

12178

12178

FORM C&GS-504	
U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey <u>SHORELINE (Photogrammetric)</u>	
Field No.	Office No. <u>T-12178</u>
LOCALITY	
State <u>Alaska</u>	
General locality <u>KEKU STRAIT</u>	
Locality <u>Pinta Rocks</u>	
<u>1962-1968</u>	
CHIEF OF PARTY	
<u>Alfred C. Holmes, Director, AMC</u>	
LIBRARY & ARCHIVES	
DATE	

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR
TO REGISTRATION

DESCRIPTIVE REPORT - DATA RECORD

T- 12178

SUBJECT NO. (II): 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 (I) (III): <table style="width:100%; border:none;"> <tr> <td style="width:40%;">January 18, 1965</td> <td>OFFICE</td> </tr> <tr> <td>November 26, 1965</td> <td>OFFICE SUPPLEMENT I</td> </tr> <tr> <td>March 18, 1966</td> <td>OFFICE AMENDMENT I</td> </tr> <tr> <td>May 11, 1965</td> <td>FIELD</td> </tr> <tr> <td>June 14, 1965</td> <td>FIELD</td> </tr> </table>			January 18, 1965	OFFICE	November 26, 1965	OFFICE SUPPLEMENT I	March 18, 1966	OFFICE AMENDMENT I	May 11, 1965	FIELD	June 14, 1965	FIELD
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 low water or mean lower low water										
REFERENCE STATION (III): WEST, 1962												
LAT.: 57° 05' 11.796" (364.9m)	LONG.: 134° 00' 36.546" (615.5m)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED										
PLANE COORDINATES (IV): X =		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.												

FORM C&GS-181b
(12-61)U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Air Photo Compilation		
July 27, 1965		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		11/03/65
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. S. Kornspan		11/03/65
CONTROL PLOTTED BY (III):		DATE
R. Smith		01/11/66
CONTROL CHECKED BY (III):		DATE
C.H. Bishop		01/11/66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
G.M. Ball		Nov. 1965
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY K.G. Boyle	DATE 01/21/66
	REVIEWED: C.H. Bishop	02/07/66
	CONTOURS	DATE
	Inapplicable	
MANUSCRIPT DELINEATED BY (III):		DATE
L. G. Boyle		02/08/66
SCRIBING BY (III): F. P. Margiotta		DATE 06/11/68
SCRIBING REVIEWED BY:		
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
COMPILATION: C.H. Bishop		02/16/66
FIELD EDIT: C.H. Bishop		12/1/66
SCRIBING & STICK-UP: R.E. Smith		06/11/68
REMARKS:		
Field Edit By: Ship PATTON - Summer 1966		

DESCRIPTIVE REPORT - DATA RECORD

AREA (KIND OR SOURCE) (III):

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

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65-M-107 and 108	27 July 1965	0836 PST	1:50,000	0.7 ft. below MLLW
62-W-5496 thru 5498	16 June 1962	0916 PST	1:20,000	4.1 ft. above MLLW
62-W-5513 and 5514	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 BMS(S) SEARCHED FOR (II):

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

T-12178

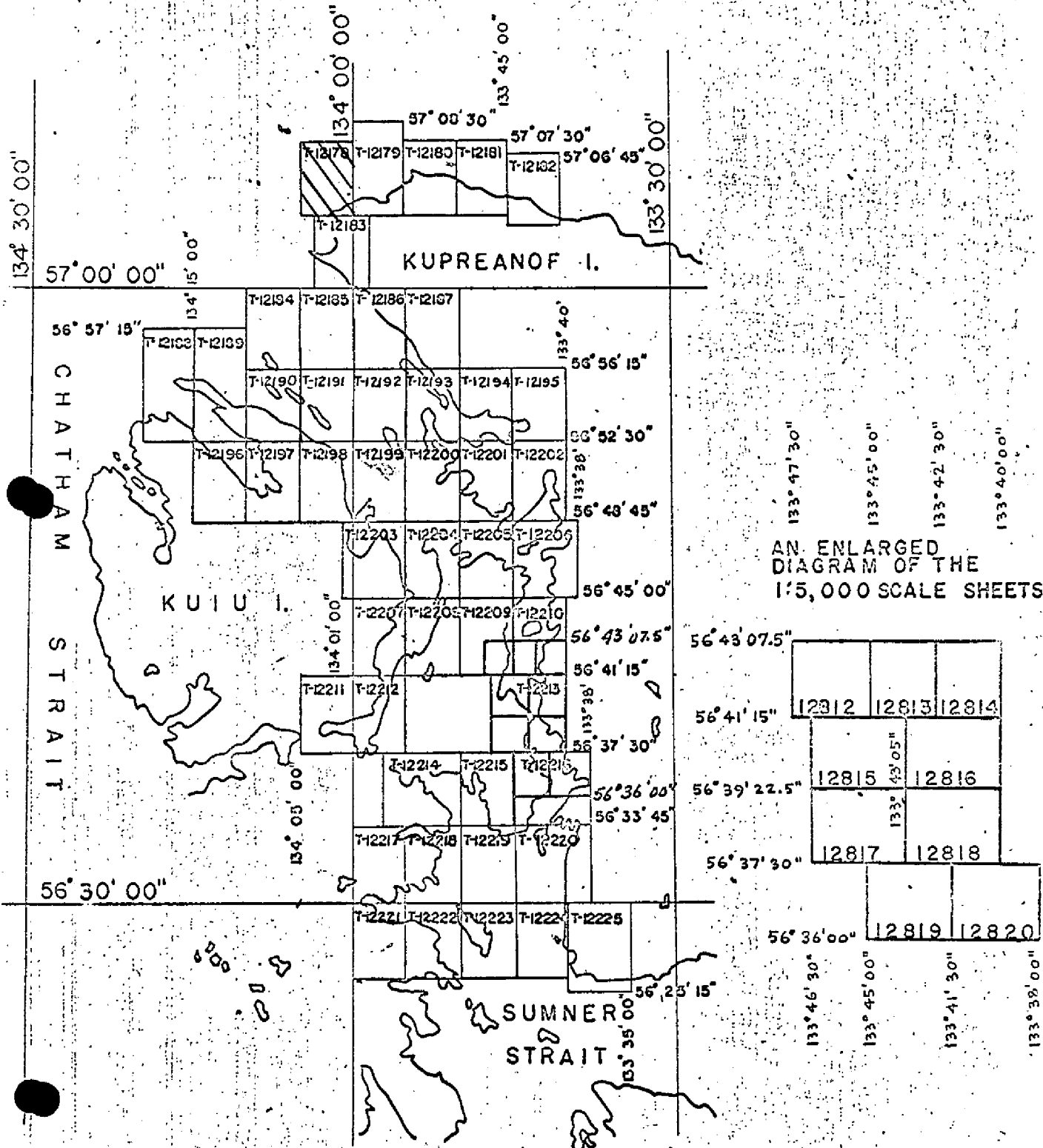
COMPILATION RECORD	COMPLETION DATE	REMARKS
Compilation complete pending field edit		
Alongshore area for hydro	February 1966	Superseded
Partial field edit applied	December 1966	<i>Superseded</i>
Final Review	August 1971 <i>October 1972</i>	<i>Superseded</i>
<i>Discrepancies with reviewed hydro surveys resolved; Addendum to Review Report added</i>	<i>Oct. 1972</i>	

SHORELINE MAPPING PROJECT

Ph-6206

KEKU STRAITS, ALASKA

SCALE 1:10,000



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

12812	12813	12814	
	12815	12816	
12817	12818		
12819	12820		

Rev. 9-66 R.G.
Revised 1-6-65

A.R.

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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12178

Shoreline survey T-12178 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 16 June 1962 and 27 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 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 August 1971. One cronaflex positive and a negative of the final reviewed survey are forwarded for record and registry.

FIELD INSPECTION REPORT
Map Manuscript T-12178
Project Ph-6206

There was no field inspection prior to compilation.

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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) HAN, 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 defination.

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 #2

27401 (+6.7 + 6.2)
 28401 (+0.0 + 9.1)
 29401 (+3.4 - 2.4)
 29401 (+5.5 - 0.7)
 29402 (+9.5 + 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.

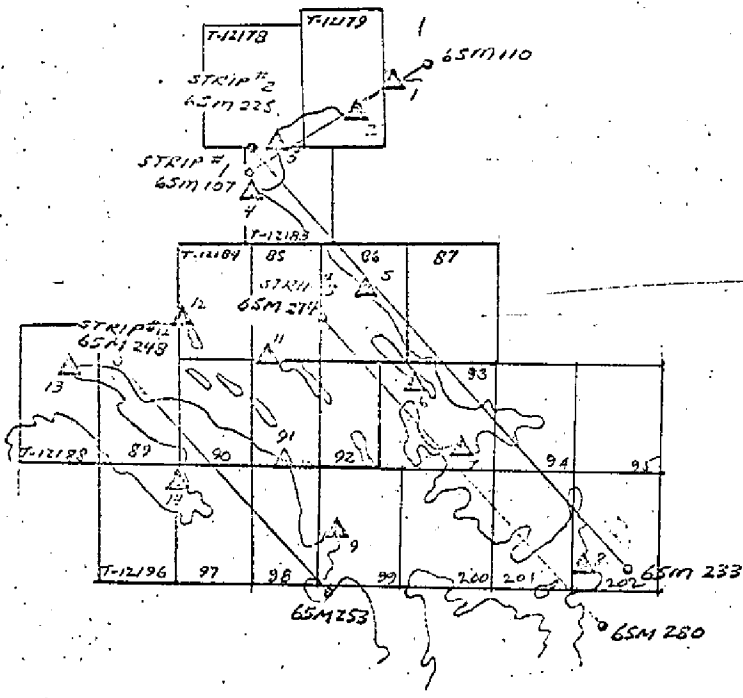
HAM, 1927
 (-2.8 -0.9)
 AGE, 1927
 (+3.4 +3.1)
 AMY, 1927
 S.S. (-0.6 -0.9)

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)



KEKU STRAITS, ALASKA
 PH - 6206
 SHORELINE MAPPING
 SCALE 1:10,000
 SINGLE LENS PHOTO.
 SCALE 1:50,000

KEY TO TRIANGULATION

1. PINT, 1965
2. KELP, 1965
3. BENDEL, 1917
4. CART, 1937
5. KAKE, 1927
6. HAM, 1927
7. AGE, 1927
8. ARMY, 1927
9. LUCK, 1927
10. LOW, 1927
11. ALTO, 1927
12. KEKU, 1927
13. CORN, 1925
14. SNAY, 1965

COMPILATION REPORT

T-12178

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 are inapplicable.

No drainage was compiled on this manuscript.

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

No difficulty was encountered in delineating the Pinta Rocks area of this manuscript. The ledge area in the north-east corner of the manuscript was compiled monoscopically, as it was not included in the Kelsh model.

37. LANDMARKS AND AIDS

No landmarks were selected.

The position for West Pinta Rocks Light was computed from data furnished to the compilation office in June 1968 and plotted on the manuscript. Form 567 was forwarded to the Washington Office.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Satisfactory junctions were made with T-12179 on the east and T-12183 on the south. There are no contemporary surveys on the north and west sides of this manuscript.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle SITKA (A-1), ALASKA, scale 1:63,360, published in 1948. A rock (position doubtful) noted on the U.S.G.S. Quad at latitude 57°04.3', longitude 134°01.5' was searched for on the photographs, but not identified. It is not charted on Nautical Chart 8201 and is noted on the discrepancy print for investigation by the hydrographer.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart 8201, scale 1:217,828, revised 7/20/64. The rock mentioned in Paragraph 46 above is not shown on this chart.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:

Charles H. Bishop

Charles H. Bishop
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

August 5, 1971

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6206 (Alaska)

T-12178

Frederick Sound

Kupreanof Island

West Pinta Rocks

Approved by:

A. Joseph Wraight

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

T-12178

49. NOTES TO THE HYDROGRAPHER

1. Position of ledge area in NE corner of sheet should be verified.
2. Check existence of rock shown on USGS Quad SITKA (A-1) at latitude $57^{\circ}04.3'$, longitude $134^{\circ}01.5'$.
3. Locate West Pinta Rocks Light.

FORM C&GS-1002 (9-66)		U.S. DEPARTMENT OF COMMERCE ESSA COAST AND GEODETIC SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW			
T- 12178			
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		6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY <i>(Topographic stations)</i> 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 See notes to Reviewer	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. STEREOSCOPIC 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> Charles H. Bishop 12-1-66		SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
43. REMARKS Field edit applied from: Field Edit Ozalid Field edit photos 62-W-5498 and 5513 Copy of B-S H-8907			

T-12178

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.

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REVIEW REPORT T-12178

SHORELINE

AUGUST 3, 1971

61. GENERAL STATEMENT

See Summary, which is page 6 of the descriptive report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Registered survey No. 2116, a 1:80,000 scale survey made in 1893 was used for comparison. That survey is now obsolete and is superseded by T-12178 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with USGS SITKA (A-1), ALASKA, 1:63,360 scale quadrangle dated 1948. That survey is necessarily generalized because of its scale. The following are noted:

A rock near latitude $57^{\circ}04.4'$ longitude $134^{\circ}01.5'$ is not visible on the photographs and was not found by the hydrographer.

The rocks in the area of the reef near latitude $57^{\circ}07.2'$ longitude $134^{\circ}00.5'$ are not visible on the photographs.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8907 (PA-10-2-66). The source of the shoreline for the boat sheet was incomplete manuscript T-12178. The shoreline of that manuscript was corrected during field edit, therefore the shoreline of boat sheet and the reviewed manuscript are not in good agreement.

65. COMPARISON WITH NAUTICAL CHARTS

A visual comparison was made with chart 8201, 1:217,828 scale, 16th edition, November 7, 1970. 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
Cartographer

Approved for forwarding:



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

Approved:



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

06'

COMPARISON PRINT

Purple = H-8907 (Verified copy)

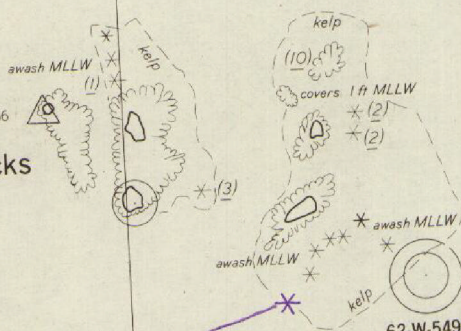
05'30"

y=1,920,000 FT.



WEST PINTA ROCKS LIGHT 1966
WEST 1962

West Pinta Rocks



Not visible on photo

57° 05'

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-12178
1:10,000 Scale

COMPARISON PRINT

Purple = H-8907 (Verified copy)

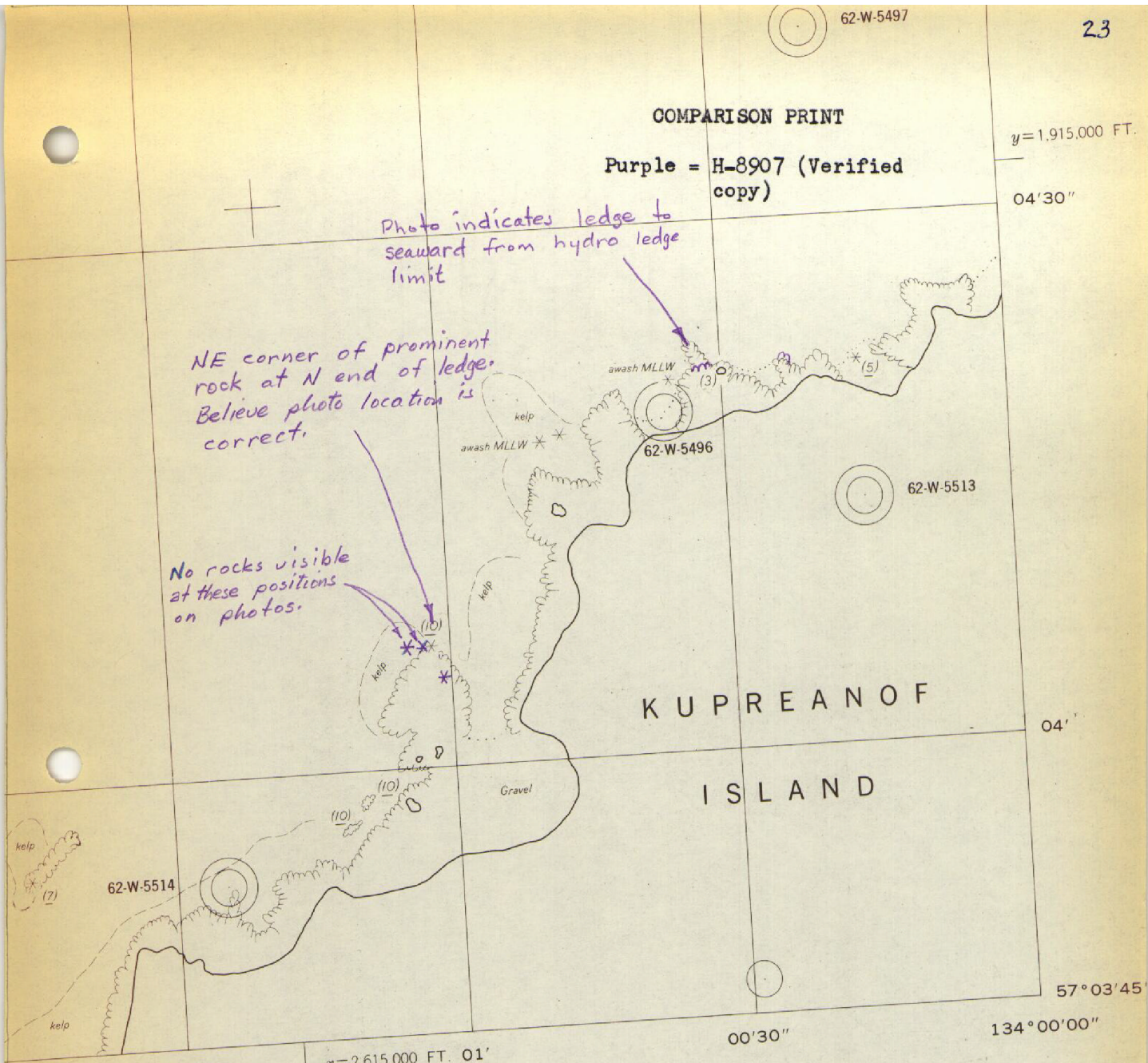
y=1,915,000 FT.

04'30"

Photo indicates ledge to seaward from hydro ledge limit

NE corner of prominent rock at N end of ledge. Believe photo location is correct.

No rocks visible at these positions on photos.



U.S. COAST AND GEODETIC SURVEY SHORELINE MANUSCRIPT

T-12178

ALASKA

KEKU STRAIT

PINTA ROCKS

SCALE 1:10,000

(1 inch = 833.33 ft.)

CONTROL DATA

Polyconic projection: 1927 North American datum
5,000 ft. grid based on Alaska plane coordinate system (Zone 1)
Datum plane: Mean High Water

- △ Recoverable horizontal control station of third-order or higher accuracy
- Approximate mean lower low water line
- The heavy shoreline defines the approximate mean high water.
- Compiled by photogrammetric methods, from aerial photographs
- Date of Photography July 1965
- Date of Field Inspection None
- Date of Field Edit Aug. 1966
- Date of Final Compilation June 1968
- Date of Final Review Aug. 1971 Oct. 1972