

T-12798

T-12798

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey Shoreline

Job No. PH-6502 Map No. T-12798

Classification No. III Edition No. 1

LOCALITY

State Alaska

General Locality Glacier Bay

Locality Hutchins Bay

1964 TO 1972

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY <u>T-12798</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>III</u> JOB <u>PH- 6502</u>	
DESCRIPTIVE REPORT - DATA RECORD				LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED			
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, Norfolk, Virginia				JOB <u>PH- _____</u> MAP CLASS <u>_____</u> SURVEY DATES: 19 <u> </u> TO 19 <u> </u>			
OFFICER-IN-CHARGE Jeffrey G. Carlen, CDR							
I. INSTRUCTIONS DATED							
1. OFFICE Aerotriangulation May 18, 1973 Compilation-Supp. II June 14, 1973 Final Review June 03, 1977				2. FIELD February 17, 1970			
II. DATUMS							
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH-AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION Polyconic				4. GRID(S) STATE <u>Alaska</u> ZONE <u>1</u> STATE <u> </u> ZONE <u> </u>			
5. SCALE 1:10,000							
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY				D. O. Norman		Jul 1973	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY				Allen		Jul 1973	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY				R. R. White		Sep 1973	
INSTRUMENT: Wild B-8 SCALE: 1:15,000				A. L. Shands		Sep 1973	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY				Charles Parker		Sep 1973	
METHOD: Smooth drafting SCALE: 1:10,000				L. O. Neterer Jr.		Sep 1973	
HYDRO SUPPORT DATA BY CHECKED BY				Charles Parker		Sep 1973	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				L. O. Neterer Jr.		Sep 1973	
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY				None			
7. COMPILATION SECTION REVIEW BY				None after 5. above			
8. FINAL REVIEW BY				C. H. Bishop		Sep 1977	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				C. H. Bishop		Dec 1977	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				J. B. Phillips		Jan 1978	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				R. T. Cator		Mar 1978	

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12798
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC18 "E" & "RC-9 "M"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE JUNEAU		X (C) COLOR X (P) PANCHROMATIC (I) INFRARED		ZONE	
<input checked="" type="checkbox"/> PREDICTED TIDES Willoughby Island				Pacific	
<input type="checkbox"/> REFERENCE STATION RECORDS				MERIDIAN	
<input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				120th	
NUMBER AND TYPE		DATE	TIME	SCALE	STAGE OF TIDE
72E(C) 4776		7/4/72	14:38	1:30,000	3.5 ft. above MLLW
72E(C) 4766-4768		7/4/72	14:28	1:30,000	3.7 ft. above MLLW
72E(C) 4801		7/4/72	14:51	1:30,000	4.4 ft. above MLLW
64M(P) 3613-3614		6/12/64	09:10	1:40,000	2.7 ft. below MLLW
64M(P) 3702-3703		6/12/64	11:06	1:40,000	2.9 ft. below MLLW

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was delineated from office interpretation of the above listed photographs.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

Office interpretation of the 1972 photographs, with frequent comparison with the 1964 photographs.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-12793	No survey	T-12643	T-12797
REMARKS			

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12798
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	None	
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (<i>Triangulation Stations</i>) BY LOCATED (<i>Field Methods</i>) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION BY	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
None2. VERTICAL CONTROL IDENTIFIED
NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (*Clarification of details*)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (*Sketch books, etc. DO NOT list data submitted to the Geodesy Division*)

None

NOAA FORM 76-36C
(3-72)

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

T-12798

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete pending field edit.	Sep 1973	Class III		
Final review prior to registration	Sept 1977	Class III-MLLWL added; corrections to kelp & foul limits	Nov. 1977	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

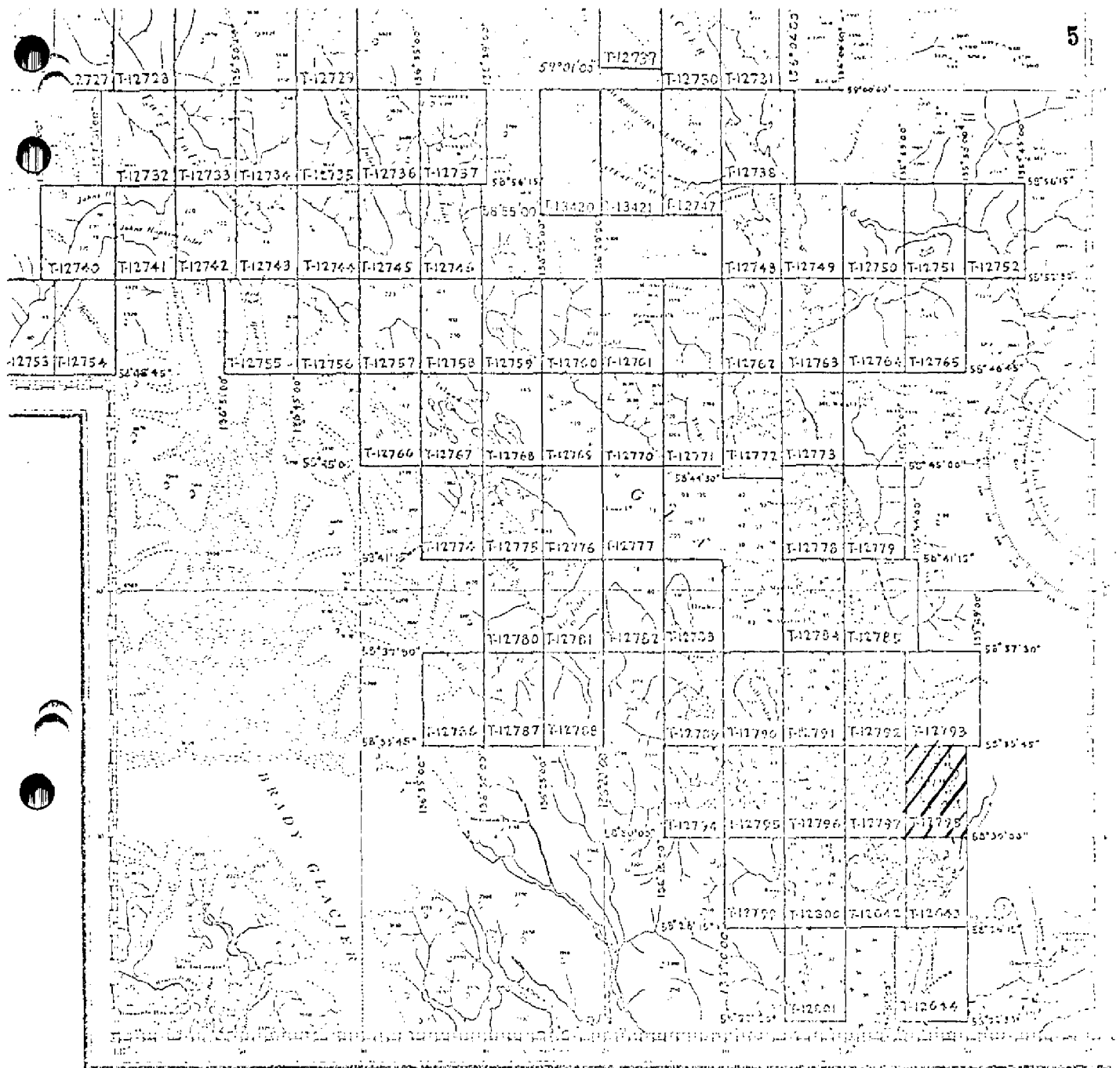
III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
 3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
 ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



JOB PH-6502 GLACIER BAY ALASKA

Shoreline Mapping

SCALE 1:10,000

REVISED 9-5-73 RWH

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12798

September 1977

This 1:10,000 scale shoreline survey is one of 80 maps that comprise Project PH-6502, Glacier Bay, Alaska. The job diagram shows its location in the project.

There was no field inspection or field edit for this map.

Compilation was done at the Atlantic Marine Center in September 1973 and is from office interpretation of the photographs.

Final review was done at the Atlantic Marine Center in September 1977. Corrections were made to the kelp and foul lines, where necessary, and the mean lower low water line was added.

The original manuscript was a stabilene sheet 3' 45" in latitude by 5' in longitude. It was forwarded to Rockville for processing a film positive for filing in the Archives, one reproduction negative to be filed in the Reproduction Branch, and two negatives to be forwarded to the Photo Map and Imagery Section for dispersal.

GLACIER BAY, ALASKA
Southern Part
Job PH-6502
July 1973

21. Area Covered. This report pertains to twenty-two sheets in the southern part of Glacier Bay, Alaska. The sheets covered are T-12773, T-12778, T-12779, T-12783 thru T-12785, T-12789 thru T-12801, and T-12642 thru T-12644.

22. Method. Five strips of RC-8 photography at 1:40,000 scale were bridged by analytic aerotriangulation methods and adjusted to ground using Alaska state plane coordinates, zone 1. Points were established for setting 1:30,000 scale compilation photography. Points were also established for determining ratios of this photography. These points were plotted by the Coradomat.

23. Adequacy of Control. The control was adequate.

24. Supplemental Data. USGS topographic quadrangles were used in determining elevations for strip adjustments.

25. Photography. The photography was adequate; however, points could not be established for the compilation of islands on sheets T-12784, T-12791, and T-12796. These islands will have to be put in by a field party.

Submitted by,

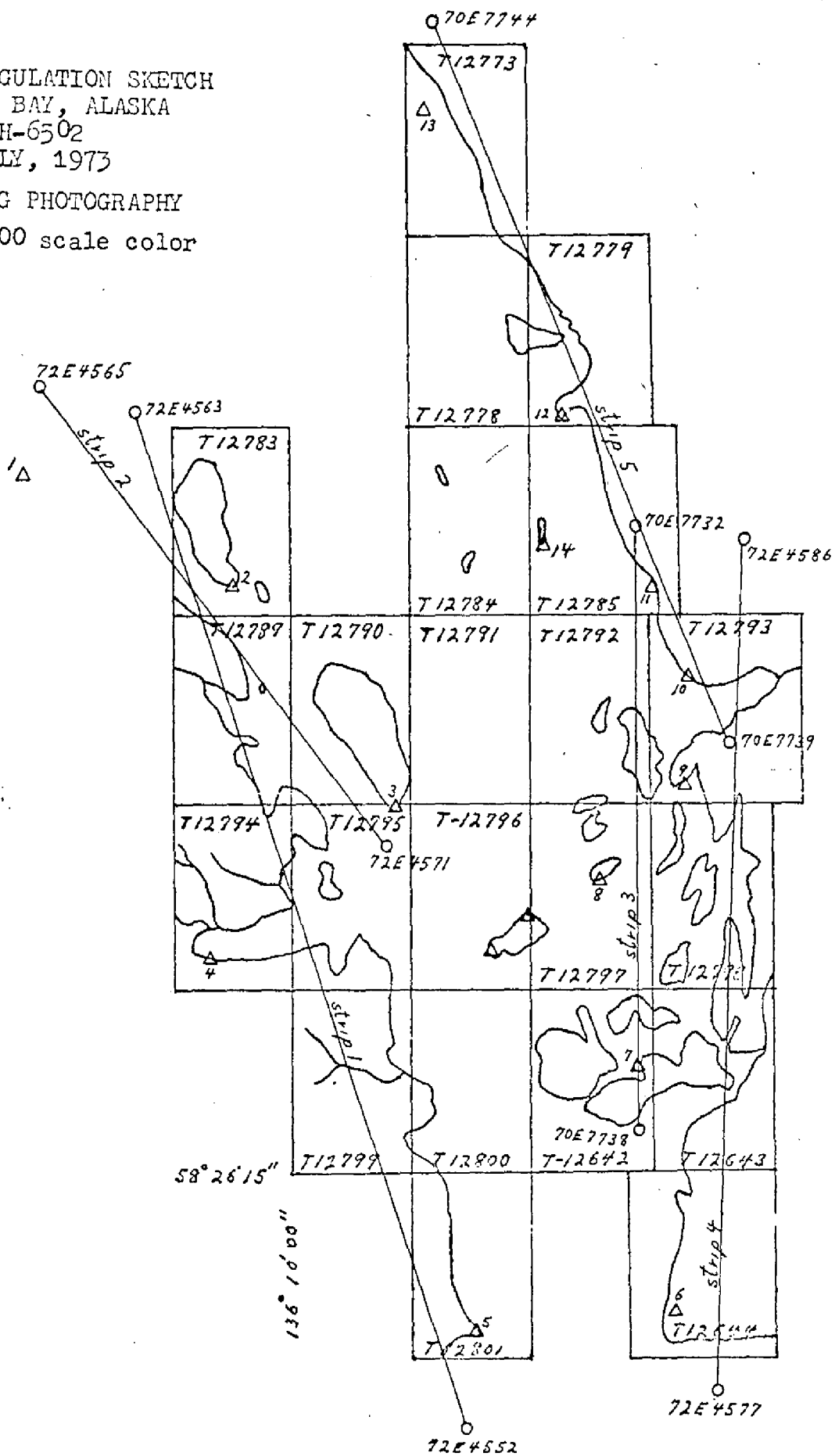
Don O. Norman
Don O. Norman

approved by:

John D. Perrow, Jr.
John D. Perrow, Jr.
Chief, Aerotriangulation
Section

AEROTRIANGULATION SKETCH
GLACIER BAY, ALASKA
PH-6502
JULY, 1973

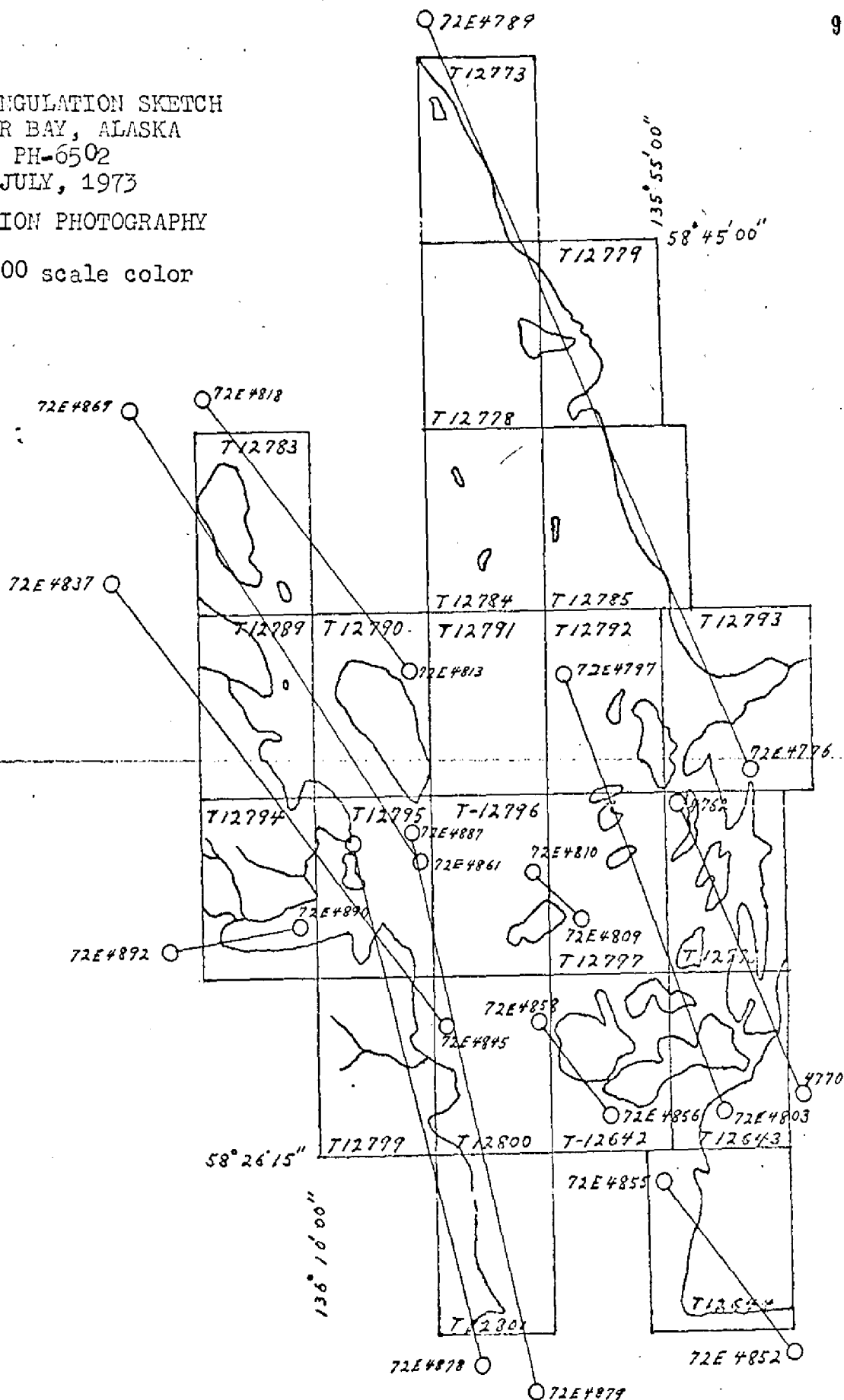
BRIDGING PHOTOGRAPHY
1:40000 scale color



AEROTRIANGULATION SKETCH
GLACIER BAY, ALASKA
PH-6502
JULY, 1973

COMPILATION PHOTOGRAPHY

01:30000 scale color



GLACIER BAY
Southern Part
Fit to Control

Strip 1

5 CARO, 1923 (+0.4, -0.4)
4 JILL, 1938 (-0.8, +2.2)
2 OPEN, 1939 (+2.1, -2.6)
1 RIDGE, 1939 (-1.8, +0.8)

Strip 2

1 RIDGE, 1939 (0.0, 0.0)
2 OPEN, 1939 (0.0, 0.0)
3 STAR, 1938 (0.0, 0.0)

Strip 3

11 GOAT, 1938 (-0.3, -2.6)
10 CANT, 1939 (+1.9, +2.8)
9 VEGA, 1939 (+1.2, +0.5)
8 SOCK, 1938 (-3.5, -1.9)
7 NAME, 1938 (+0.6, +1.2)

Strip 4

6 STAVE, 1938 (+1.5, -1.3)
773802 (-6.2, +2.7)
736801 (+3.4, -2.0)
9 VEGA, 1939 (+3.3, +0.3)
733802 (-2.0, +0.3)

Strip 5

9 VEGA, 1939 (-0.4, -0.8)
10 CANT, 1939 (-0.1, +2.3)
11 GOAT, 1939 (-2.3, -0.2)
14 LITE, 1939 (-0.5, -2.8)
12 EARL, 1970 (+3.0, +1.8)
13 SNOWHITE, 1970 (-0.5, -0.1)

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	PH-6502	GEODETIC DATUM		NA	1927	ORIGINATING ACTIVITY		REMARKS	
				SOURCE OF INFORMATION (Index)	AEROTRIANGULATION POINT NUMBER			COORDINATES IN FEET STATE Alaska ZONE I	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	Division, Norfolk, Va.	FORWARD
T-12798	SOLE, 1939	G.P. VOL 3 P. 799			X=	Y=	φ 58 33 01.502 λ 135 52 37.203				46.5 (1810.0)
											601.7 (368.7)
	KICK, 1939	G.P. VOL 3 P. 798			X=	Y=	φ 58 33 12.002 λ 135 51 22.665				371.4 (1485.1)
											366.5 (603.8)
	ANCHOR, 1939	G.P. VOL 3 P. 799			X=	Y=	φ 58 31 26.756 λ 135 50 56.207				827.9 (1028.6)
											909.7 (61.4)
	CENTER, 1939	G.P. VOL 3 P. 798			X=	Y=	φ 58 31 01.823 λ 135 52 11.354				56.4 (1800.1)
											183.8 (787.5)
	LEAD, 1939	G.P. VOL 3 P. 798			X=	Y=	φ 58 31 25.491 λ 135 53 26.614				788.7 (1067.8)
											430.8 (540.3)
	GORE, 1939	G.P. VOL 3 P. 798			X=	Y=	φ 58 32 33.242 λ 135 54 22.199				1028.5 (827.9)
											359.1 (611.5)
	HIVE, 1939	G.P. VOL 3 P. 798			X=	Y=	φ 58 32 30.348 λ 135 53 14.748				939.0 (917.5)
											238.6 (732.0)
					X=	Y=	φ				
					X=	Y=	λ				
					X=	Y=	φ				
					X=	Y=	λ				
					X=	Y=	φ				
					X=	Y=	λ				
COMPUTED BY	A. C. Rauk, Jr.							COMPUTATION CHECKED BY	Charles Parker		DATE 8/2/73
LISTED BY								LISTING CHECKED BY			DATE
HAND PLOTTING BY								HAND PLOTTING CHECKED BY			DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

COMPILATION REPORT

T-12798

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter, using 1:30,000 scale color photography. Coverage was adequate.

32. CONTROL:

See the attached Photogrammetric Plot Report, dated July 1973.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. Drainage was delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

Alongshore details were delineated by the Wild B-8 stereoplotter and by office interpretation of the photographs.

The mean high water line was delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS:

Offshore detail was compiled from office interpretation of the photography.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See the attached Form 76-36b, Item #5 of the Descriptive Report concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison has been made with the following USGS Quadrangle: Juneau (C-6) Alaska, scale 1:63,360, dated 1948.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following Coast & Geodetic Survey chart: 8202, scale 1:209,987, 17th edition, Sept. 11, 1971.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. FOR
Charles Parker
Cartographic Aid
Sept. 25, 1973

Approved:

Albert C. Rauck, Jr.
Albert C. Rauck, Jr.
Chief, Coastal Mapping Section

ADDENDUM TO COMPILATION REPORT

T-12798

By comparing the 1972 photographs with the 1964 photographs, a reasonable location for the approximate mean lower low water line was selected and applied to the map. The kelp and foul limits were corrected where necessary.

Submitted by:

Charles H. Bishop

Charles H. Bishop
Final Reviewer
Sept. 15, 1977

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12798

Bartlett River

Beardslee Islands

Hutchins Bay

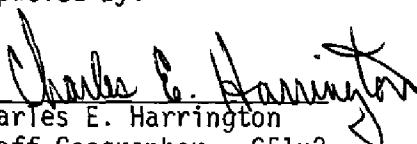
Kidney Island

Link Island

Spider Island

Glacier Bay National Monument

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

NOAA FORM 75-74
(7-75)U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEAN SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T - 12798

1. PROJECTION AND GRIDS LON	2. TITLE LON	3. MANUSCRIPT NUMBERS LON	4. MANUSCRIPT SIZE LON
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY LON	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS LON
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES NA	10. PHOTOGRAMMETRIC PLOT REPORT LON	11. DETAIL POINTS LON
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE LON	13. LOW-WATER LINE LON	14. ROCKS, SHOALS, ETC. LON	15. BRIDGES LON
16. AIDS TO NAVIGATION LON	17. LANDMARKS LON	18. OTHER ALONGSHORE PHYSICAL FEATURES LON	19. OTHER ALONGSHORE CULTURAL FEATURES LON
PHYSICAL FEATURES			
20. WATER FEATURES LON	21. NATURAL GROUND COVER NA		22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES LON
CULTURAL FEATURES			
27. ROADS LON	28. BUILDINGS LON	29. RAILROADS LON	30. OTHER CULTURAL FEATURES LON
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES LON	34. JUNCTIONS LON		35. LEGIBILITY OF THE MANUSCRIPT LON
36. DISCREPANCY OVERLAY LON	37. DESCRIPTIVE REPORT LON	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS LON
40. REVIEWER <i>Lowell O. Neterer, Jr.</i> Lowell O. Neterer, Jr. 9/25/73		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		SUPERVISOR	
43. REMARKS			

REVIEW REPORT
T-12798

SHORELINE

September 1977

61. GENERAL STATEMENT:

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

No comparison print was made.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with a copy of Survey T-6677, 1:20,000 scale, dated Sept. 1938, June-Sept. 1939. The mean high water line on this old survey is consistently inshore from the mean high water line on T-12798. No other significant differences were noted.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with USGS Quadrangle JUNEAU (C-6), ALASKA, dated 1948. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

None - no contemporary hydrographic survey was available for comparison.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 17300 (8202), 1:209,978 scale, 20th edition, dated Jan. 1, 1977. No significant differences were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by:

Charles H. Bishop

Charles H. Bishop
Cartographer
Sept. 15, 1977

Approved for forwarding:

Joseph W. Vonasek

Joseph W. Vonasek
Chief, Photogrammetric Branch, AMC

Approved:

D.K. Hanson

Chief, Photogrammetric Branch

James L. ...

Chief, Coastal Mapping Div.