

12183

12183

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY DESCRIPTIVE REPORT	
<i>Type of Survey</i> SHORELINE (Photogrammetric)	
<i>Field No.</i>	<i>Office No.</i> T-12183
LOCALITY	
<i>State</i> ALASKA	
<i>General locality</i> KEKU STRAIT	
<i>Locality</i> CAPE BENDEL	
<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 - 12183

PROJECT 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, Atlantic Marine Center

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 and Wild B-8

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:10,000 and 1:8,333

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):

CHART 1927 ✓

LAT.:

57°01' 29.229"

LONG.:

134° 03' 03.518" ✓

ADJUSTED

UNADJUSTED

PLANE COORDINATES (IV):

1,896,468.78 ✓ x = 2,609,073.75 ✓

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

CAMERA (KIND OR SOURCE) (III):
Wild RC-8 "W" & Wild RC-9 "M"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65-M-225 and 226	29 July 1965	0843 PST	1:50,000	4.3 below MLLW
65-M-107 and 108	27 July 1965	0836 PST	1:50,000	0.8 below MLLW
62-W-5491 thru 5495	16 June 1962	0916 PST	1:20,000	3.4 above MLLW
62-W-5515 and 5516	16 June 1962	0924 PST	1:20,000	4.0 above MLLW
62-W-5560 thru 5563	16 June 1962	0956 PST	1:20,000	5.8 above MLLW

TIDE (III)

Diurnal

	RATIO OF RANGES	MEAN RANGE	EXTREME 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-12183

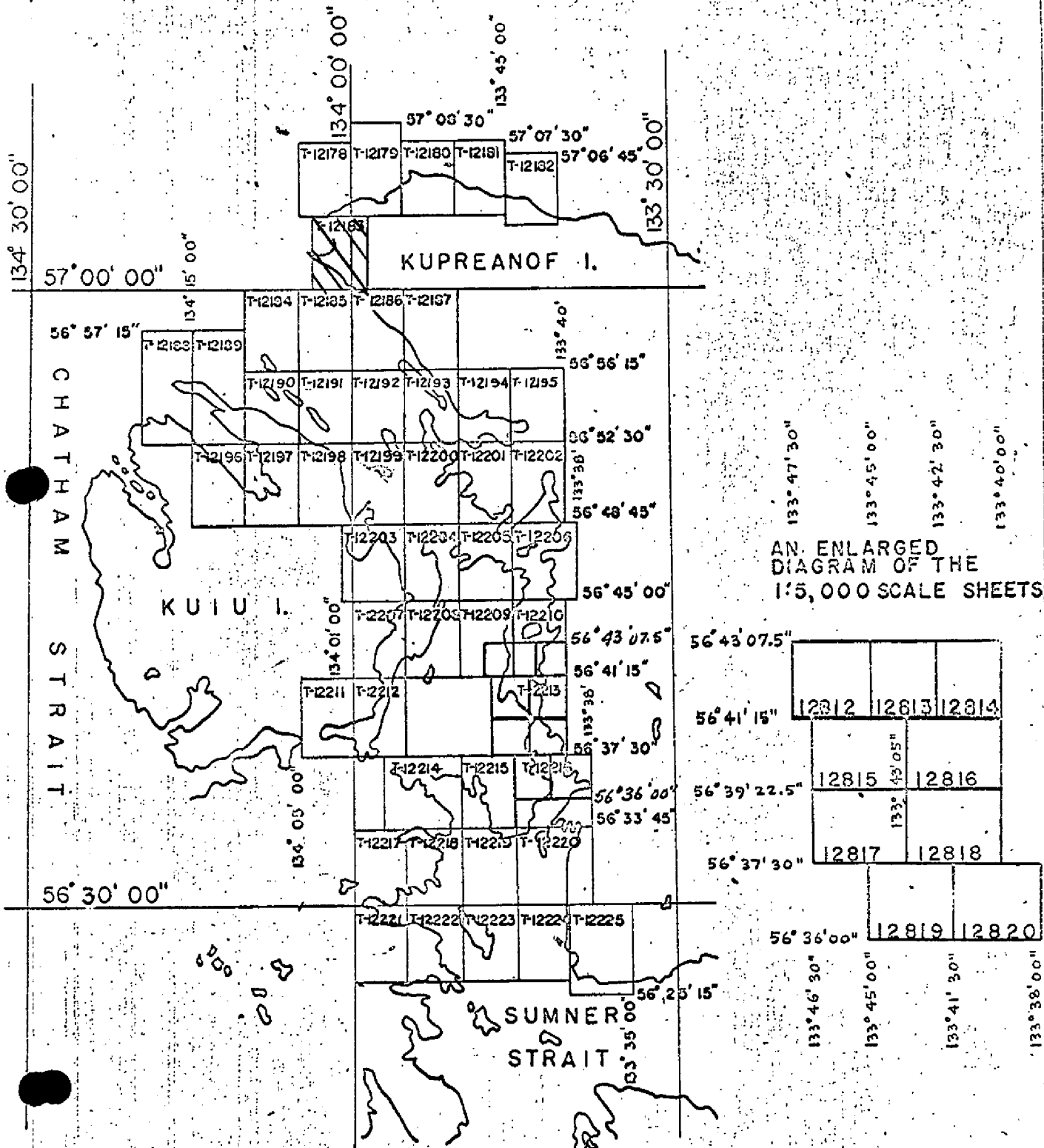
COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for hydro	March 1966	Superseded
Field Edit applied	November 1966	<i>Superseded</i>
Final Review	{September 1971 October 1972	<i>Superseded</i>
<i>Discrepancies with reviewed hydro surveys resolved; Addendum to Review Report added.</i>	<i>Oct. 1972</i>	

SHORELINE MAPPING PROJECT

Ph-6206

KEKU STRAITS, ALASKA

SCALE 1:10,000



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

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

A.R.

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12183

Shoreline survey T-12183 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 and Wild B-8 plotter 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 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 September 1971. One cronaflex positive and a negative of the final reviewed survey are forwarded for record and registry.

FIELD INSPECTION REPORT
T-12183

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)
 PIWT, 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 (+9.5 + 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.

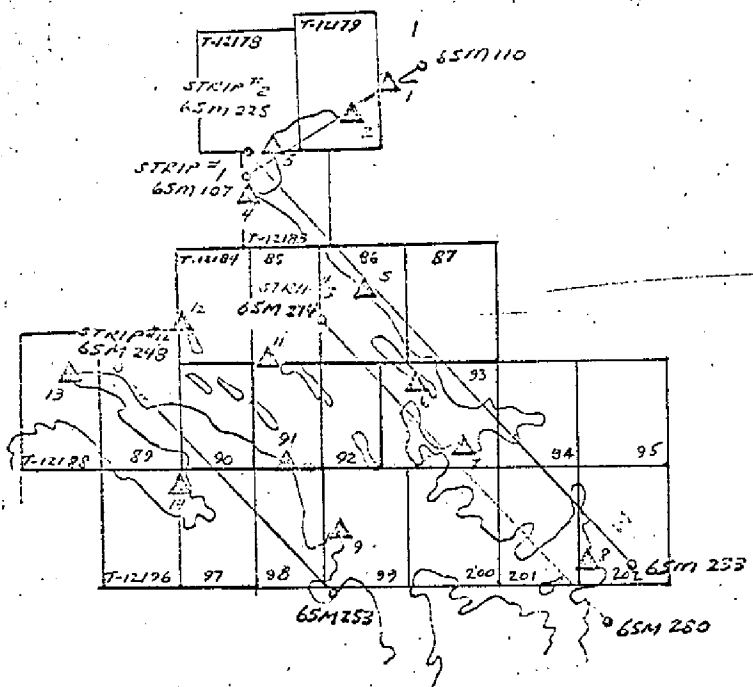
HAM, 1927
 (-2.8 -0.9)
 AGE, 1927
 (+3.4 +3.1)
 AMY, 1927
 S.S. (-0.6 -0.9)

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. KELL, 1965
3. BENDEL, 1917
4. CART, 1927
5. KAKE, 1927
6. HARM, 1927
7. AGE, 1927
8. AMY, 1927
9. LUCK, 1927
10. LOW, 1927
11. ALTO, 1927
12. Keku, 1927
13. CORN, 1925
14. GNAN, 1965

File

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 E-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:

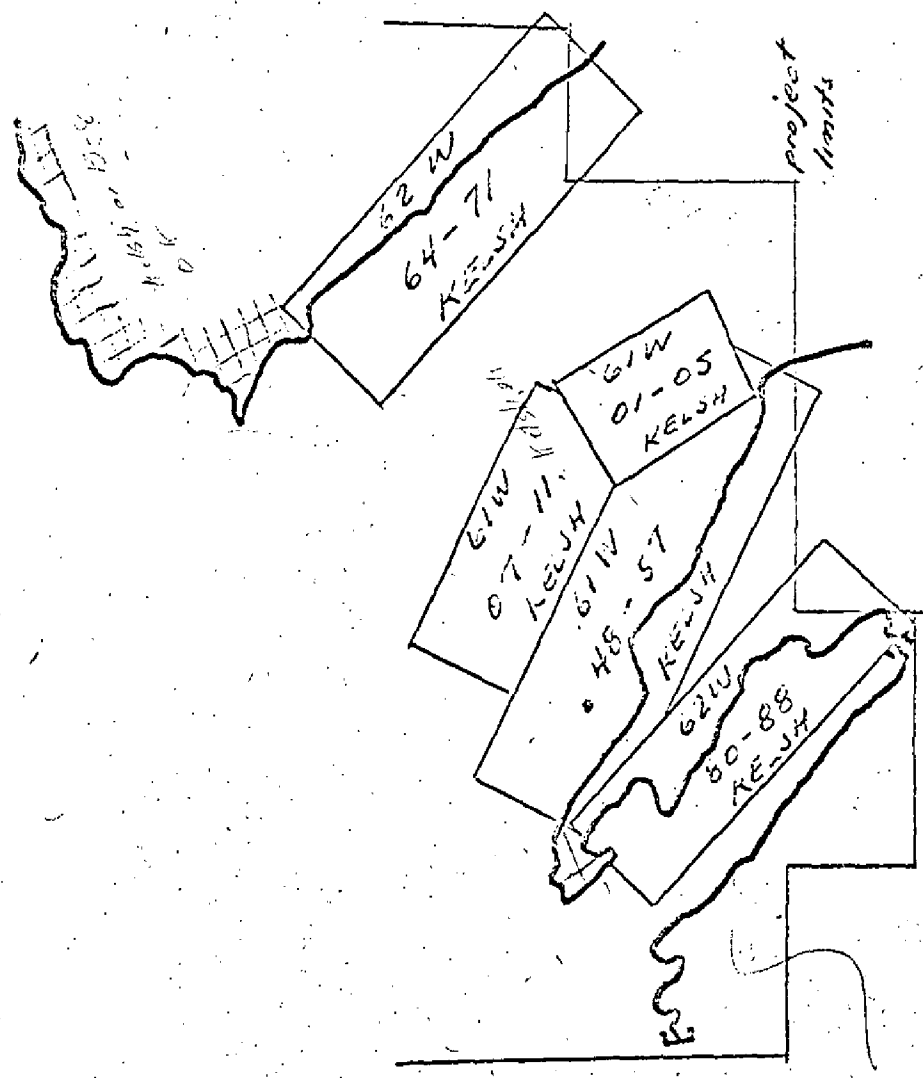
- 61 W 9348 - 57
- 61 W 9401 - 05
- 61 W 9407 - 11
- 62 W 5480 - 88
- 62 W 5564 - 71

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 Kelsh 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.

 CAN NOT BE COMPLETED
 GRAPHICALLY OR B-S
 KENSH



CONTROL MONITORED
 TO BE FURNISHED
 DURING THE 1966
 SEASON
 KENSH

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

TRASIT AND GEODETIC SURVEY
CONTROL RECORD

MAP T. 12183 PROJECT NO. Ph-6206 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
CART 1927	GP Vol II p. 355	N.A. 1927	57 01	29.229	904.2	(951.9)				
"	57314 p. 2	"	134 03	03.518	59.4	(952.9)				
			1	896 468.78	1468.8	(3531.2)				
			2	609 073.75	4073.8	(926.2)				
BENDEL 1917	GP III p. 991	"	57 03	38.154	1180.3	(675.8)				
"	57134 p. 1	"	134 01	51.809	873.2	(138.1)				
			1	909 530.06	4530.1	(469.9)				
			2	613 112.20	3112.2	(1887.8)				
WHITE 1927	Vol II p. 364	"	57 00	12.318	381.0	(1475.0)				
"	57134 p. 8	"	134 00	32.319	545.6	(467.2)				
			1	888 619.50	3619.5	(1380.5)				
			2	617 402.48	2402.5	(2597.5)				

COMPILATION REPORT

T-12183

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 not applicable.

One large stream southeast of Pt. Macartney was delineated.

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

None.

37. LANDMARKS AND AIDS

No landmarks were selected.

The only fixed aid to navigation within the manuscript area is Point Macartney Light. It was not identified on the photographs and was not compiled.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Satisfactory junctions have been made with T-12178 and T-12179 to the north, and T-12185 and T-12186 to the south. There are no contemporary surveys to the east or west.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with 1:63,360 scale U.S.G.S. Quadrangles SITKA (A-1), ALASKA and SUMDUM (A-6), ALASKA, both published in 1948.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart 8201, scale 1:217,828, revised 20 July 1964. A charted bare rock about 3000 feet northeast of Pt. Macartney was not discernable on the photographs. A rock about 1000 feet east of the charted position was visible on the photographs and was compiled.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Approved for forwarding:

Submitted:

Melvin J. Ambach
Melvin J. Ambach, CDR, NOAA
Chief, Photogrammetry Div.
AMC

Charles H. Bishop
C. H. Bishop
Cartographer

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-12183

- Cape Bendel
- Frederick Sound
- Keku Strait
- Kupreanof Island
- Point Macartney
- Point White

Approved by:

A. Joseph Wright
 A. Joseph Wright
 Chief Geographer

Prepared by:

Frank W. Pickett
 Frank W. Pickett
 Cartographic Technician

T-12183

49. NOTES TO THE HYDROGRAPHER.

1. 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 ledge limits should be verified.
2. All rock data is to be added by the Hydrographer.

16
19

FORM C&GS-1002 (9-68)		U.S. DEPARTMENT OF COMMERCE ESSA COAST AND GEODETIC SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW			
T- 18187			
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 XX	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 Charles H. Bishop 12/10/66 Charles H. Bishop 12/10/66		SUPERVISOR, REVIEW, SECTION OR UNIT Albert C. Rauck, Jr. 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 Charles H. Bishop 12/10/66		SUPERVISOR Albert C. Rauck, Jr.	
REV. BY: Charles H. Bishop 12/10/66		Albert C. Rauck, Jr.	
43. REMARKS Field Edit applied from: Field edit ozalid, field photos. Nos. 62-W-5491, 5492, 5493, 5495, and 5563.			

T-12183

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-12183

SHORELINE

SEPTEMBER 1, 1971

61. GENERAL STATEMENT:

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

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

There were no prior registered topographic surveys available for comparison purposes at the time of final review.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with USGS SITKA (A-1) and SUNDUM (A-6), ALASKA, 1:63,360 scale quadrangles, editions of 1948. The surveys appear to be in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with copies of boat sheets H-8907 (PA 10-2-66) and H-9000 (PA 10-3-66). The shoreline of the boat sheets and survey T-12183 is in good agreement. All differences between the surveys 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. This is a 1:217,828 scale chart and only a visual comparison was feasible.

Point Macartney Light, latitude 57°01.5' longitude 134°03.4', is not visible on photographs of the area and was not located by the field editor. No other significant omissions or changes 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.

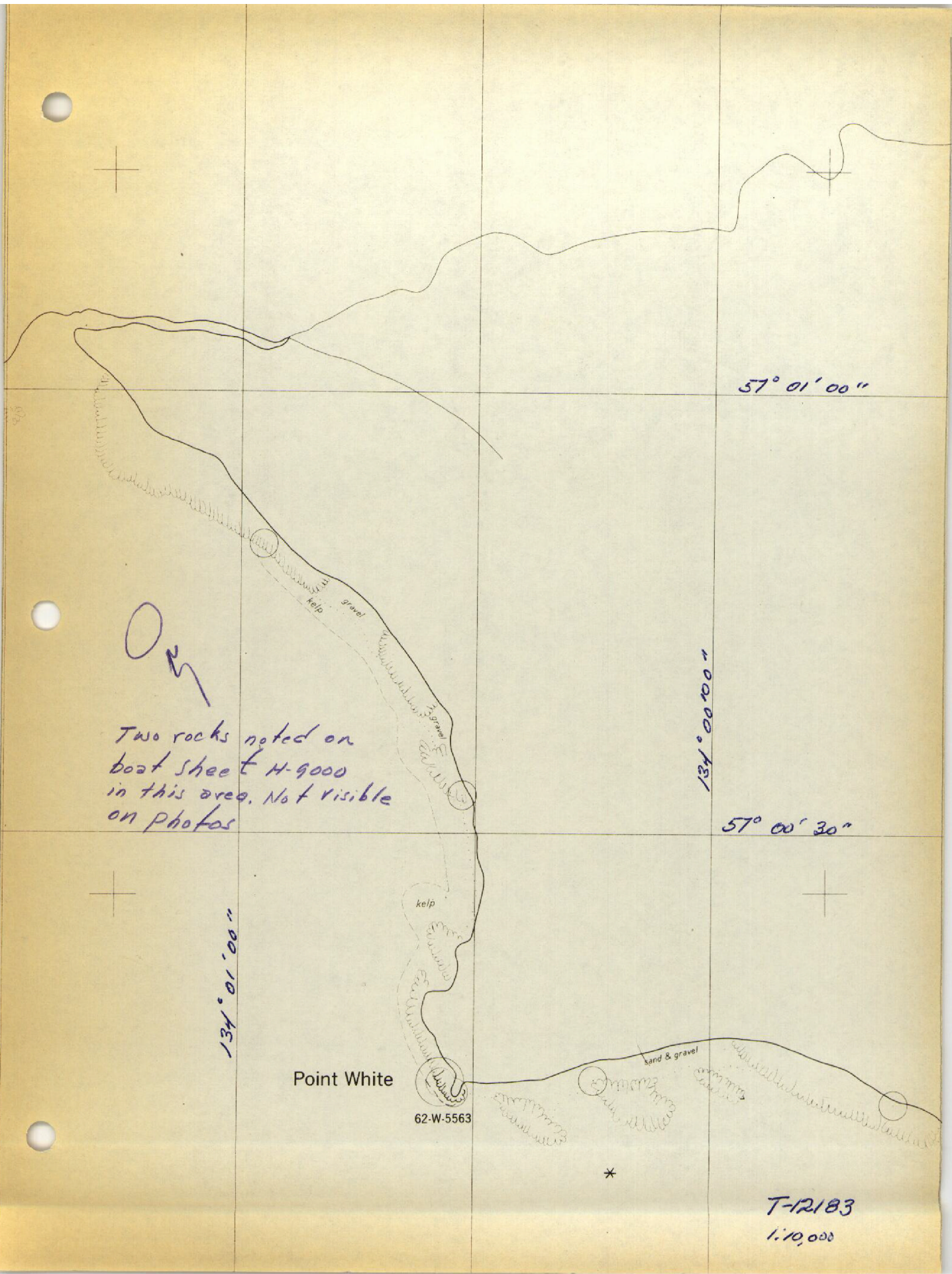
Copies of the hydrographic surveys were used as aids to verify what could be seen on the photographs of the area: If a feature on the hydrographic survey was not positively identifiable on the photographs, it was not added to the T-sheet. This review resulted in the revision of several ledges, some mean 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



Cape Bendel

62-W-5515



BENDEL 1917

62-W-5495



57°03'30"

+ ← Not visible on photos

62-W-5494



awash MLLW

I C K

134°02'00"

Submerged rocks
not visible on
photos →

foul

134°01'00"

57°02'30"

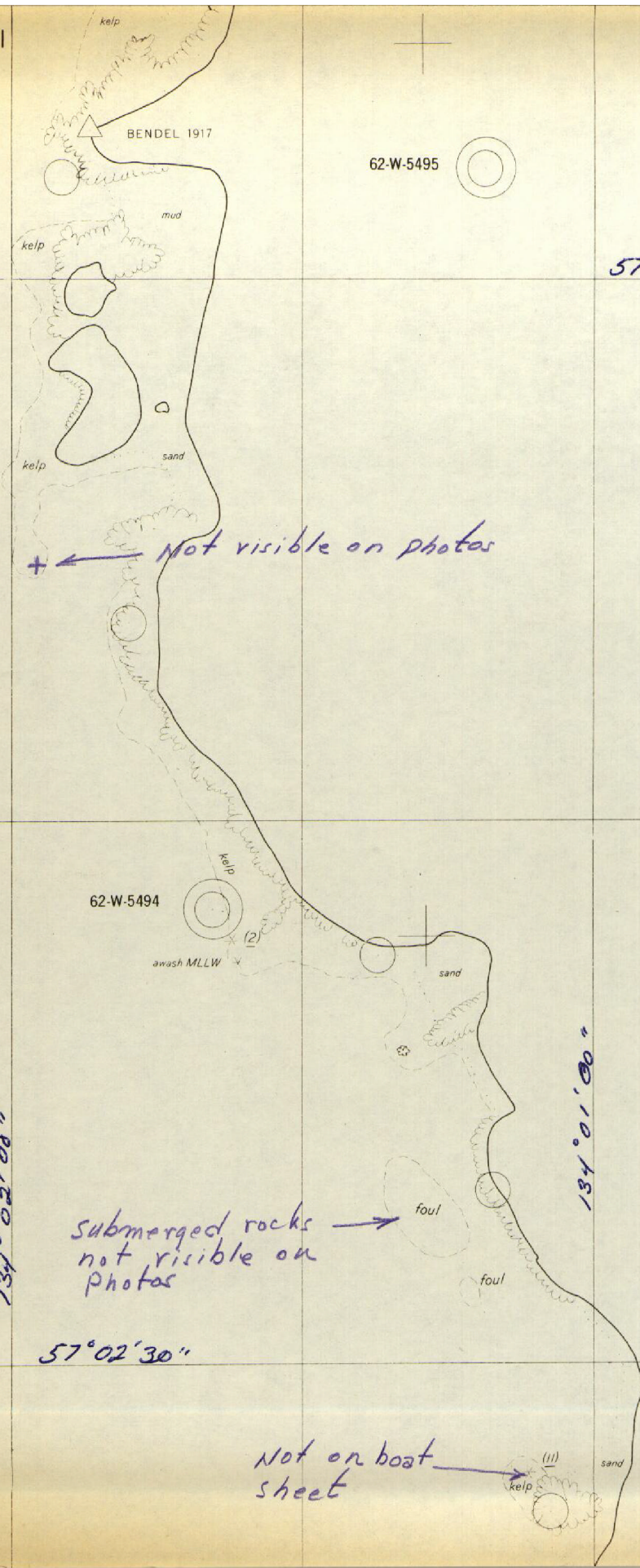
D

Not on boat
sheet →

(11)

T-12183

1:10,000



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.

57° 02' 00"

Rocks in purple from H-8907

Pt. Macartney Lt
not visible on photos;
not mapped on T-12183

Rock not on
boat sheet

kelp (4)
o (2)

(5)
kelp

Rock not visible on
photos

62-W-5492

awash MLLW

kelp

kelp

sand

sand & gravel

CART 1927

Point Macartney

62-W-5561

gravel

gravel

* ← Not visible on
photos

134° 03' 00"

57° 01' 00"

62-W-5491

134° 02' 00"

T-12183

1:10,000

62-W-5562