

12179

12179

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-12179	
LOCALITY	
<i>State</i> Alaska	
<i>General locality</i> Keku Strait	
<i>Locality</i> Turnabout Island	
<hr/> 19 62-1966	
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 - 12179

SUBJECT NO. (II):

JOB PH-6206

FIELD OFFICE (III):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center
Photogrammetric Branch

OFFICER-IN-CHARGE

Alfred C. Holmes, RADM, NOAA
Director, AMC

INSTRUCTIONS DATED (II) (III):

January 18, 1965	OFFICE
November 26, 1965	OFFICE SUPPLEMENT I
March 18, 1966	OFFICE AMENDMENT I
May 11, 1965	FIELD
June 14, 1965	FIELD

METHOD OF COMPILATION (III):

Kelsh instrument

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

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):

N. A. 1927

VERTICAL DATUM (III): MHW

~~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 lower low water~~ or mean lower low water

REFERENCE STATION (III):

TURNABOUT ISLAND LIGHTHOUSE 1917 ✓

LAT.:

57° 07' 56.511 ✓

LONG.:

133° 59' 09.525 ✓

ADJUSTED

UNADJUSTED

PLANE COORDINATES (IV):

1,935,702.91 ✓

x = 2,622,207.58 ✓

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

FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air Photo compilation Date of Photography: 6/16/62, 7/27/65, 7/28/65		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE 11/03/65
PROJECTION AND GRIDS CHECKED BY (IV): R. S. Kornspan		DATE 11/03/65
CONTROL PLOTTED BY (III): R. Smith		DATE 01/11/66
CONTROL CHECKED BY (III): C. H. Bishop		DATE 01/11/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): G. M. Ball		DATE Nov. 1965
STEREOSCOPIC INSTRUMENT COMPILATION (III): K.G. Boyle C. H. Bishop	PLANIMETRY K. G. Boyle	DATE 02/02/66
	REV. BY: C.H. Bishop	02/02/66
CONTOURS Inapplicable		DATE
MANUSCRIPT DELINEATED BY (III): C.H. Bishop		DATE 02/03/66
SCRIBING BY (III): R. R. White		DATE 06/11/68
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): COMPILATION: C.H. Bishop FIELD EDIT: C.H. Bishop SCRIBING & STICK-UP: R.E. Smith		DATE 02/16/66 11/10/66 06/12/68
REMARKS: Field Edit by: Ship PATTON		June 1966

DESCRIPTIVE REPORT - DATA RECORD

AMERA (KIND OR SOURCE) (III):

Wild RC-8 "W" & Wild RC-9 "M"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65-M-108 and 109	27 July 1965	0836 PST	1:50,000	0.4 ft. below MLLW
65-M-211 and 212	28 July 1965	0853 PST	1:50,000	2.5 ft. below MLLW
62-W-5499 thru 5503	16 June 1962	0916 PST	1:20,000	3.8 ft. above MLLW
62-W-5508 thru 5512	16 June 1962	0925 PST	1:20,000	4.1 ft. above MLLW

TIDE (III)

Diurnal

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Ketchikan		13.0	15.4
SUBORDINATE STATION: Kake, Keku Strait		11.7	14.0
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): Leo F. Beugnet, AMC

DATE:
August 1971

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

IDENTIFIED:

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

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

T-12179

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit		
Alongshore area for hydro	Feb. 1966	Superseded
Shoreline on N. side of Turn- about Island revised from Photos 62-W-5501 and 5502	March 1966	<i>Superseded</i>
Partial Field Edit Applied	December 1966	<i>Superseded</i>
Final Review	August 1971 October 1972	<i>Superseded</i>

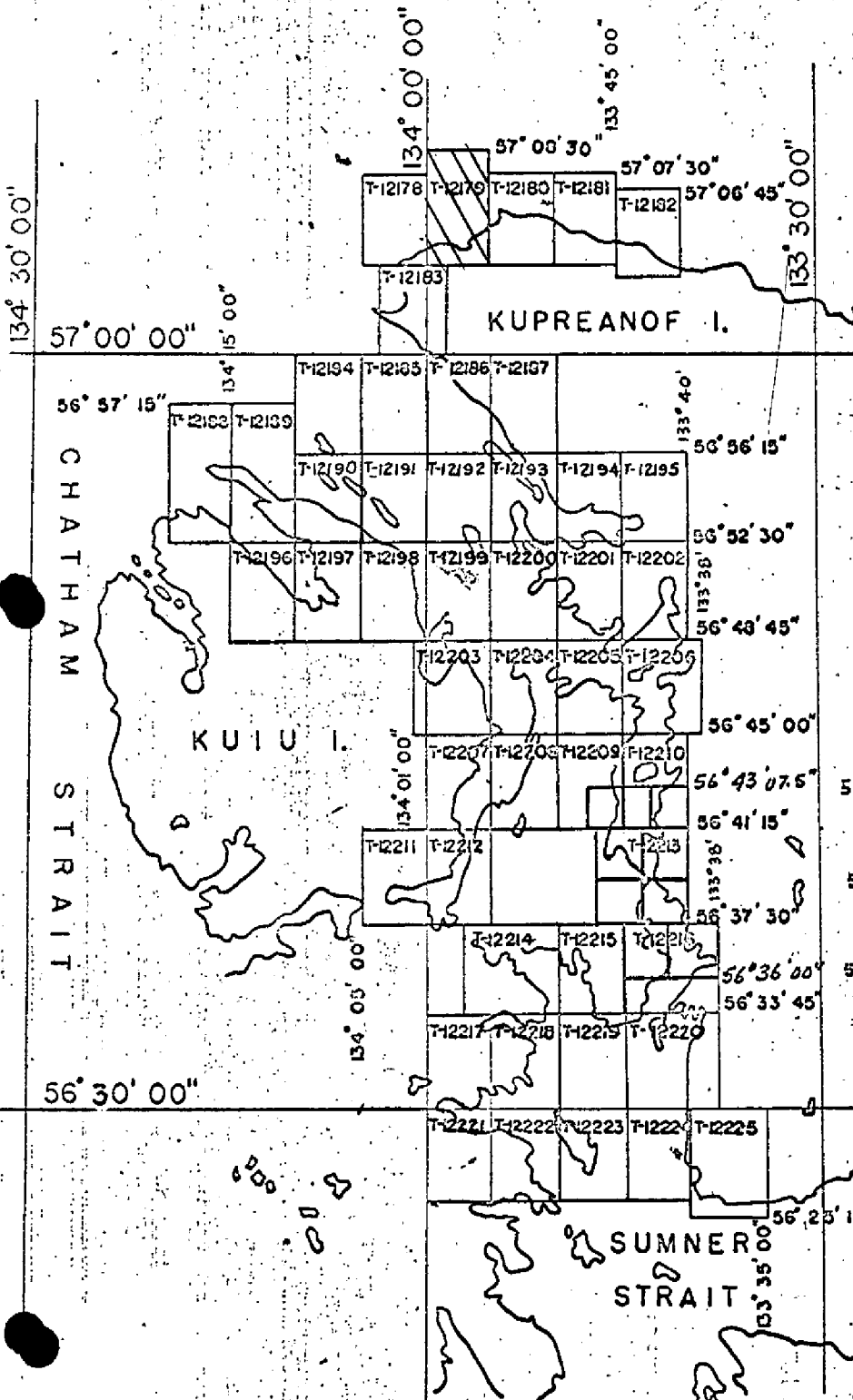
Discrepancies with reviewed
hydro surveys resolved;
Addendum added to
Review Report } Oct: 1972

SHORELINE MAPPING PROJECT

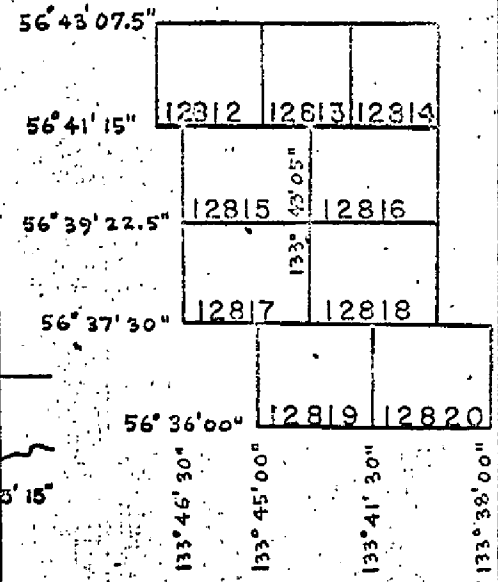
Ph-6206

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-12179

Shoreline survey T-12179 is one of 53 similar surveys in project PH-6206. The primary purpose of the project was to provide modern shoreline and photo-hydro support data for hydrographic surveys in the Keku Strait area. See page 5 for the area covered by the project and the location of this survey within the project.

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

Compilation was at 1:10,000 scale by Kelsh instrument methods using the photography of June 1962 and July 1965. Copies of the incomplete manuscript along with specially prepared photographs and ozalids were furnished for transfer of the shoreline to the boat sheet, photo-hydro support use and field edit.

The compilation manuscript was a vinylite sheet 4 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 August 1971. One cronaflex positive and a negative of the final reviewed survey are forwarded for record and registry.

FIELD INSPECTION REPORT
T-12179

There was no field inspection prior to compilation.

Photogrammetric Plot Report
Project PH-6206
Keku Straits, Alaska
November 1965

21. Area Covered

This report covers an area of Alaska in the upper portion of Keku Straits and its confluence with Frederick Sound.

22. Method

Analytic aerotriangulation methods were used to bridge four strips of "M" photography at the scale of 1:50,000. The attached sketch of strips bridged shows the amount and placement of triangulation furnished. Closures to control and to tie points have been tabulated.

23. Adequacy of Control

Horizontal control (pre-marked targets) identified and required to adjust the strips bridged was slightly above our minimum requirements. Two of the four strips were adjusted using only three stations and common tie points as a check to our bridging accuracy. The final results are well within the National Standards of Map Accuracy for the fourteen shoreline sheets to be compiled (T-12178, T-12179, T-12183 through T-12192, T-12196 and T-12197).

Control stations that were not used in our final adjustment follow: (1) CORN, 1925, this station is on the tip of a peninsula and so situated that it was impossible to set a model in which this station could have been of any value to our work; (2) KEKU, 1927, this target was not visible on either the film or the plates. It is our belief, based upon the published description, that the target might have washed away; (3) HAM, 1927, this station was used on Strip #2, however on Strip #3 the target was not visible because the lay-over of trees near the station obscured the target on one photograph.

24. Supplemental Data

Numerous U.S.G.S. quads were used to obtain elevations required for the final adjustment.

25. Photography

Photography was adequate with regard to coverage, overlap and image definition.

Respectfully submitted:

George M. Ball
George M. Ball

Approved and forwarded:

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

CLOSURE TO CONTROL AND TIE POINTS
(feet)

STRIP #1

BENDEL, 1917
(0.0 -0.1)
KELP, 1965
(-0.1 -0.1)
PINT, 1965
(-0.1 -0.1)

STRIP #2

BENDEL, 1917
(+1.3 0.0)
CART, 1927
(-2.0 -0.6)
KAKE, 1927
(-1.4 +0.1)
AGE, 1927
(+1.3 +0.6)
AMY, 1927
S.S. (-0.5 -0.4)

TIES TO STRIP #1

08401 (-0.2 + 2.6)
08402 (-0.9 +10.1)
08402 (-0.9 + 9.6)

TIES TO STRIP #3

27401 (+6.7 + 6.2)
28401 (+9.0 + 9.1)
29401 (+3.4 - 2.4)
29401 (+5.5 - 0.7)
29402 (+9.3 + 6.0)
29403 (+8.2 + 3.7)
33401 (+3.2 + 0.4)
33402 (+5.0 + 5.4)

STRIP #3

KAKE, 1927
(+1.8 -2.1)
ALTO, 1927
(-2.0 +0.5)

STRIP #3 cont.

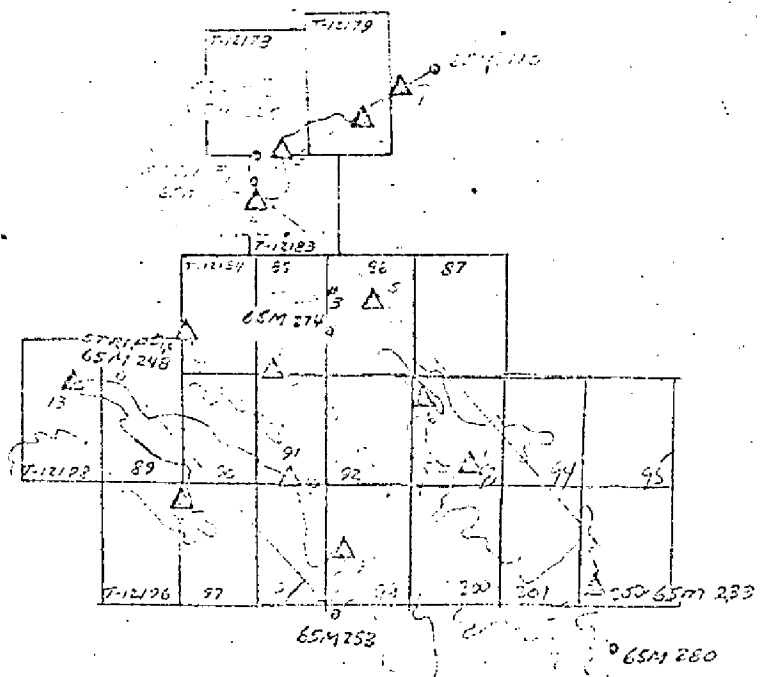
HAM, 1927
(-2.8 -0.9)
AGE, 1927
(+3.4 +3.1)
AMY, 1927
S.S. (-0.6 -0.9)

STRIP #4

GNAW, 1965
(-0.1 0.0)
LOW, 1927
(-0.1 0.0)
LUCK, 1927
(-0.1 0.0)

TIES TO STRIP #3

74401 (+0.1 +0.2)
74401 (+0.3 +0.6)
75401 (+9.3 -6.2)
76401 (+3.1 +3.2)
76402 (+6.7 +5.4)



RENU STRAITS, ALASKA
 PH - 6206
 SHUBERT E. MARSHALL
 SCALE 1:10,000
 SOLSIC LENT, PHOENIX
 SCALE 1:150,000

KEY TO SURVEY POINTS

1. TUNT, 1965
2. KEMP, 1965
3. SENDL, 1917
4. CART, 1927
5. KARE, 1927
6. HAD, 1927
7. AB, 1927
8. HAD, 1927
9. LUCK, 1927
10. LOW, 1927
11. ALTS, 1927
12. KEND, 1927
13. TUN, 1927
14. TUN, 1927

File 11A

Job PH-6206
Keku Straits, Alaska

Notes to Compiler

The drill holes have been cleaned, however, it is suggested that due to the methods by which the plates have been transported the holes be recleaned. The method that we have found most practical has been to gently tap the area around the drill hole with scotch tape; this will remove any emulsion which may have fallen back into the holes.

The difference between the dates of the photography (M 65 E to E plates and W 61 and 62 Kelsh plates) as well as the scale difference (M 1:50,000 and the W 1:20,000) caused the pug operators a great amount of trouble, hence, it is advisable to have the Kelsh operators drop as many additional points to help control the surrounding models.

The Kelsh operators will also have some models that have only three points, this unfortunate condition could not be avoided.

There are areas within the project limits that cannot be delineated by using the Kelsh plotter, therefore, the M photography will have to be set in the B-8's. The methods by which the shoreline is to be delineated and the field ratio prints are to be furnished for hydro support will be up to the Compilation Office. Kelsh plates have been ordered to cover the whole area even though only 60 percent of the plates have been drilled. These plates may or may not be of any additional help to you, however, we have tried to furnish all the available material.

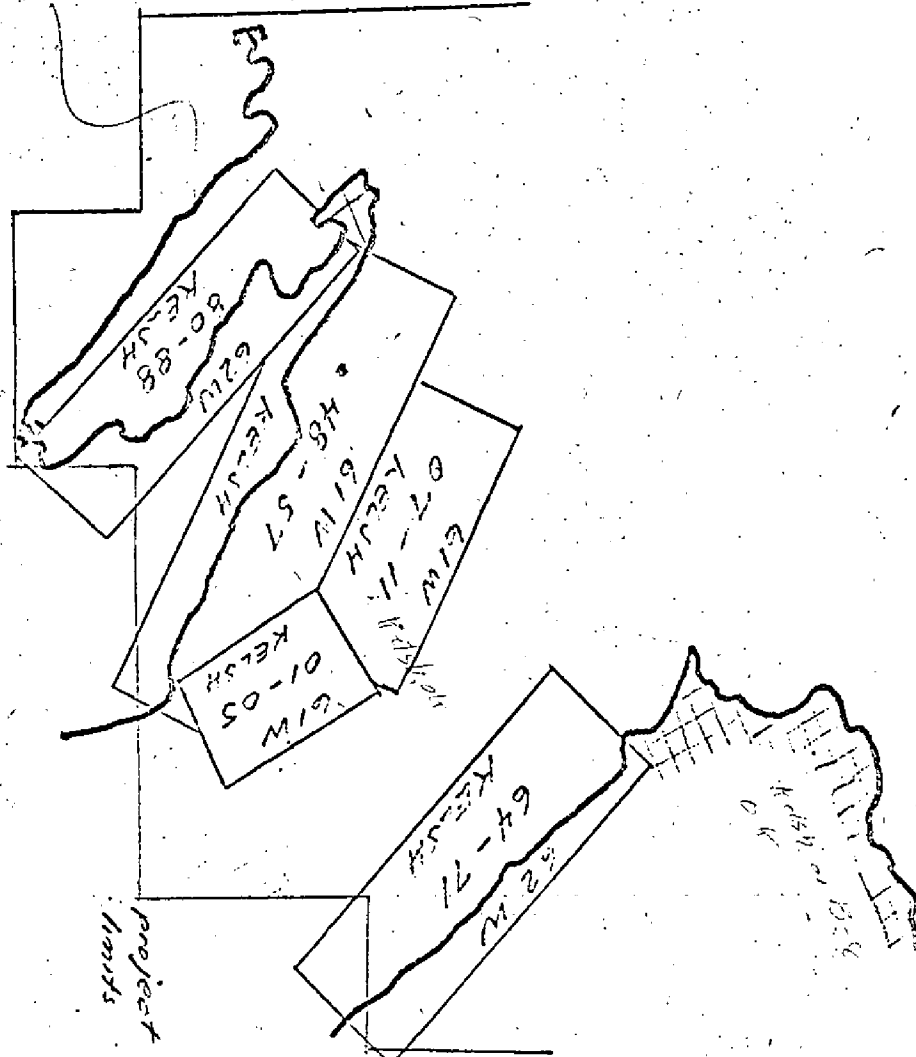
The following list indicates those Kelsh models that can be set:

- 61 W 9348 - 57
- 61 W 9401 - 05
- 61 W 9407 - 11
- 62 W 5480 - 88
- 62 W 5564 - 71

and the additional Kelsh plates furnished but not drilled:

- 62 W 5478 - 79
- 62 W 5491 - 97
- 62 W 5507 - 15
- 62 W 5560 - 63

The attached diagram shows (1) the areas that can be compiled with the Kelish plotter, (2) the areas to be compiled either with the B-8 or graphically, and (3) the area within the project limits which cannot be compiled. This problem has been called to the attention of Mr. Heywood. This diagram should be used only as a reference diagram, the final project and control diagram will accompany the Photogrammetric Plot Report.



Capital Requirements

TO 83 FUNDING

STATION

NETO STRAITS

NETO

- [Hatched Box] CMU NOT USE
- [Hatched Box] CONCRETE
- [Hatched Box] BRICK
- [Empty Box] KESH

COMPILATION REPORT
T-12179

31. DELINEATION

Planimetry was compiled by Kelsh instrument.

32. CONTROL

Adequate supplementary control, based on identified horizontal control, was established by aerotriangulation.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours not applicable.

Main streams, two on this manuscript, were delineated for a short distance inshore from the shoreline.

35. SHORELINE AND ALONGSHORE DETAILS

There was no field inspection prior to compilation. Shoreline and alongshore details were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

The only offshore details are the easterly section of Pinta Rocks. No compilation difficulties were encountered.

37. LANDMARKS AND AIDS

No landmarks were selected.

The only fixed aid to navigation, Turnabout Island Light, was listed on Form 567.

Form 567 has been forwarded to the Washington Office.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Satisfactory junctions were made with T-12178 on the west and T-12183 on the south. There is no contemporary survey on the north and from Longitude 133°58'30" eastward on the south. No junction was made to the east with T-12180, which is not in the immediate requirements for compilation.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle SUMDUM (A-6) ALASKA, scale 1:63,360 published in 1948.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart 8201, scale 1:217,828 revised 7/20/64.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

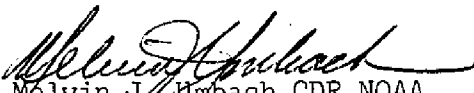
None.


ITEMS TO BE CARRIED FORWARD

None


Approved for forwarding:

Submitted:


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


C. H. Bishop
Cartographer

Approved:


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

August 5, 1971

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-6206 (Alaska)

T-12179

- Frederick Sound
- Kupreanof Island
- Pinta Rocks
- Turnabout Island

Approved by:

A. Joseph Wraight

 A. Joseph Wraight
 Chief Engineer

Prepared by:

Frank W. Pickett

 Frank W. Pickett
 Cartographic Technician

49. NOTES FOR THE HYDROGRAPHER

1. Completion of approximate MHWL on north side of Turnabout Island is awaiting receipt of ratio photos from Washington Office as of this date (3/1/66).
2. All compilation was done without the aid of field inspection; therefore, the office interpretation of the mean high water line, character of the foreshore, foul areas and kelp areas should be verified.
3. All rock data should be added by the hydrographer.

NOTE: Item 1 above superseded. MHWL revised from ratios received from WSC. See new submission of T-12179 crona-flex (2). (03-04-66)

FORM C&GS-1002
(9-66)

U.S. DEPARTMENT OF COMMERCE
ESSA
COAST AND GEODETIC SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T- 12179

1. PROJECTION AND GRIDS CHB		2. TITLE CHB		3. MANUSCRIPT NUMBERS CHB		4. MANUSCRIPT SIZE CHB	
CONTROL STATIONS							
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY CHB				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 XX	
ALONGSHORE AREAS (Nautical Chart Data)							
12. SHORELINE CHB		13. LOW-WATER LINE CHB		14. ROCKS, SHOALS, ETC. CHB		15. BRIDGES XX	
16. AIDS TO NAVIGATION CHB		17. LANDMARKS XX		18. OTHER ALONGSHORE PHYSICAL FEATURES CHB		19. OTHER ALONGSHORE CULTURAL FEATURES XX	
PHYSICAL FEATURES							
20. WATER FEATURES CHB				21. NATURAL GROUND COVER CHB		22. PLANETABLE CONTOURS XX	
23. STEREOSCOPIIC INSTRUMENT CONTOURS XX		24. CONTOURS IN GENERAL XX		25. SPOT ELEVATIONS XX		26. OTHER PHYSICAL FEATURES XX	
CULTURAL FEATURES							
27. ROADS XX		28. BUILDINGS XX		29. RAILROADS XX		30. OTHER CULTURAL FEATURES XX	
BOUNDARIES							
31. BOUNDARY LINES XX				32. PUBLIC LAND LINES XX			
MISCELLANEOUS							
33. GEOGRAPHIC NAMES CHB				34. JUNCTIONS CHB		35. LEGIBILITY OF THE MANUSCRIPT CHB	
36. DISCREPANCY OVERLAY XX		37. DESCRIPTIVE REPORT CHB		38. FIELD INSPECTION PHOTOGRAPHS None		39. FORMS CHB	
40. REVIEWER <i>Charles H. Bishop</i> Charles H. Bishop				SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> 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 <i>Charles H. Bishop</i> C.H. Bishop				SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.			
REV. BY: C.H. Bishop		11/10/66		11/10/66			
43. REMARKS Field edit applied from: Field edit ozalid, field photos Nos. 62-W-5511 & 5512.							

T-12179

FIELD EDIT REPORT

There were no field edit reports submitted with the field edit covering the 1966 to 1968 season's work, and no Form 567 was submitted to the compilation office by the field party.

REVIEW REPORT T-12179

SHORELINE

August 11, 1971

61. GENERAL STATEMENT

The area in the vicinity of Turnabout Island and the area west of longitude 133°57'00" on this survey was not field edited.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A visual comparison was made with a copy of survey No. 2116, a 1:80,000 scale survey made in 1893. That survey is now obsolete and is superseded by T-12179 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with U.S.G.S. SUMDUM (A-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 a copy of boat sheet H-8907 (PA-10-2-66). The boat sheet does not cover that area west of longitude 133°57'00" or the area of Turnabout Island.

The source of the shoreline for the boat sheet was an incomplete manuscript. Some changes in the placement of the MHWL were made by the field editor, therefore, the shoreline of the two surveys is not in complete agreement. All differences have been noted on the comparison print in purple.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 8201, 16th edition, dated November 7, 1970. Because of the difference in scale only a visual comparison was feasible. No major discrepancies 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. Beugnet

Leo F. Beugnet
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

ADDENDUM TO REVIEW REPORTS

T-12178, T-12179, AND T-12183 THROUGH T-12202

After Maps T-12178, T-12179, and T-12183 through T-12202 had been final reviewed and the reports written and signed, and the hydrographic surveys had been verified and reviewed, the Marine Chart Division requested additional review of the photogrammetric manuscripts to aid in resolving discrepancies between the hydrographic and photogrammetric surveys. Discrepancy prints of each T-sheet and verified copies of the hydrographic surveys were furnished to aid in this review. H-9041 Boat Sheet was used for T-12198 through T-12202, as a verified copy of this survey was not available to the reviewer.

Copies of the hydrographic surveys were used as aids to verify what could be seen on the photographs of the area: If a feature on the hydrographic survey was not positively identifiable on the photographs, it was not added to the T-sheet. This review resulted in the revision of several ledges, some mean high water line, and the addition of several rocks awash. The hydrographer's elevations were not added to the photogrammetric manuscripts.

Questions on the discrepancy prints were answered on separate ozalids and returned to the Marine Chart Division, along with a Chart Maintenance Print reflecting differences between the Advance Manuscript and the Final Reviewed Manuscript for each map.

Comparison prints bound with this report reflect differences with the verified hydrographic surveys, except T-12198 through T-12202, rather than the boat sheets. The sources for shoreline on the verified hydrographic surveys were copies of Advance Manuscripts; therefore, shoreline agreement is generally good.

Charles H. Bishop

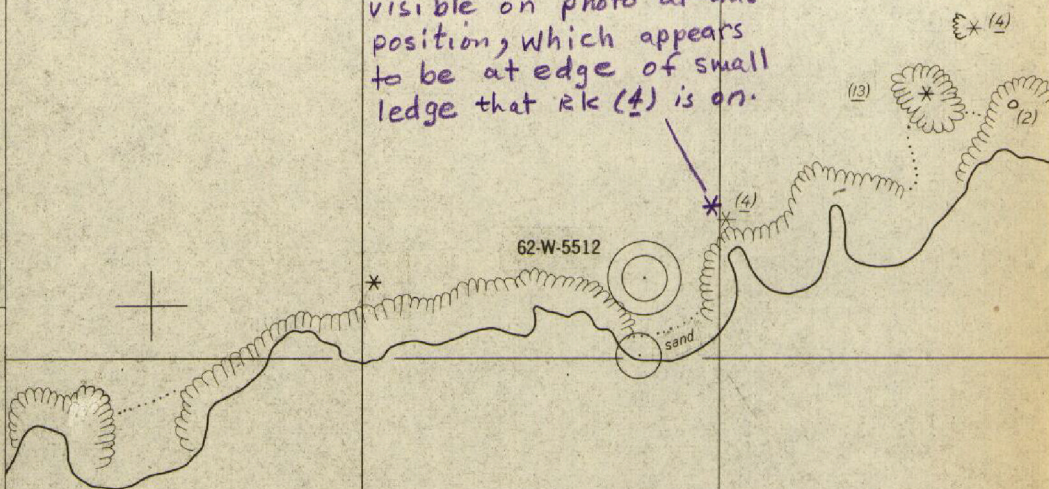
Charles H. Bishop
Cartographer
January, 1973

05'

No prominent rock visible on photo at this position, which appears to be at edge of small ledge that Rk (4) is on.

y=1,915,000 FT.

04'30"



COMPARISON PRINT

Purple = H-8907 (Verified copy)

04'

T-12179
1:10,000 Scale

57°03'45"

134°00'00"

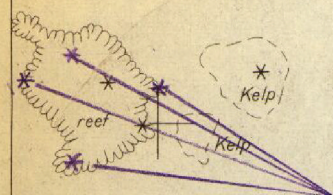
x=2,620,000 FT. 59'30"

59'

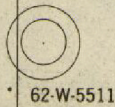
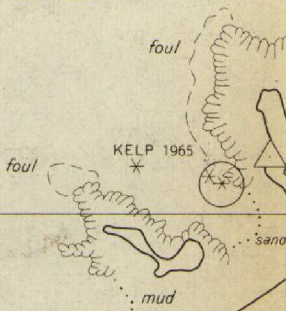
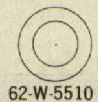
5

COMPARISON PRINT

Purple = H-8907 (Verified Copy)



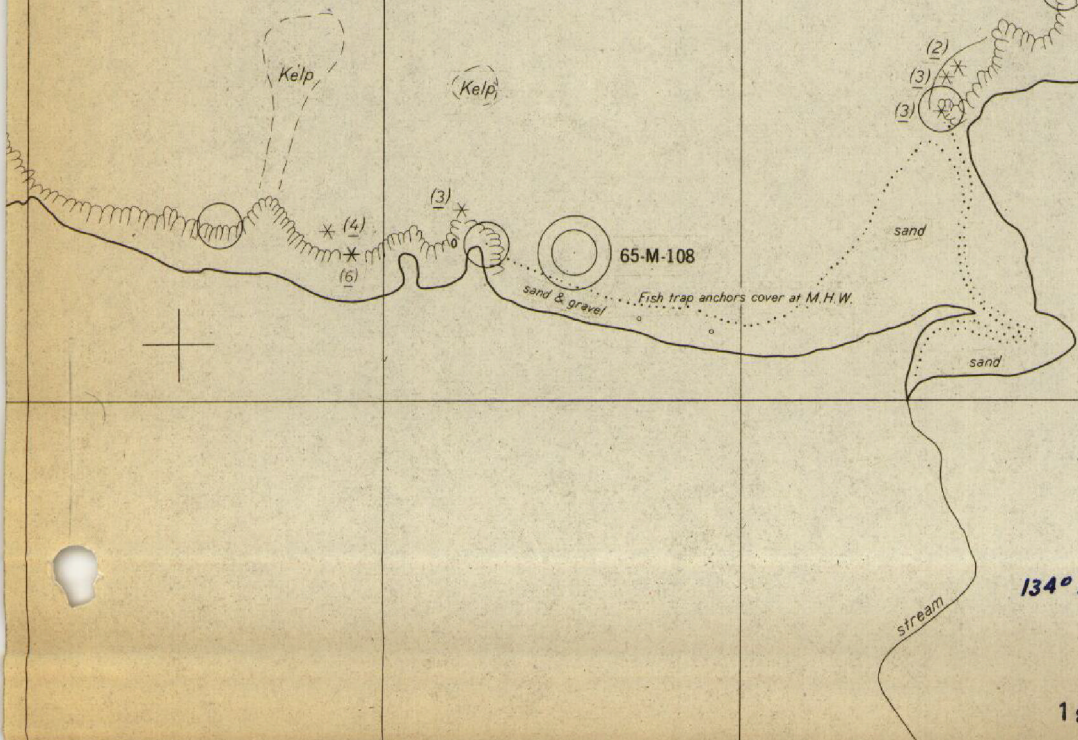
Rocks are part of reef.



Doubtful on photo



East limit of H-8907



57°04'30"

134°57'00"

T-12179
1:10,000 scale