NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Map No. Edition No. T-12374 1 Job No. PH-6303 Map Classification FINAL FIELD EDITED MAP Type of Survey SHORELINE LOCALITY State ALASKA General Locality CLARENCE STRAIT Locality MAGNETIC POINT **TO 19**71 **19** 63 REGISTERED IN ARCHIVES DATE

TYPE OF SURVEY

SURVEY TP-

NOAA FORM 76-36B U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION T-12374 NATIONAL OCEAN SURVEY **COMPILATION SOURCES** 1. COMPILATION PHOTOGRAPHY CAMERA(S) TYPES OF PHOTOGRAPHY TIME REFERENCE Wild RC-8 "W" & "L" LEGEND TIDE STAGE REFERENCE ZONE (C) COLOR Pacific STANDARD TA PREDICTED TIDES X(P) PANCHROMATIC TREFERENCE STATION RECORDS MERIDIAN (I) INFRARED DAYLIGHT TIDE CONTROLLED PHOTOGRAPHY 120th STAGE OF TIDE NUMBER AND TYPE DATE TIME SCALE 11.3 above MLLW 1:30,000 63W 7254-7258 Jül 2, 1963 10:36 1:30,000 2.1 above MLLW 65L 5091 Jul 30, 1965 10"25 5.1 ft above MLLW 63W 7615-7617 Jul 2, 1963 15:18 1:15,000 5.0 ft above MLLW 63W 7627-7631 Jul 2, 1963 15:24 1:15,000 REMARKS 2. SOURCE OF MEAN HIGH-WATER LINE: The mean high water line was compiled from the above listed photography. 3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE: A partial mean lower_water line was compiled from the 1965 photography 4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.) SURVEY NUMBER DATE(S) SURVEY COPY USED SURVEY NUMBER SURVEY COPY USED 5. FINAL JUNCTIONS ^{souтн}т-12378 North No survey EAST-11981 WEST T-12373 REMARKS

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	•	ніст	ORY OF FIELD	OPERATIONS				
I. 🗓 FIELD INSPECT	TION OPERATIO	DN	FIEL	D EDIT OPERATION	l			
	OPERAT	ION			NAME			DATE
1. CHIEF OF FIELD F	PARTY			B. Williams	.		Apr	1966
			RECOVERED BY	R. Melby				1966
2. HORIZONTAL CON	TROL		ESTABLISHED BY	R. Melby				1966
	P	RE-MARKED	OR IDENTIFIED BY	R. Melby			Apr	1966
	- -		RECOVERED BY	NA				
. VERTICAL CONTR	OL		ESTABLISHED BY	NA	<u> </u>			
	P	RE-MARKED C	R IOENTIFIED BY	NA		_		
	RECOV	ERED (Triange	ulation Stations) BY	None				
	ON	LOCATED	(Field Methods) BY	None				
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None 								
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5. GEOGRAPHIC NAMI	ES; R	EPORT	NONE	6. BOUNDARY AN	D LIMITS:	REPORT	X	NONE
. SUPPLEMENTAL M	APS AND PLAN	S		•				
None								
		ooks, etc. DO	NOT list data submi	tted to the Geodesy D	ivision)			

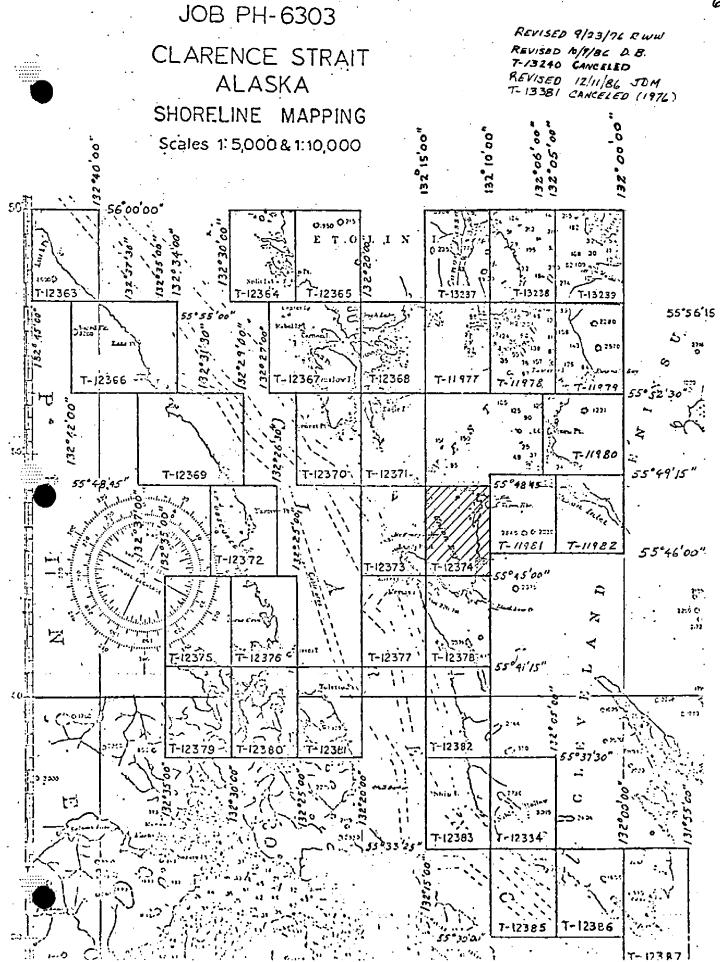
OAA FORM 76-36C -72	T-12374 HISTORY OF FIELD	NATIONAL OCEANIC AN		OF COMMER DMINISTRAT OCEAN SURV	
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	RECOVERED BY	NA			
, VERTICAL CONTROL	ESTABLISHED BY	NA			
	PRE-MARKED OR IDENTIFIED BY	NA			
R	ECOVERED (Triangulation Stations) BY	None			
. LANDMARKS AND	LOCATED (Field Methods) BY	None			
AIDS TO NAVIGATION	IDENTIFIED BY	None			
	TYPE OF INVESTIGATION		1		
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NVESTIGATION	SPECIFIC NAMES ONLY				
	NO INVESTIGATION	7 072		May 1971	
. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	L. Oliver	P	lay 197 <u>1</u>	
. SOURCE DATA	SURVEYED OR IDENTIFIED BY	NA			
HORIZONTAL CONTROL IDE	NTIFIED	2. VERTICAL CONTROL NA	IDENTIFIED	 	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGN	NATION	
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None					
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NA	ME	
. GEOGRAPHIC NAMES:	REPORT X NONE .	6. BOUNDARY AND LIMI	S: REPORT	[X] NONE	
. SUPPLEMENTAL MAPS AND None				,	
. OTHER FIELD RECORDS (Sk.	etch books, etc. DO NOT list data submit	ted to the Geodesy Division)			

NOAA FORM 76-36D (3-72)

U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

T-12374

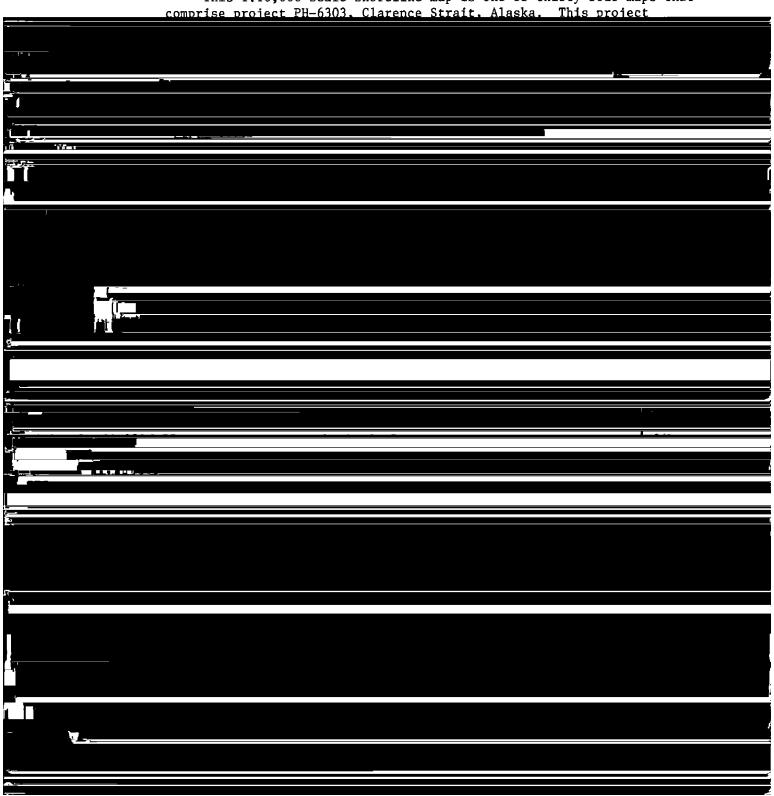
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_	ation complete field edit	Jan 1971	Class II	r	Mar 30,1971	Mar 2,1971
	edit applied tion complete	Aug 1972	Class I		Jun 9,1975	
Final F	Review	Sep 1987	Final Fi	eld Edited Map	June 1967	
				-		
II. LANDM	ARKS AND AIDS TO NAVIGA	rion None		-		
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==	REPORT TO MARINE CHART REPORT TO AERONAUTICAL					
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SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

T-12374

This 1:10,000 scale shoreline map is one of thirty-four maps that comprise project PH-6303. Clarence Strait. Alaska. This project



FIELD INSPECTION REPORT

Project PH-6303

Shoreline Mapping, Clarence Strait & Ernest Sound Alaska
May, 1966

Shoreline Manuscripts T-11982 and T-12363 thru T-12387

The area of the project is along the shores of Clarence Strait and the entrance of Ernest Sound, including Tolstoi Bay and Union Bay.

The area is in a remote section of southeast Alaska, accessible only by ship or airplane.

There are three communities, Meyers Chuck, Thorne Bay and Ratz Harbor.

The latter two are logging camps.

The interior areas are covered with a dense growth of coniferous timber, chiefly spruce, hemlock and cedar.

Horizontal control consisted of the photo-identification of the required triangulation stations. New station were established by triangulation or traverse utilizing the electronic distance measuring instruments (Fairchild MC-8 Electrochains).

The shoreline is mostly rocky and irregular. Numerous ledges extend seaward from the rocky headlands and points. The strata formation of many of the ledges are in vertical or incline planes making the ledges quite irregular and jagged. The shoreline of occasional small bights will be of a gravel, stone or boulder composition.

The shoreline was field inspected at landing sites, these locations usually being at the site of triangulation stations. The interpretation of the mean high water line on photography taken at low water can be distinguished in the following manner. Adjacent to the existing water level at the time of photography will be a white area. This is mostly barnacles and similiar marine

life that reflects a white tone. This will appear as a white band paralleling the shoreline. This is followed by a dark, nearly black color tone. This area receives only occasional wave action during storms. This appears on the photography as a dark band adjacent to and next in elevation above the white band of barnacles. Above the dark band will usually be seen a greyish color tone, extending to the tree line. This is composed of grass, lichens and debris on the bedrock. The mean high water line is at the junction of the white barnacle band and the dark band. An example of this can be noted by observing contact photograph 65 L 5129 in the vicinity of the field identification of station OVAL, 1916.

Approved:

Bruce I. Williams Lt. ESSA

C.O. Ship PATTON

Respectfully submitted

Robert B. Melby

Surveying Technician, C &GS

Photogrammetric Plot Report Job PH-6303 Clarence Strait, Alaska Part II - Northern Half

December 3, 1970

21. Area Covered

The area covered is in and around the junction of Ernest Sound and Clarence Strait, Alaska. Included are T-Sheets 11977 thru 11982, 12363 thru 12371, 12374, and 13237 thru 13240, at 1:10,000 scale, in Zone 1, Alaska Plane Coordinates.

22. Method

Seven strips were bridged on the stereoplanigraph and adjusted by I.B.M. 1620 methods. Strip #4 (63-W-7254 thru 7258) was adjusted on three triangulation sub-stations and two tie points from Strip #3 (Part I). Companion sub-stations and additional tie points served as checks. Strip #7 (65-L-5098 thru 5105) was adjusted on four triangulation sub-stations with companion sub-stations and tie points from Strip #12 as checks. Strip #8 (63-W-7324 thru 7330) was bridged only in part. 63-W-7324 thru 7328 was bridged and adjusted by a first order curve (straight line). The method employed two sub-stations for adjustment, with companion sub-stations and six tie points as checks. The remainder of the Strip (63-W-7329 and 7330) must be detailed graphically from ratio prints. Strip #9 (65-L-5109 thru 5116) was adjusted on four triangulation sub-stations with companion sub-stations, one additional triangulation station and five tie points with Strip #10 as checks. Strip #10 (63-W-7311 thru 7319) was bridged on three triangulation sub-stations with companion sub-stations and eleven tie points with Strips #8 and #9 as checks. Strip #11 (63-W-7291 thru 7306) was adjusted on four triangulation sub-stations and checked with tie points from Strip #6. Strip #12 (65-L-5091 thru 5096) was adjusted on four triangulation sub-stations with tie points from Strips #4 and #7 as checks. All points were drilled on the PUG. All tie points between strips were averaged. Some outlying islands in Sheet T-11977 and T-11978 could not be covered by bridging, nor can the area be compiled, with any accuracy, by graphic methods. Completion of these two sheets should be completed by the ship during the hydrographic survey.

23. Adequacy of Control

Horizontal control was adequate and complied with project instructions. All stations held within National Map Accuracy Standards with the following exceptions:

(1) Drag, 1916 SS "C". This position was of poor image quality. In addition, it was allowed to drift by using tie points from Strip #3, as control on Strip #4. This solution provided the best overall fit.

24. Supplemental Data

Local GS quads were used to provide level points for bridging Operations. Due to the nature of the terrain and the scale of the quads, these elevations are very approximate.

25. Photography

Photography was good in coverage, overlap, and definition.

John D Verza

John D. Perrow, Jr.

Approved by:

Submitted by:

Henry P. Eichert

Chief, Aerotriangulation Section

Notes to Compiler PH-6303 Clarence Strait, Alaska

December 3, 1970

Strip #4 does not fit within itself too well. However, the best overall fit was made so that the strip could be tied to Strip #3 (Part I), which had been compiled at an earlier date.

Strip #8 is positioned too far out over the water to provide more than a quarter of a model in that portion of the strip north of triangulation station Mabel. These small portion models would be extremely difficult to bridge, and equally as difficult to set in a compilation instrument. Therefore, points common to both strips in that area were selected in critical areas to establish ratioing constants for Strip #8, so that those photographs could be used in compiling the alongshore detail by graphic methods.

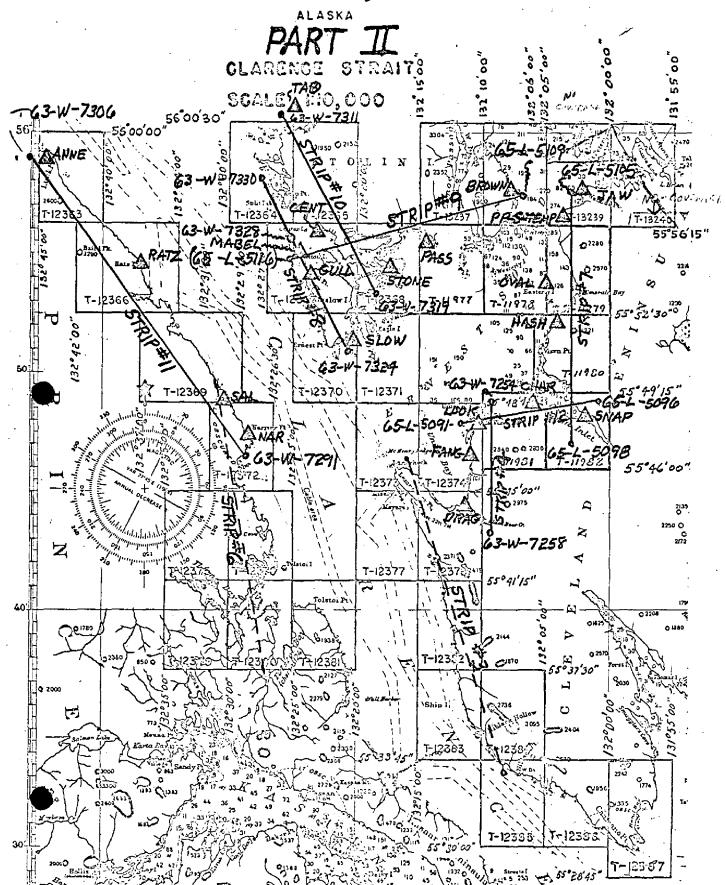
Just south of the area covered by Strip #9, are a number of islands which could not be covered by bridging operations, due to excessive water areas. These islands are located on T-Sheets 11977 and 11978. Ratio prints of this area were made at a three time enlargement, however, these are uncontrolled, and the exact scale cannot be determined. It is recommended that the islands on these two T-Sheets be located and positioned by the hydrographic survey party.

Strip #11. It is recommended that the area covered by model 63-W-7291 - 7292 be detailed from Strip #6 (Part I), since Strip #6 seems to be the stranger photogrammetric bridge.

Note: The published position of station HASH, 1966, is in error. A new position was provided by Geodesy. The sub-stations for Station OVAL, 1916, could not be seen on the bridging photography.

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SHORELINE MAPPING



NOAA FORM 76-41 (6-75)				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	, DEPARTMENT O	F COMMERCE
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MAP NO.	ON BOF		GEODETIC DATUM	ORIGINATING ACTIVITY	Coastal	Manning
T-12374	PH-6303		NA 1927	on,		944
STATION NAME	SOURCE OF	AEROTRI- ANGULATION	COORDINATES IN FEET	1	REMA	KS
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HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE	
		SUPERSEDES NO	ERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE	CH IS OBSOLETE.		

COMPILATION REPORT

T-12374

31. DELINEATION:

The Wild B-8 and 1:30,000 scale black and white photography was used to compile all the shoreline except a small portion of Union Point which was compiled graphically. The photography was satisfactory.

32. CONTROL:

See Photogrammetric Plot Report PH-6303 Part II Northern Half dated December 3, 1970, and Part I Southern Half dated March 15, 1967.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was compiled from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

Shoreline and alongshore detail has been compiled by office interpretation of the photographs.

36. OFFSHORE DETAILS:

Offshore details were compiled by office interpretation of the photographs. Only a portion of the mean lower low water line could be compiled from the 1965 "L" photography. This was in the northeast corner of this map.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None.

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GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6303 (Clarence Strait, Alaska)

T-12374

Cleveland Peninsula

Ernest Sound

Lemesurier Point

Magnetic Point

Union Bay

Union Point

Vixen Harbor

Approved:

Charles E. Harrington Chief Geographer

Nautical Charting Division Charting and Geodetic Services

SHEET T-12374

CLARENCE STRAIT

I MAGNETIC POINT)

PH-6301 6 303

MAY 1971

NOAA SHIP PATHFINDER
CAPT. H.R. LIPPOLD JR., CMDG.

51 Methods

The field edit of this map was done in accordance with photogrammetric instructions and project instructions to the Commanding Officer, NOAA SHIP PATHFINDER, dated 19 January 1971. Steep shorelines made it possible to do all work from NW #6 and SB #5. Easy accessability to the beach made frequent on shore inspection no problem. Sextant fixes were used to verify and locate objects that could not be seen or positively verified on the photographs.

All deletions, additions, verification and corrections to be applied to the manuscript appear on the Field Edit Ozalid. This ozalid is an index and inventory of all field edit work performed. All features marked in green on the ozalid are to be deleted. Red circles on the ozalid indicate the approximate location of the signals used in the field work. Cross references on the Field Edit Ozalid to the photographs are also a part of the compilation.

52 Adequacy of Compilation

Compilation of the manuscript was adequate and complete for all areas

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REVIEW REPORT SHORELINE

T-12374

61. GENERAL STATEMENT:

See Summary included with this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A comparison was made with U.S.G.S. Quadrangle: CRAIG (D-1), Alaska, dated 1951, scale 1:63,360.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with Hydrographic Surveys H-9191 and H-9287, both are $1\!:\!10,000$ scale.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with NOS charts:

17385, 11th edition, dated August 11, 1984, scale 1:80,000, 17420, 23rd edition, dated March 16, 1985, scale 1:229,376, and 17423, 11th edition, dated January 3, 1981, scale 1:40,000.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the Project Instructions and meets the requirements for National Standards of Map Accuracy.

Submitted by:

Lowell O. Neterer, Jr.

Final Reviewer

September 25, 1987

Approved for forwarding: B. Ely W. Barnes

Billy H. Barnes

Chief, Quality Assurance Group, AMC

Approved: July O. Rahan

Chief, Photogrammetric Production Sect.

Chief, Photogrammetry Branch

Rockville

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.

2. In "Remarks" column cross out words that do not apply.

3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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