

12196

12196

<p>FORM C&GS-504</p> <p>U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY</p> <p>DESCRIPTIVE REPORT</p>	
<p>Type of Survey <u>SHORELINE (PHOTOGRAMMETRIC)</u></p>	
<p>Field No.</p>	<p>Office No. <u>T-12196</u></p>
<p>LOCALITY</p>	
<p>State <u>Alaska</u></p>	
<p>General locality <u>Keku Strait</u></p>	
<p>Locality <u>Saginaw Bay</u></p>	
<p><u>1965-1968</u></p>	
<p>CHIEF OF PARTY</p>	
<p><u>Alfred C. Holmes, Director, AMC</u></p>	
<p>LIBRARY & ARCHIVES</p>	
<p>DATE</p>	

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR
TO REGISTRATION

DESCRIPTIVE REPORT - DATA RECORD

T - 12196

PROJECT NO. (III):

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
June 8, 1966	OFFICE SUPPLEMENT II
May 11, 1965	FIELD
June 14, 1965	FIELD
January 21, 1965	FIELD

METHOD OF COMPILATION (III):

Wild B-8

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:8,333 pantographed to 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 LOWER LOW WATER~~ 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~~ mean lower low water

REFERENCE STATION (III):

BITE 1966 ✓

LAT.:

56° 51' 26.03800" (805.4m) ✓

LONG.:

134° 10' 43.81418" (742.5m) ✓

ADJUSTED

UNADJUSTED

PLANE COORDINATES (IV):

1 835 426.92 ft. ✓ x = 2 583 140.54 ft. ✓

STATE

Alaska ✓

ZONE

1 ✓

NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, (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: July 29, 1965		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE 11-08-65
PROJECTION AND GRIDS CHECKED BY (IV): R. S. Kornspan		DATE 11-08-65
CONTROL PLOTTED BY (III): R. Smith		DATE 01-12-66
CONTROL CHECKED BY (III): C. H. Bishop		DATE 01-12-66
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): G. M. Ball		DATE Nov. 1965
STEREOSCOPIC INSTRUMENT COMPILATION (III): Wild B-8	PLANIMETRY L. O. Neterer, Jr. Reviewed: K. G. Boyle	DATE 07-11-66 07-11-66
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): L. O. Neterer, Jr.		DATE 07-14-66
SCRIBING BY (III): F. P. Margiotta		DATE 06-27-68
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): COMPILATION: C.H. Bishop FIELD EDIT: C. H. Bishop SCRIBING & STICKUP: R. J. Pate		DATE 07-21-66 06-04-68 06-28-68
REMARKS: Field Edit by - Ship PATTON June 1967		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild RC-9 "M"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65-M-244 & 245	7-29-65	0913	1:50,000	(from predicted tables) 3.1 below MLLW

TIDE (III)

DIURNAL

	RATIO OF RANGES	MEAN RANGE	SEMI RANGE
REFERENCE STATION: Juneau		13.8	16.4
SUBORDINATE STATION: Saginaw Bay, Kuiu Island		11.3	13.8
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): *Leo F. Beugnet, AADC* DATE: *Nov. 1971*

PROOF EDIT BY (IV): DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): RECOVERED: *1* IDENTIFIED: *1*

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

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (II):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

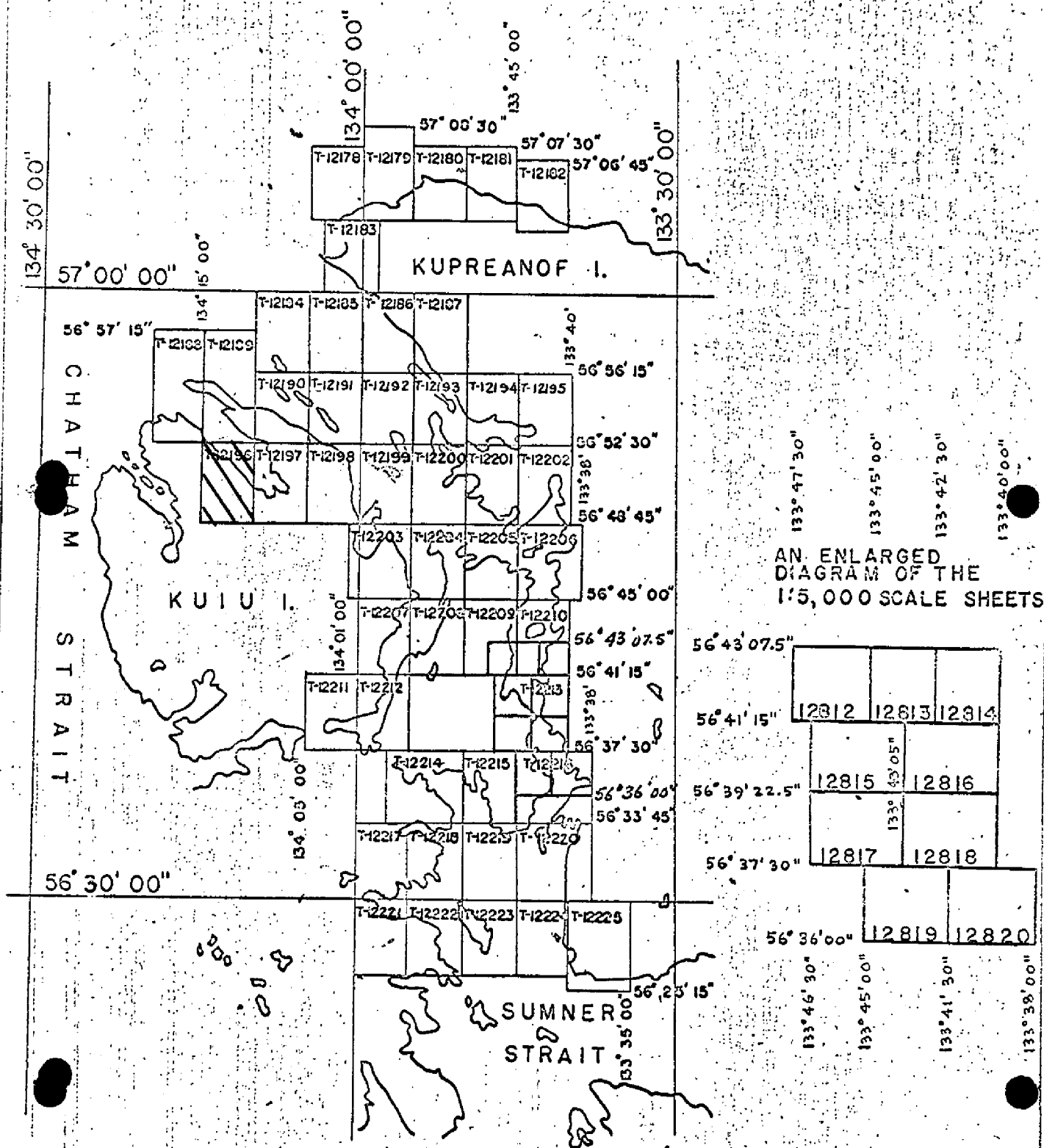
REMARKS:

T-12196

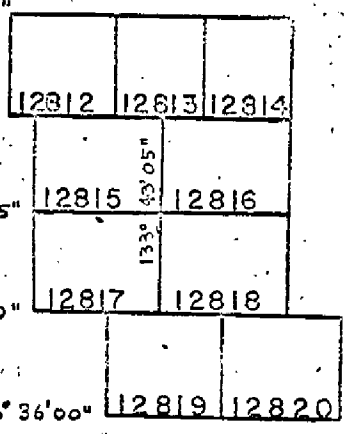
COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore are for hydro	July 1966	Superseded
Field edit applied Compilation complete	June 1968	Superseded
<i>Final Review</i>	<i>Nov. 1971 & Dec 1972</i>	
Discrepancies with reviewed hydro surveys resolved; addendum added to Review Report	Dec. 1972	

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-12196

Shoreline survey T-12196 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 Wild B-8 methods using the photography of 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 November 1971. One cronaflex positive and a negative of the final reviewed survey are forwarded for record and registry.

FIELD INSPECTION REPORT
JOB PH-6206
T-12196

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) 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.

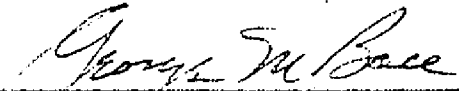
24. Supplemental Data

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

25. Photography

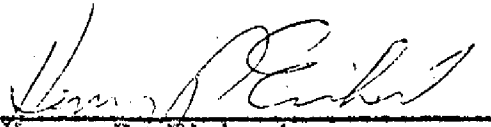
Photography was adequate with regard to coverage, overlap and image definition.

Respectfully submitted:



George M. Ball

Approved and forwarded:



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)
ALFO, 1927
(-2.0 +0.5)

STRIP #3 cont.

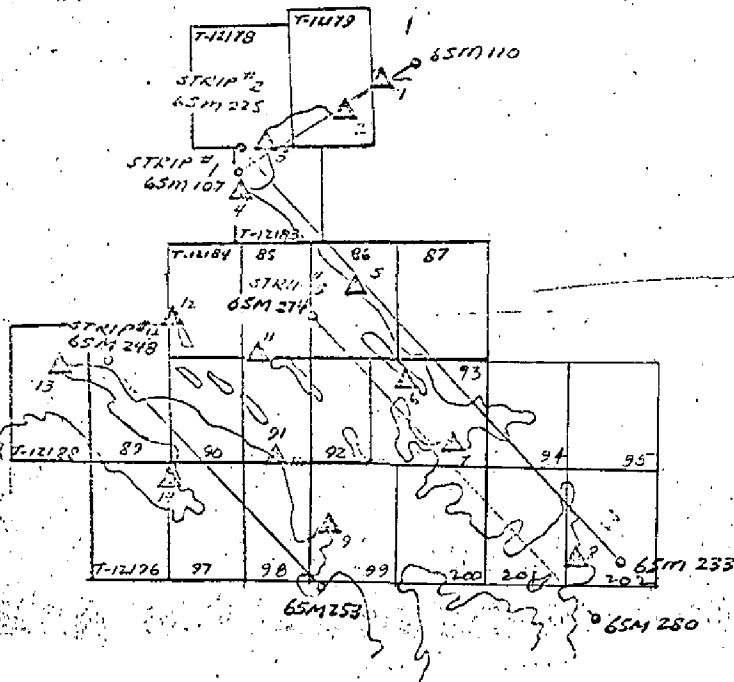
HAM, 1927
(-2.8 -0.9)
AGE, 1927
(+3.4 +3.1)
AMY, 1927
S.S. (-0.6 -0.9)

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. KEMP, 1965
3. BENDEL, 1917
4. CART, 1927
5. KAKE, 1927
6. HAM, 1927
7. ABE, 1927
8. PINK, 1927
9. LUCK, 1927
10. LOW, 1927
11. ALTO, 1927
12. KEKU, 1927
13. CORN, 1925
14. GNAN, 1965

COMPILATION REPORT
T-12196

31. DELINEATION:

The Wild B-8 was use. Photography was satisfactory.

32. CONTROL:

Difficulty was experienced in holding aerotriangulation points when the model involving stations BITE and CHEW was set. Several solutions were tried, none of which held all points in the model. A solution that would hold most of the six substitute stations for BITE and CHEW and the aerotriangulation points near the shoreline was used.

33. SUPPLEMENTAL DATA:

None

34. CONTOURS AND DRAINAGE:

Inapplicable

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline was delineated by office interpretation. No Mean Lower Low water line was shown.

36. OFFSHORE DETAIL:

The offshore details are to be checked and verified by the hydrographic party.

37. LANDMARKS AND AIDS:

None

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS:

T-12189 junctions to the north and T-12197 junctions to the east and there aren't any contemporary surveys to the south or the west.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with U.S.G.S. quadrangle PORT ALEXANDER (D-1), ALASKA, 1948.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with USC&GS Nautical Chart 8214, scale 1:40,000, dated July#1, 1909, revised Aug. 10, 1959.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None

ITEMS TO BE CARRIED FORWARD:

None

Submitted by:

Lowell O. Neterer, Jr.

Lowell O. Neterer, Jr.
Cartographic Technician

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

ADDENDUM TO 32-CONTROL

The subsequent rebridging of this area resolved none of the initial horizontal control problems. An attempt to resolve the control deficiency resulted in several solutions, none of which would hold all drilled pass points and substitute stations within the models. The final result, holding most of the substitute points for BITE, CHEW, and MEADE, and the drilled pass points nearest the shoreline was used.


The southern portion of this map manuscript is not believed to be within the required accuracy standards.

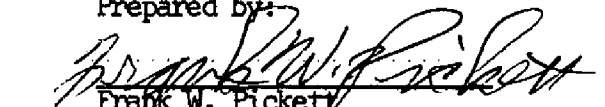
December 8, 1971

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-6206 (Alaska)

T-12196

- Cool Lake
- Kuiu Island
- Saginaw Bay

Approved by:

 A. Joseph Wraight
 Chief Geographer

Prepared by:

 Frank W. Pickett
 Cartographic Technician

49. NOTES FOR THE HYDROGRAPHER

The southern portion of this sheet is "Preliminary". It is so marked in red on the field edit ozalid.

The shoreline on the south side of Saginaw Bay is believed to be in error. It is suggested that you locate hydrographic signal sites by the use of the processed cronapaque ratioed photographs only.

The Saginaw Bay area (south shore) is to be re-bridged by the Aerotriangulation section in the near future, after which these discrepancies will be resolved.

Refer to "ADDENDUM TO 32-CONTROL" concerning this area.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 12196

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 Wild B-8	
ALONGSHORE AREAS (Nautical Chart Data)							
12. SHORELINE CHB		13. LOW-WATER LINE XX		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 CHB		28. BUILDINGS CHB		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 XX		39. FORMS XX	
40. REVIEWER <i>Charles H. Bishop</i> C.H. Bishop 07-21-66				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>C. H. Bishop</i> <i>Charles H. Bishop</i> C. H. Bishop 06-04-68				SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.			
43. REMARKS Field Applied from: Field Edit Ozalid and Field photo No. 65M-245							

T-12196

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-12196

SHORELINE

November 29, 1971

61. GENERAL STATEMENT

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

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

A comparison was made with a copy of survey No. 2152, 1:20,000 scale, made in September 1892. That survey is now obsolete and is superseded by T-12196 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with USGS PORT ALEXANDER (D-1), ALASKA, 1:63,360 scale quadrangle, edition of 1948 with minor revisions made in 1963. The two surveys are in good agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8960 (PA 10-1-67). The shoreline for the boat sheet was evidently obtained from an incomplete manuscript. Some shoreline and ledge limits were corrected on the advance manuscript.

Rocks located by the hydrographer that are not visible on the photographs have been indicated on the comparison print in purple.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 8214, 4th edition, dated December 16, 1968. The two surveys are in good general agreement.

Rocks shown on the chart that are not visible on the photographs have been noted on the comparison print in red.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey is considered adequate for photo-hydro support use and nautical chart construction. Please refer to item 32 of the Compilation Report.

Reviewed by:

Leo F. Beugnet
Leo F. Beugnet
Cartographer

Approved:

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

x=2,580.00

12'

12'30"

x=2,575.000 FT.

3'30"

134°13'00"

56°52'00"

S
A
G

chart 8214

only one rock
visible in area.
65 M 244-245

× (6)
*

"The photogrammetric
offshore from the mean
may not be complete
reviewed hydrographic
should be consulte

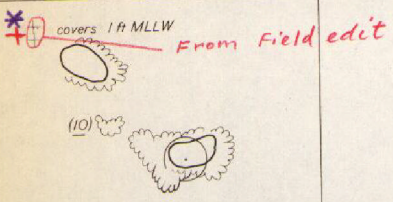
COMPARISON PRINT

Red = Chart 8214

T-12196

1:10,000

10 FT. 1'30" 11' 10'30" x=2,585.000 FT. 134° 10'00" 56° 52'30"



COMPARISON PRINT

Purple = H-8960
Red = Chart 8214

y=1,840.000 FT.

I
N
A
W

B
A
Y

52'

NOTE:
Location and delineation of features
on high-water line on this survey
is for final. The contemporary
survey of the area where available,
should be used for the final delineation."

+ covers 2 ft MLLW

51'30"

BITE 1966

y=1,835.000 FT.

7-12196
1:10,000