12186

12186

FORM **C&GS-504**

U.S. DE PARTMENT OF COMMERCE Environmental science services administration COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC
Field No. Office No. T-12186
LOCALITY
State Alaska
General locality Keku Strait
Locality Kake
<u>19.62-1</u> 969
CHIEF OF PARTY
Alfred C. Holmes, Director, AMC
LIBRARY & ARCHIVES

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR TO REGISTRATION



DESCRIPTIVE REPORT - DATA RECORD T ... 12186

- /	ı	- 12100			
PROJECT NO. (II):					
PH-6206)				
FIELD OFFICE (II):			CHIEF OF PARTY		
PHOTOGRAMMETRIC OFFICE (III):		OFFICER-IN-CHAR	IGE	
	Atlantic Marine Center			lmes, RADI C	M, NOAA
INSTRUCTIONS DATED (II) (III):			Director, AM		
Novembe March 1 May 11, June 1 ¹	r 18, 1965 - FIFICE er 26, 1965 OFFICE 18, 1966 OFFICE 1, 1965 FIELD 1, 1966 OFFICE	E SUPPLEMI E AMENDMEI E AMENDMEI			
	-, -, -, -, -, -, -, -, -, -, -, -, -, -,				
METHOD OF COMPILATION (III):					
Wild F	3-8				
NUSCRIPT SCALE (III):		STEREOSCO	PIC PLOTTING INS	TRUMENT SCA	LE (III):
1:10,00	00	1:	8,333		
-		ORTED TO NAUTICA	AL CHART BRA	NCH (IV):	
1					
APPLIED TO CHART NO.		DATE:	· ·- ·	DATE REGIS	TERED (IV):
ł				Sent	4 1975
GEOGRAPHIC DATUM (III):		<u>l</u>	VERTICAL DATU	м (пт): МН	W
			Elevations shown		
31 A	3007		Elevations shown		
N.A.,	1921		i.e., many company mean lower low water		
REFERENCE STATION (III):			<u> </u>		
KAKE,	1927				
56° 58° 26.945° (83	J.5m) 133° 56' 57.815'	(976.8m)	ADJUSTED)	_
PLANE COORDINATES (IV):			STATE		ZONE
)1 877 872.15 ft.	×= 2 629 236.42 :	ft.	Alaska		1
OR (IV) WASHINGTON OFFICE.	HETHER THE ITEM IS TO BE ENTE				

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

DE2C	RIPTIVE REPORT - DATA RECORD	•	
	T-12186	DATE:	
FIELD INSPECTION BY (II):		DATE:	
None			
MEAN HIGH WATER LOCATION (SIL) (STATE DATE	AND METHOD OF LOCATION):	 -	
July 1965 (Date of	photography)		
Wild B-8 Air phot	co Compilation		
PROJECTION AND GRIDS RULED BY (IV):		DATE	
A. E. Roundtree		11-04-65	
PROJECTION AND GRIDS CHECKED BY (IV):		DATE	
R. S. Kornspan		11-04-65	
CONTROL PLOTTED BY (III):		DATE	
R. Smith	01-11-66		
		DATE	
CONTROL CHECKED BY (III):	•	DATE	
C. H. Bishop	01-11-66		
0. II. BIBLOP			
RADIAL PLOT OR STEREOSCOPIC CONTROL EXT	ENSION BY (III):	DATE	
G. M. Ball		Nov. 1965	
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY L.O. Neterer	DATE	
	REV. BY: A.L. Shands	March 1966 March 1966	
	CONTOURS	DATE	
MANUSCRIPT DELINEATED BY (111):		DATE	
L. O. Neterer		March 1966	
SCRIBING BY (III):		DATE	
F. P. Margiotta	01-22-69		
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): (COMPILATION: C.H. Bishop; L.L.		
F	TETT EDIT: C.U. DIBUOD	Jan. 1969	
	UP & SCRIBING: R. E. Smith	Jan. 30, 1969	
REMARKS:		DATE	
Field edit by:		June 1968	

Ship PATTON

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

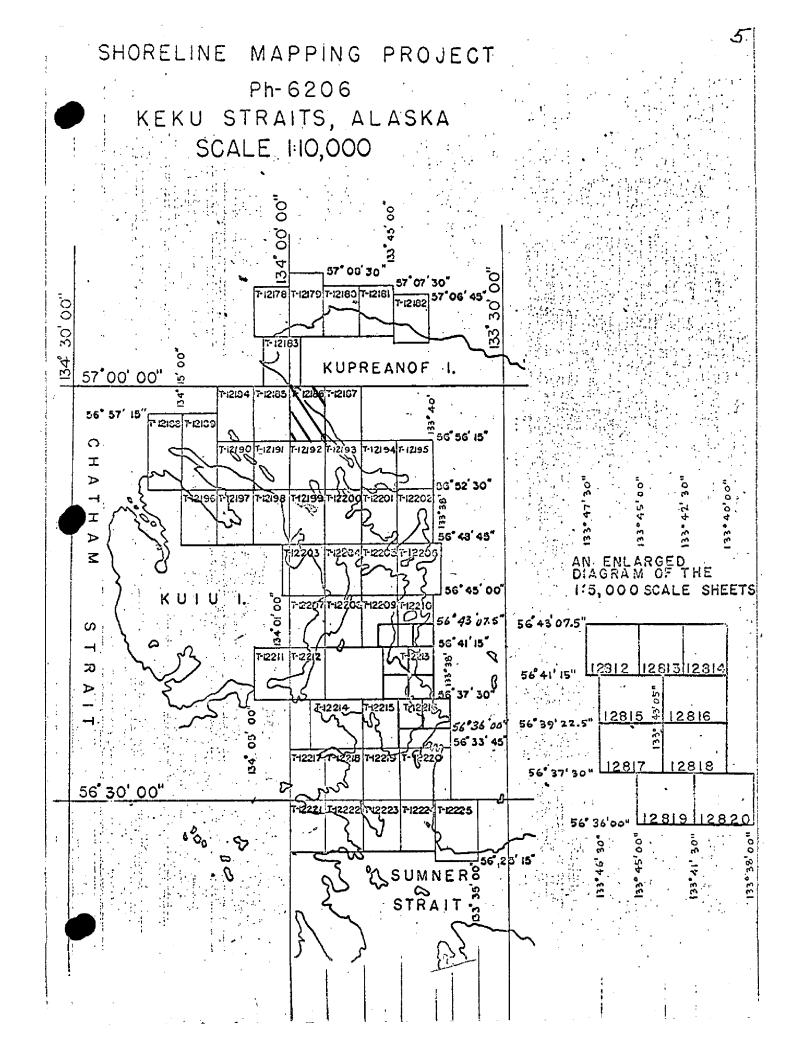
T-12186

CAMERA (KIND OR SOURCE) (111):

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

	19 July 1965	TIME	SCALE	\$1	AGE OF TH	
	19 July 1965	a0 L	[1
		08:45	1:50,000	54.4 ft.below		
62W 5564 thru &568	16 June 1962	09:57	1:20,000	5	.8 ft.	above MI
						,
		TIDE (III)	PREDICTED		MEAN	SPRING
-				RATIO OF RANGES	MEAN RANGE	RANGE
REFERENCE STATION:	Ketchikan				13.0	15.4
BORDINATE STATION: Kake, Keku Strait					11.7	1li.0
SUBORDINATE STATION:						
WASHINGTON OFFICE REVIEW BY (IV): Leo F. Beugnet, AMC PROOF EDIT BY (IV):				DATE: October, 1971 DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 6 RECOVERED: 5				IDENTIFIE	ED: 1	
NUMBER OF BM(S) SEARCHED FOR (II):				IDENTIFIE	ED	
NUMBER OF RECOVERABLE PHO	TO STATIONS ESTABLISH	1EO (INI): 2			-	
NUMBER OF TEMPORARY PHOTO	HYDRO STATIONS ESTAI	BLISHED (III):	0			

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore area for hydrography	March 1 966	Superseded
Field Edit Applied	J an. 1969	Superseded
Final Review	Oct. 1971	Superseded
Discrepancies with reviewed hydro surveys resolved; Addendum to Review Report Added.	Oct-1972	



SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-12186

Shoreline survey T-12186 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 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 October 1971. One cronaflex positive and a negative of the final reviewed survey are forwarded for record and registry.

FIELD INSPECTION REPORT T-12186 PROJECT PH-6206

There was no field inspection prior to the compilation of this map.

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 "N" 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-overief 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.

Photography

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

Respectfully submitted:

Approved and forwarded:

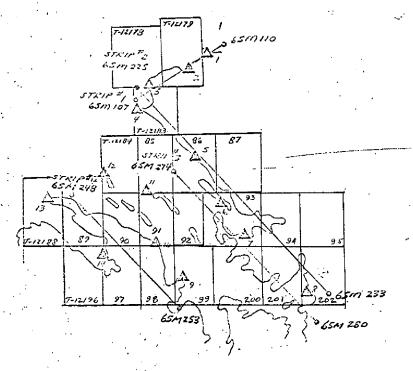
Henry P./Eichert Acting Chief, Aerotriangulation Section

CLOSURE TO CONTROL AND TIE POINTS (feet)

BENDEL, 1917 (0.0 -0.1) KELP, 1965 (-0.1 -0.1PINT, 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} MAY, 1927 -0.4) S.S. (-0.5 TIES TO STRIP #1 08401 (-0.2 08402 (-0.9 08402 (-0.9 + 2.6) +10.1) **+9.6**) THES TO STRIP #3 + 6.2) 27401 (+6.7 28401 19.0 +9.1+3.4 % 29401 29401 ₩9.5 +8.2 50/i05 29403 (+3.2 33401 + 0.4 33402 (+5.0 STRIP #3 KAKE, 1927 (+1.8 -2.1ALTO, 1927 +0.5) {-2.0

STRIP #3 cont. HAM, 1927 (-2.8 -0.9) ACE, 1927 (+3.4)+3.1) MMY, 1927 s.s. (-0.6 -0.9) STRIP #4 GNAW, 1965 (-0.1)0.0) LOW, 1927 0.0) (-0.1LUCK, 1927 (-0.10.0TIES TO STRIP #3 74101(+0.1 (+9.3 (+9.1 (+3.1 +0.6 74401 75401 -6.276401

76402 (+6.7



KEKU STRAITS, ALASKA PH - 6206

> SHORELINE MAPPING SCALE 1:10,000

> SINGLE LENS PHOTO. SCALE 1:50,000

KEY TO TRIBUSULATION

K. KELP, 1965

3. BENDEL, 1917

7. ASE, 1927

LOW, 1927

11. ALTO, 1927.

12. KEKÚ, 1927

13. CORN, 1925

U.S. DEPARTMENT OF COMMERCE KIC SURVEY COAST AND GE

Atlantic Marine Center, Norfolk, Va. NONFLOATING AIDS CREATERNERING FOR CHARTS

STRIKE OUT TWO

TO BE CHARTED COMPLETE ESPEC

3

C&GS FO.

19 69

Jan. 8

I recommend that the following objects which have (francount) been inspected from seaward to determine their value as landmarks be charted on (dataodataon) the charts indicated.

Allen L. Povell rehop Charles H. Bishop The positions given have been checked after listing by

CHARTS Chief of Ports 8201 8201 8201 MANUAL CHART K H H 89 89 1961 Director, AMC Photo ** T-12186 6/ Photo ** T-12186 6/ Triang. T-12186 LOCATION AND BURVEY No. DATUM 03.83 - N.A. 64.7 1927 = E D. P. METERS 20.117 3116 44.63 75 LONGITUDE 133 55 2 7133 56 POSITION 1231.5 133 D. M. METERS 25.96 · 803 $\frac{2h.h1}{755}$ LATITUDE # 쌼 72 5 况 36 36 BIGNAL Kake Harbor Daybeacon 1968 Month and day not known. Portage Bay Light 2, 1968 (Kake Harbor Light 1960) Day of month not known. DESCRIPTION ALASKA CHARTING STATE

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonflosting aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given. * TABULATE SECONDS AND METERS

G D USCOMM-DC 18234-P&1

FORM 164 (4-23-54)

RED KAKE GUNNOCK, 1960 BETH C10H7 1960 ベムスで CHAN COMPUTED BY: 1 FT. - .3048006 METER MAP T- /2 STATION ナムベス HARGOR 3 2 2 = 1927 1927 1927. 1927 186 56134 SOURCE OF 561384 56/33 Vol. II Vo/. 2 Vo1.77 P. 287 p.365 Vo1.2 p. 355 p./009 Vol. 3 and P. 1009 6.16 YC1. 3 210 9 6 p.355 р. З (NDEX) 14 × 1 PROJECT NO. PH-6206 DATUM = = 3 -3 Ξ, = 7 = DATE 133 5 133 50 56 56 123 (v) (v) LONGITUDE OR x-COORDINATE 6 LATITUDE OR 4-COORDINATE 5 h cs W 133.57 U.S. DEPARTMENT OF COMMERCE 683 629 877 874 634 878 1-17-66 019 8 5 5 (ب در 56 8 **رم** ری 5 رم هز 59 DESCRIPTIVE REPORT 666.65 4 158.76 872.15 002.31 14.672 03.83" 385,73 297.69 Ç, 11.641 41.546 36.42 37.139 37.554 79. 26.553 ×9.00 57.815 2 6,945 30.749 56 0 7 OR PROJECTION LINE IN METERS SCALE OF MAP 1:10 000 7 Ś Ν DISTANCE FROM GRID IN FEET. 1515.19 196.7 455.9 418.7 1285.2 1231.51 833.5 634.4 974.8 951.2 627.9 666.6 297.741 385.7 FORWARD 279.6 002.3 158.81(2841,2 COAST AND GEODETIC SURVEY 872.2 236 4 NTROL RECORD 7 CHECKED BY 1022.5) (8.646) (386.5) (2 /27.8) 570.9) 379.2) 904.8 (1333.4 817.05 1402.13 36.9) 624.5-)-702.3 ひょうこ 997.7 763.6 565.2 614.3 720.4) 070 DATUM CORRECTION FROM GAID OR PROJECTION LINE FROM GRID OR PROJECTION LINE FROM GRID OR PROJECTION LINE 3 405 FORWARD N.A. 1927 - DATUM j comp SCALE FACTOR: 64. DATE .. PXS. (BACK) KK.S. 2/3/66 É بر 7 - 32 - 6 FORWARD ò 9 o COMM- DC- 57843 (BACK)

1

COMPILATION REPORT MAP MANUSCRIPT T-12186 PROJECT PH-6206

31. DELINEATION:

The Wild B-8 plotter was used with the 65-M photography for delineation and to drop points common to the 62-W photography. The quality of the 65-M ratio photographs was poor, in that they were enlarged five times. The 62-W ratios were much clearer and were used graphically for clarification of the shoreline.

32. CONTROL:

See PHOTOGRAMMETRIC PLOT REPORT dated November 1965.

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, cultural features and other alongshore details were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS:

Offshore islands, rocks, reefs, and foul areas were delineated from office interpretation of the photographs.

37. LANDMARKS AND AIDS:

Three fixed aids to navigation were compiled. Appropriate copies of Form 567 have been forwarded to the Washington Office.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

Junctions are in agreement with T-12183 to the north, T-12187 to the east, T-12192 to the south and T-12185 to the west.

LO. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS Quadrangle PETERSBURG (D-6), ALASKA, scale 1:63,360, dated 1951.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with chart 8201, Etolin Island to Midway Islands, scale 1:217,828, 11th edition, revised 7/20/64.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Charles H.Bishop Charles H. Bishop

Cartographer

Approved for forwarding:

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

Approved:

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

October 20, 1971

GEOGRAPHIC NAMES FINAL NAME SHEET PH-6206

T-12186

Burnt Island

Grave Island

Gunnuk Creek

Hamilton Island

Kake

Keku Strait

Kupreanof Island

Little Gunnuk Creek

Mosquito Islands

Approved by:

A. Joseph Wraight Chief Geographer

Prepared by:

Frank W. Pickett Cartographic Technician

49. NOTES FOR THE HYDROGRAPHER

Foul, shoal and reef areas shown on this sheet were determined by office inspection of aerial photographs of the area and are shown to aid the hydrographer in locating possible hazardous areas. Their existence and extent should be verified by the hydrographer. If a foul, shoal or reef area that is shown does not exist, this fact should be noted on the discrepancy print.

Specific items to be investigated are noted on the discrepancy print.

FORM C&GS-1002 (9-66)

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

)	PHU		12186	
1. PROJECTION AND GRIDS	2 TITLE	TILE 3. MANUSCRIPT NUMBERS		4. MANUSCRIPT SIZE
CHB	СНВ		СНВ	СНВ
CONTROL STATIONS				· · · · · · · · · · · · · · · · · · ·
5. HORIZONTAL CONTROL ST. THIRD-ORDER OR HIGHER A	ATIONS OF	6. RECOVERAS	BLE HORIZONTAL STATIONS AN THIRD-ORDER ACCURACY	7. PHOTO HYDRO STATIONS
СНВ		(Topographic	CHB	XX
8. BENCH MARKS	9. PLOTTING O	FSEXTANT	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
XX	XX	Bridge (W.O.)		Wild B-8
ALONGSHORE AREAS (Nautice)	Chart Data)			
12. SHORELINE	13. LOW-WATER	LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
CHB	XX		СНВ	XX
16. AIDS TO NAVIGATION	17. LANDMARK	ś	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
СНВ	XX		СНВ	СНВ
PHYSICAL FEATURES				
20. WATER FEATURES		21. NATURAL	GROUND COVER	22. PLANETABLE CONTOURS
CHB	СНВ		XX	XX
23. STEREOSCOPIC	24. CONTOURS	IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
XX	XX		XX	XX
CULTURAL FEATURES				
27. RO ADS	28. BUILDINGS		29. RAILROADS	30. OTHER CULTURAL FEATURES
CHB	СНВ		XX	СНВ
BOUNDARIES				
31. BOUNDARY LINES	KX		32. PUBLIC LAND LINES	K
MISCELLANEOUS				165
33, GEOGRAPHIC NAMES	3. GEOGRAPHIC NAMES 34. JUNCTION		S	35. LEGIBILITY OF THE MANUSCRIPT
СНВ	СНВ		CHB	СНВ
36. DISCREPANCY OVERLAY	37. DESCRIPTI	VE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
XX	СНВ		XX	CHB
40. REVIEWER HB151	rop		SUPERVISOR, REVIEW SECTION	on or unit
C.H. Bishop	i	7/66	Albert C. Rauck	
41. REMARKS (See attached she	(10			
FIELD COMPLETION ADDITIO	~~~			
script is now complete	s fumished by the cept as noted un	ne field completeder item 43.	tion survey have been applied o	
A.L. Shar		1/6/69	SUPERVISOR albu	t C. Manche
REV. BY: C.H. Bis		1/7/69	Albert C. Ranck,	Jr.
43. REMARKS				
Field edit appl		Field edi	t ozalid, Field Photo	Nos.:

T-12186

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-12186

SHORELINE

OCTOBER 18, 1971

61. GENERAL STATEMENT

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

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Comparison was made with copies of registered surveys No. 6989, dated May-June 1960 and No. 7110 dated August 1962. Both of these are at 1:5,000 scale and appear to be planetable surveys to establish control for hydrography.

The shoreline of these two surveys is superseded by T-12186 for nautical chart constructionspurposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with USGS PETERSBURG (D-6) ALASKA, 1:63,360 scale quadrangle, edition of 1951 with minor revisions made in 1963. The two surveys are in good general agreement.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with copies of boat sheets H-8517 (HO 5-1-60), H-8658 (HO 5-1-62), H-9000 (PA 10-3-66) and H-9040 (DA 10-4-68). The source of the shoreline for the first two of these surveys appears to have been planetable surveys. The source for the latter two were incomplete manuscripts.

Many of the rocks shown on the boat sheets are not visible on the photographs of the area. This is particularly evident in the area just to the northwest of Burnt Island. Some rocks on the boat sheets appear as reefs or ledges on the photographs and have been mapped as such.

All differences between the boat sheets and survey T-12186 have been noted on the comparison print in purple.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with KAKE and PORTAGE BAY insets of Chart 8201, 16th edition, dated November 7, 1970. The remainder of the chart at 1:217,828 scale is too small for other than a visual comparison.

Attention is called to the rocks shown on the chart in the vicinity of Kake. These are not visible on the photographs, the area appears only as a ledge and has been so mapped on survey T-12186. All differences between the chart and this survey have been indicated on the comparison print in red.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with project instructions and appears to meet 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, Coasal Mapping Division

ADDENDUM TO REVIEW REPORTS

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

After Maps T-12178, T-12179, and T-12185 through T-12202 had ben 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 czalids 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 HBroker

Charles H. Bishop Cartographer January 1973

region consequencia e l'iscone proportione la la latera provincia le la companie de la companie de la companie

