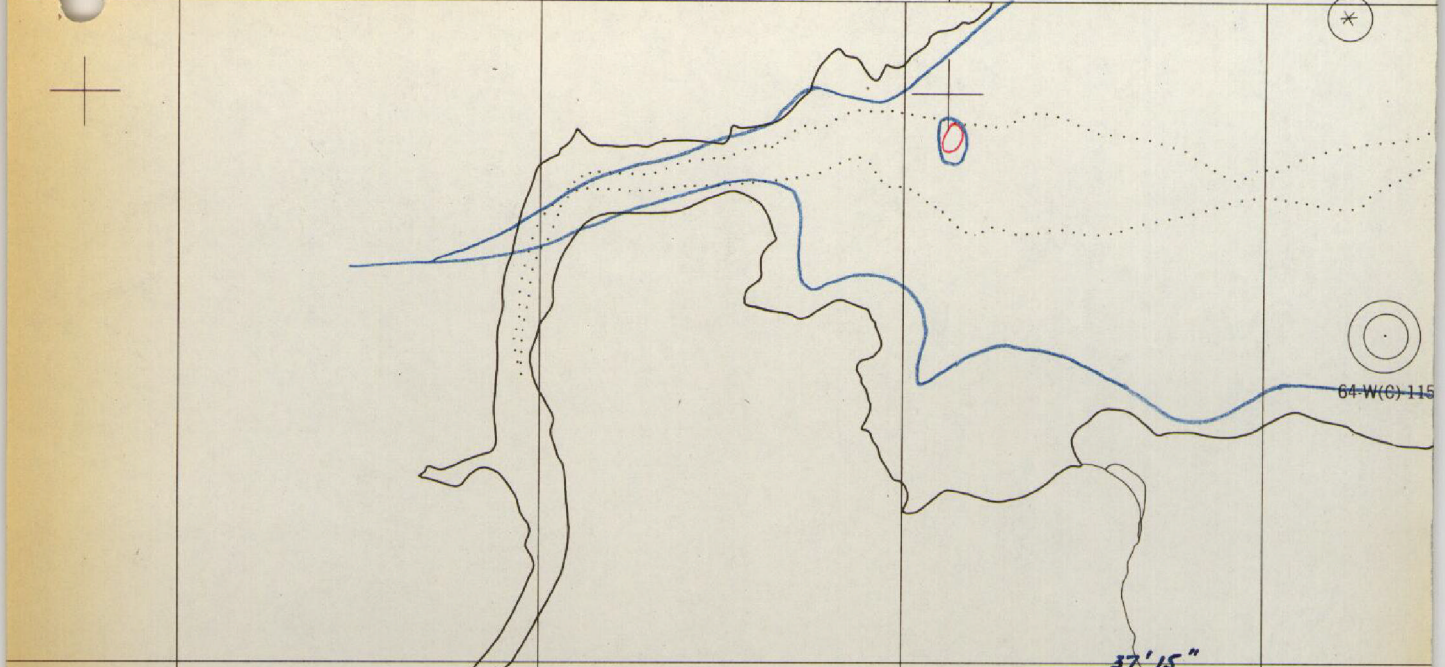
Approved:

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

Approved:

Chief, Photogrammetric Branch    Chief, Coastal Mapping Division

000 FT | 44'00" | 43'45" | 43'30" | x=2,674,000 FT. | 133° 43'15"

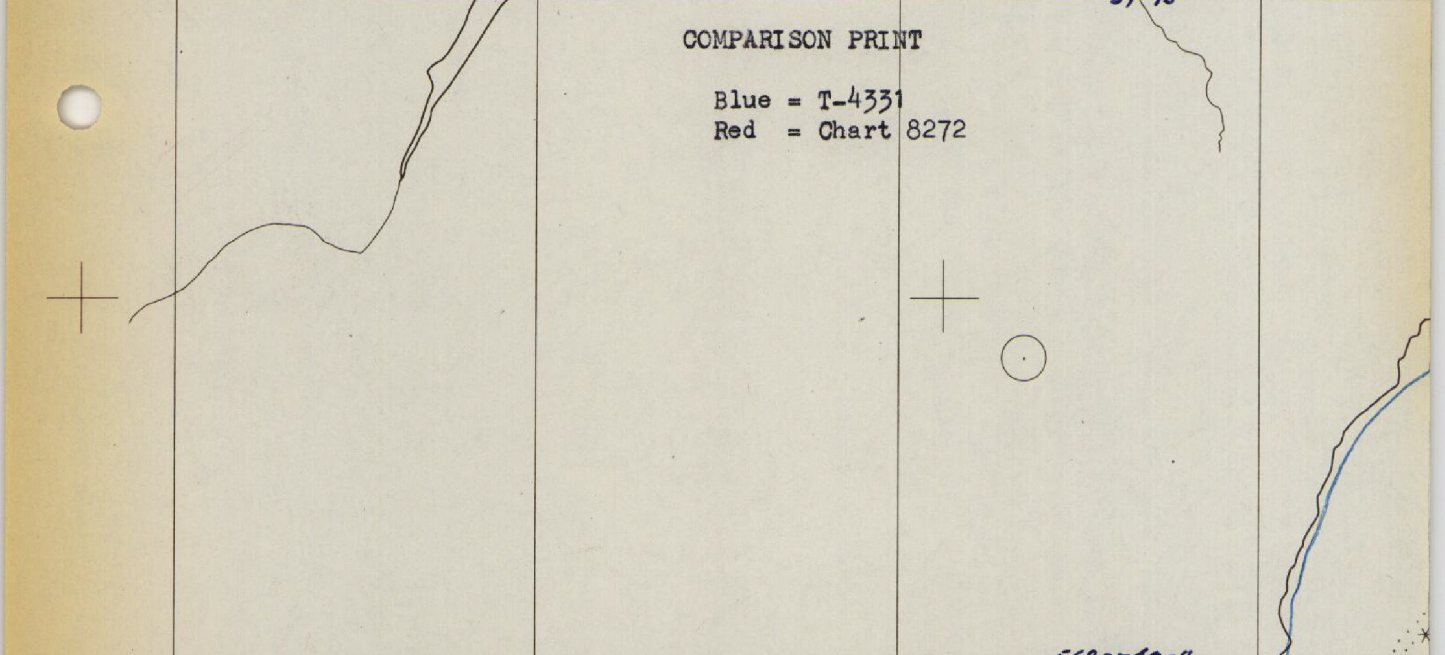


64 W(6) 115

COMPARISON PRINT

Blue = T-4331  
Red = Chart 8272

37'15"



56°37'00"

T-12819  
1:5,000



43'00" x=2,676,000 FT.

42'45"

133° 42'30"

x=2,678,000 FT.

42'15"

56° 37' 30"

37' 15"

56° 37' 20"

Photo	Tide
61 W 9544-43	-0.4 predicted
64 W(c) 1151-52	3.5 "

No rks visible at this position 64W 1151, 3.5 ft tide

Rks not visible on photos

Not vis. on photos

Rks not visible on photos

ke not vis on photos

COMPARISON PRINT

- Blue = T-4331
- Red = Chart 8272
- Purple = H-8091

NOTE:

"The photogrammetric location and delineation of features offshore from the mean high-water line on this survey may not be complete or final. The contemporary reviewed hydrographic survey of the area where available, should be consulted for the final delineation.

T-12819  
1:5,000



42'00"      41'45"      x=2,680,000 FT. 133°41'30"      56°37'30"  
 y=1,750,000 FT.

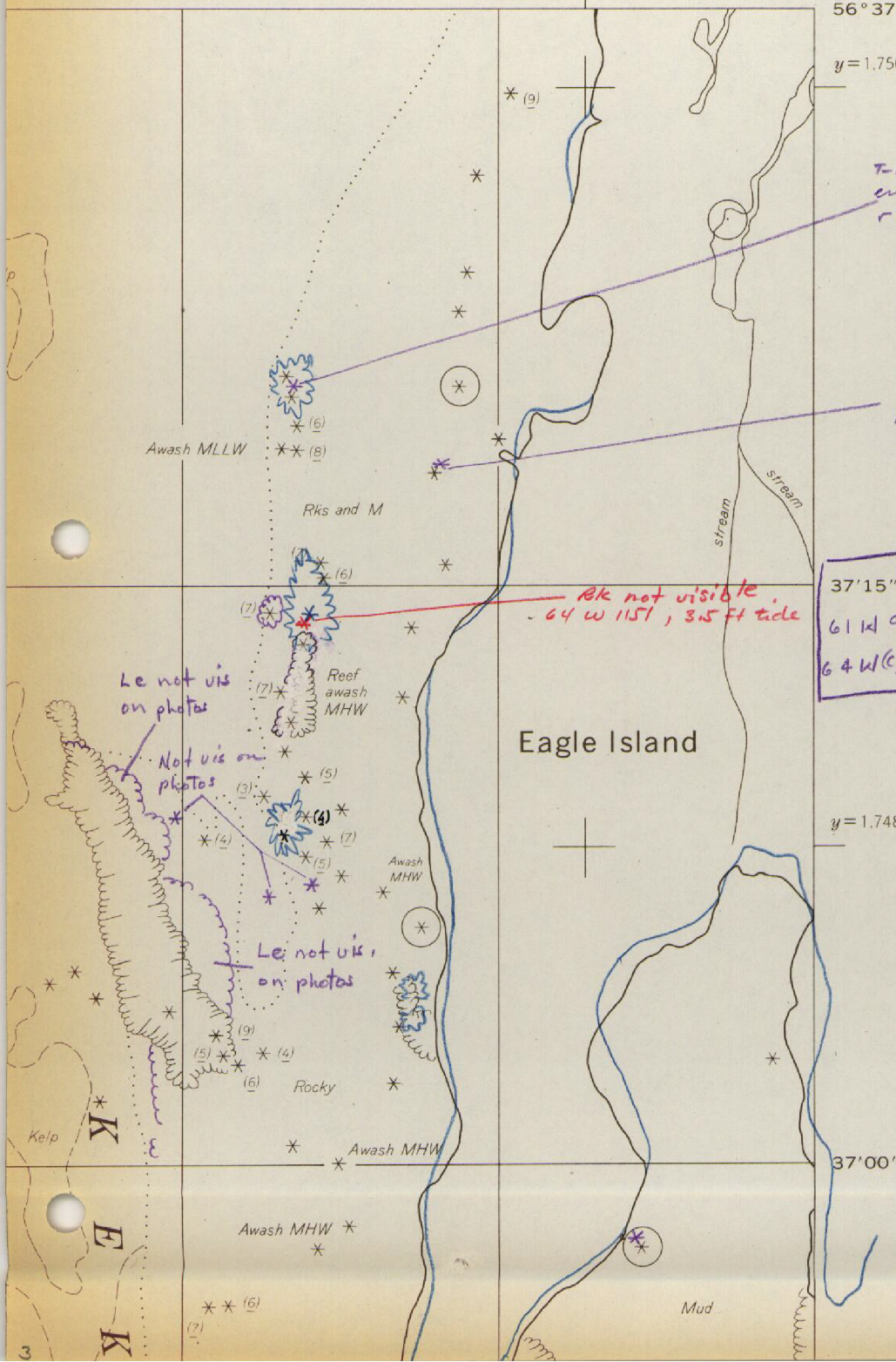
T-12819 rks mark N. and S. end of group; H-8091 rk marks center.

2 rks 5m apart. Photo rk. is S'ly one of two.

Photo	Tide
37'15" 61 W 9543-44	-0.14 pred.
64 W (C) 1151-52	3.5 "

Rk not visible - 64 W 1151, 3.5 Ft tide

Le not vis on photos  
 Not vis on photos  
 Le not vis on photos



y=1,748,000 FT.  
**COMPARISON PRINT**  
 Blue = T-4331  
 Purple = H-8091  
 Red = Chart 8272

T-12819  
 1:5,000



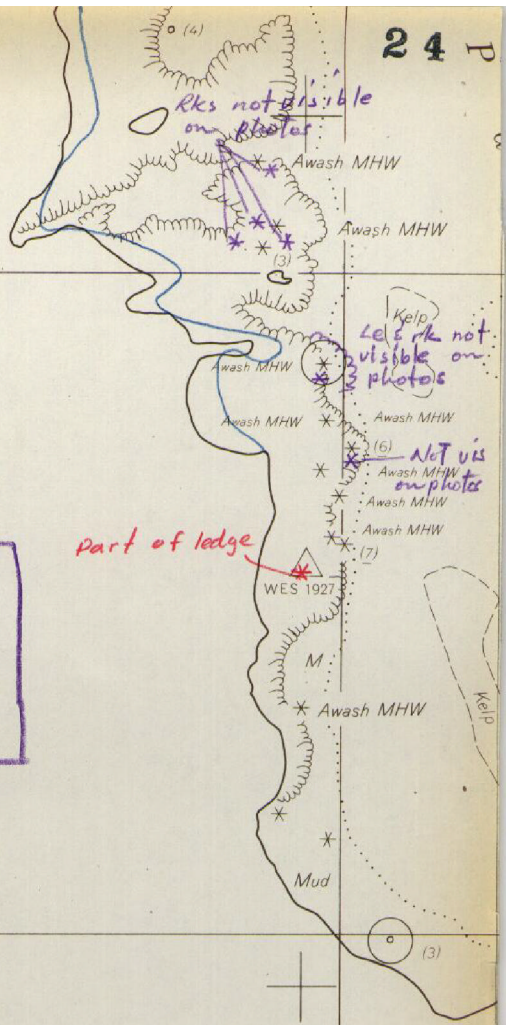
L A N D

36' 45"



64-W(C)-1151

<u>Photo</u>	<u>Tide</u>
61 W 9543-44	-0.4 predicted
64 W(C) 1150-52	3.5 "



COMPARISON PRINT

- Blue = T-4331
- Red = Chart 8272
- Purple = H-8091

56' 36' 15"

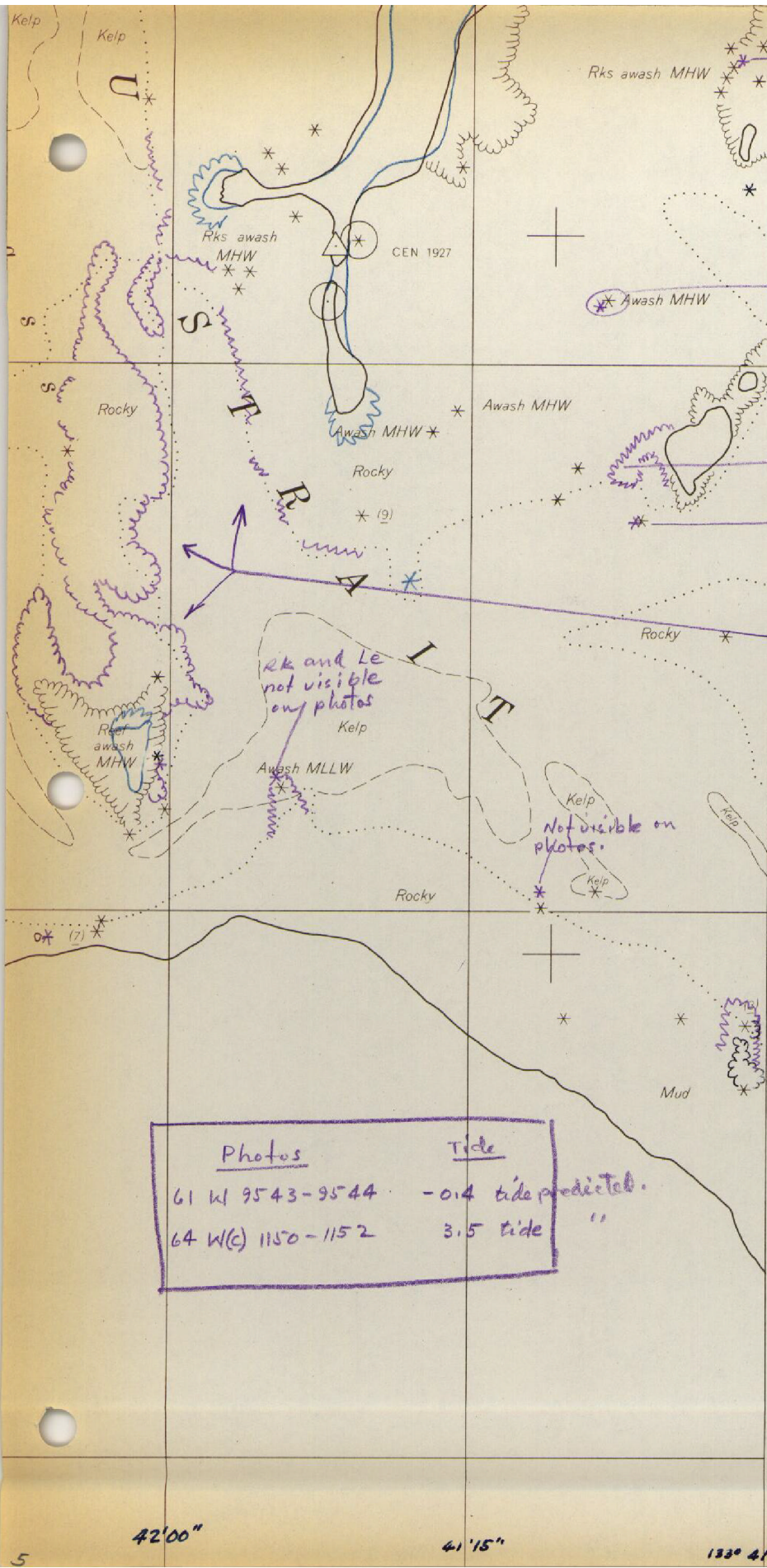
43' 00"

42' 45"

133° 42' 30"

T-12819  
1:5,000





Not visible

y=1,746,000 FT.

Probably same rock. Photo location is rk. identified on 1151 by F.E.

36'45"

Ledge visible

Only one rock

{ Hydrographer's reef limits could not <sup>be</sup> identified on the photographs.

Rk and Le not visible on photos

Not visible on photos.

36'30"

y=1,744,000 FT.

Le limit not visible to the extent mapped on H-9081

Photos	Tide
61 W 95°43-95°44	-0.4 tide predicted.
64 W(c) 1150-1152	3.5 tide "

COMPARISON PRINT  
Blue = T-4331  
Purple = H-8091

T-12819  
1:5,000

36'15"

42'00"

41'15"

133° 41'30"