

ORIGINAL

T-12783

T-12783

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-12783 ...

Classification No. II Edition No. ...1.....

LOCALITY

State Alaska

General Locality Glacier Bay

Locality Drake Island

19 64 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		SURVEY T. <u>-12783</u>	
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. <u>1</u>	
				<input type="checkbox"/> RESURVEY		MAP CLASS <u>II</u>	
				<input type="checkbox"/> REVISED		JOB <u>PH-6502</u>	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, AMC Norfolk, Va.				LAST PRECEDING MAP EDITION			
OFFICER-IN-CHARGE Jeffrey G. Carlen, CDR				TYPE OF SURVEY		JOB <u>PH-</u>	
				<input type="checkbox"/> ORIGINAL		MAP CLASS <u></u>	
				<input type="checkbox"/> RESURVEY		SURVEY DATES:	
				<input type="checkbox"/> REVISED		19 <u></u> TO 19 <u></u>	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Aerotriangulation 5/18/73 Compilation Supplement II 6/14/73 Final Review 6/03/77				Feb. 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 checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION				4. GRID(S)			
Polyconic				STATE <u>Alaska</u>		ZONE <u>1</u>	
5. SCALE 1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				D. O. Norman		Jul 1973	
METHOD: Analytic LANDMARKS AND AIDS BY							
2. CONTROL AND BRIDGE POINTS PLOTTED BY				Allen		Jun 1973	
METHOD: Coradomat CHECKED BY				Allen		Jun 1973	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				G. Vanderhaven		Sep 1973	
COMPILATION CHECKED BY				R. R. White		Sep 1973	
INSTRUMENT: Wild B-8				NA			
SCALE: 1:15,000				NA			
4. MANUSCRIPT DELINEATION PLANIMETRY BY				G. Vanderhaven		Sep 1973	
CHECKED BY				A. L. Shands		Oct 1973	
METHOD: Smooth drafting				NA			
CHECKED BY				NA			
SCALE: 1:10,000 HYDRO SUPPORT DATA BY				G. Vanderhaven		Sep 1973	
CHECKED BY				A. L. Shands		Oct 1973	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				A. L. Shands		Oct 1973	
6. APPLICATION OF FIELD EDIT DATA BY				NA			
CHECKED BY							
7. COMPILATION SECTION REVIEW BY				A. L. Shands		Oct 1973	
8. FINAL REVIEW BY				C. H. Bishop		Aug 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. Cather		Mar. 1978	

NOAA FORM 76-36B
(3-72)

T-12783

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

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E" and "M"		RC-9		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE JUNEAU		(C) COLOR <input checked="" type="checkbox"/>		(P) PANCHROMATIC		ZONE Pacific	
<input checked="" type="checkbox"/> PREDICTED TIDES Willoughby Island		(I) INFRARED				<input checked="" type="checkbox"/> STANDARD	
<input type="checkbox"/> REFERENCE STATION RECORDS						MERIDIAN 120th	
<input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY						<input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE		DATE		TIME		SCALE	
72E(c) 4815-4817		7/4/72		15:02		1:30,000	
72E(c) 4866-4867		7/4/72		15:28		1:30,000	
64M(p) 3646		6/12/64		09:33		1:40,000	
64W(c) 919		6/12/64		09:33		1:24,000	
						4.2 ft. above MLLW	
						5.1 ft. above MLLW	
						3.8 ft. below MLLW	
						3.8 ft. below MLLW	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean high water line was delineated from field inspection on 64M 3646 and office interpretation of the above listed photographs.

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

Office interpretation of the above listed 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
No Survey	No Survey	T-12789	T-12782

REMARKS

T-12783

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. Houlder	Aug 1964
2. HORIZONTAL CONTROL	RECOVERED BY WHS ESTABLISHED BY NA PRE-MARKED OR IDENTIFIED BY WHS	Aug 1964 Aug. 1964
3. VERTICAL CONTROL	RECOVERED BY NA ESTABLISHED BY NA PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None LOCATED (Field Methods) BY None IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY BY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY None	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
64M(P)3648	Drake, 1939 (SS 1)		
64M(P)3648	Drake, 1939 (SS 2)		
64M(P)3649	Open, 1939 (SS 1)		
64M(P)3649	Open, 1939 (SS 2)		

3. PHOTO NUMBERS (Clarification of details)

64 M(P) 3646

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)

2 Forms 152
Field Inspection Report

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12783
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	B. M. P.	Jun 1972
2. HORIZONTAL CONTROL	RECOVERED BY O. F. S.	Jun 1972
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY O. F. S.	Jun 1972
3. VERTICAL CONTROL	RECOVERED BY NA	
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE BY	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
72E(c)4866	Open, 1939		

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)

1 form 152

NOAA FORM 76-36D
(3-72)

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

T-12783

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.	Oct. 1973	Class III	11/4/75	
Final Review prior to registration	Aug. 1977	Class II-Field inspection, previously lost, applied-few corrections made, MLLWL added.	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

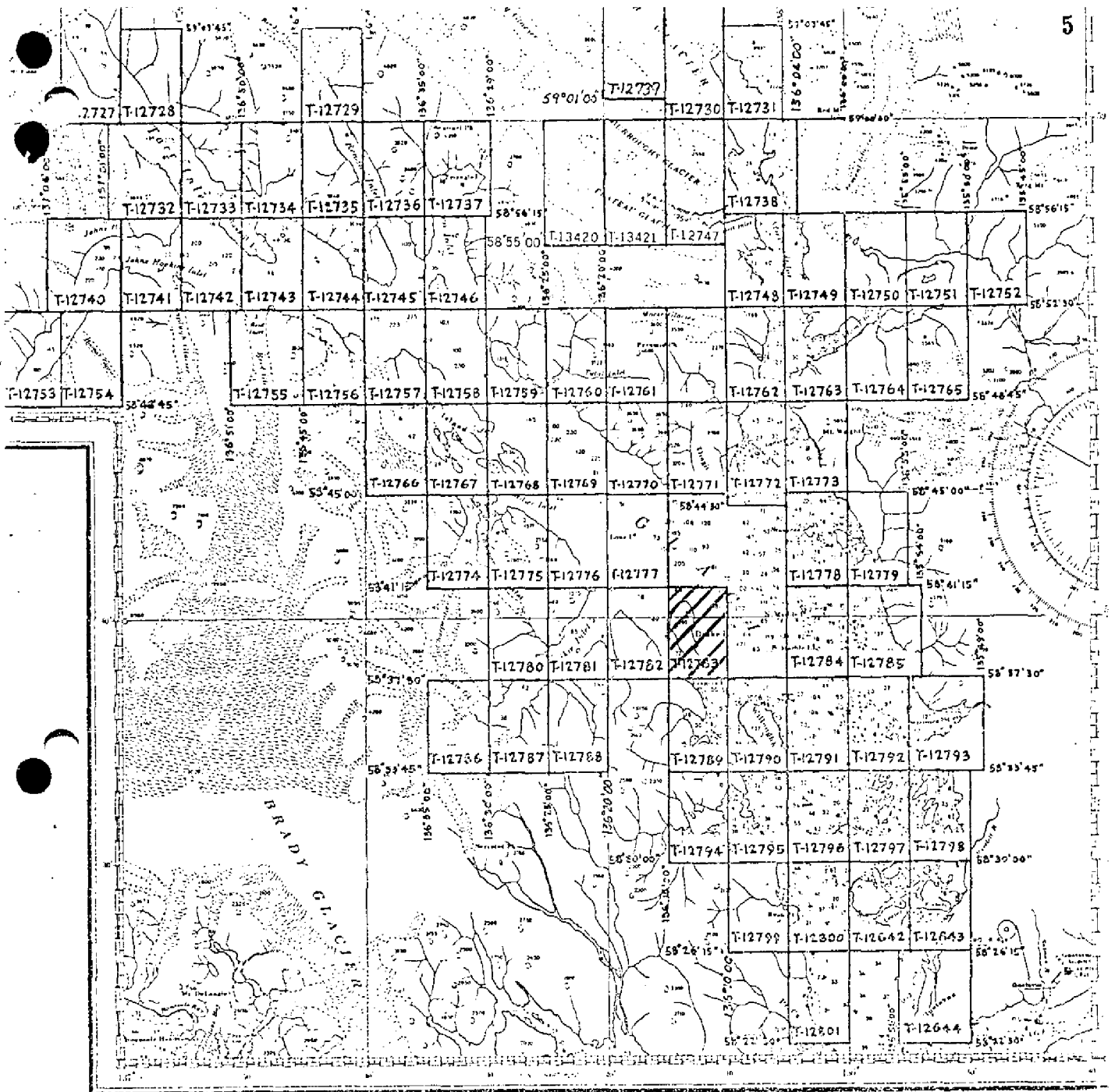
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

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	



REVISED 9-5-72 RWW

JOB PH-6502
GLACIER BAY
ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12783

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

Field inspection was done by a photogrammetric party in August 1964.

Aerotriangulation was done in Rockville in July 1973.

Compilation was done at the Atlantic Marine Center in Sept.-Oct. 1973. Hydrographic support data was prepared, but never used.

There was no field edit for this map.

Final review was done at the Atlantic Marine Center in August 1977.

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 Information Section for dispersal.

11 September 1964

FIELD INSPECTION REPORT

Project 21423 - Glacier Bay

2. AREAL FIELD INSPECTION

No map numbers appear on the Project Diagram for this part of Glacier Bay which includes inspection of the islands and bays on the west side from the south end of Willoughby Island northward to Tlingit Point, then both shores northwestward to Tidal Inlet on the north, Gilbert Island and Hugh Miller Inlet on the south.

There are no populated places. All the area lies within the Glacier Bay National Monument and is managed by the National Park Service. A pamphlet regarding the Monument is enclosed, herewith.

The shoreline varies from that at the base of rock bluffs or steep slopes, where there is no beach, to the irregular type where there are numerous indentations, ledge out-croppings and narrow gravel and boulder-strewn beaches.

There are two major inlets on the southeast shore, (Geikie and Hugh Miller -CHarpentier) and one on the north (Tidal). At the heads of these inlets and the principal coves off them are tidal flats probably caused by streams-flowing from the receding glaciers. These are gravel and silt. The one at the head of Geikie Inlet is near the base of a glacier partly visible on the photographs - 64M 3752 and 3753. It is interesting to note the large "mountains" of loose gravel on the north side evidently left by the receding glacier.

Field inspection was of necessity rather hurriedly done due to a bad weather period and completion deadline. However, practically the entire shoreline was covered and inspection is believed to be adequate.

Field inspection notes will be found on the following 1:40,000 scale photographs: 64M 3646, 3651, 3652, 3661, 3662, 3663, 3665 thru 3670, 3682, 3684, 64M 3748 thru 3750, 3755 thru 3757, 3761 thru 3764, 3766 thru 3768.

The photography is of excellent quality with no significant problems as to definition or interpretation. Coverage is complete except for Lone Island, a small island approximately midway between north and south shores in Glacier Bay. Triangulation Station Lone 1939 at Lat. $58^{\circ} 43' 20.492''$, Long. $136^{\circ} 17' 35.614''$, is on the island. About half of the island is visible on photo 64M 3757.

3. HORIZONTAL CONTROL

Photogrammetric plot requirements are believed to be satisfied by (1) recovery and identification of existing stations as called for on the project diagram and (2) establishment and identification of two new stations by triangulation methods.

Enlargements of sections of the 1:40,000 scale contact photographs were furnished for identification of several of the required control stations. These proved very useful. However, enlargements were not received for Stations: STAR, ELSE, OPEN and DRAKE on flight strip No. 3. These were identified on the contact photos.

The two stations established are RANA and ACE. Positions are furnished with project data. These stations marks were set in 1944 by S.B.G., but the season apparently ended before positions were determined.

3. Cont.

One required station could not be found. In place of it, (DINGO), nearby station KMOB was identified.

All stations recovered and identified are Coast and Geodetic Survey stations except HUGH MILLER EAST BASE 1907 and GLOOMY 1907, which were established by the International Boundary Commission.

Note: The U. S. Geological Survey is in process of publishing new quadrangular maps of the northwest part of Glacier Bay, the field work having been done in the early 1960's. It is believed that they established additional horizontal control that may prove useful to future surveys northward of our 1964 work. It is suggested that this be investigated before the next seasons work is begun.

4. VERTICAL CONTROL

Inapplicable.

5. CONTOURS AND DRAINAGE

Contours are inapplicable.

The photographs show many small streams flowing down the mountains from the melting snow and ice. Many were labelled but thorough check was not attempted. The photographs were taken in June when the runoff was building to its height and the streams are readily seen. It is felt that they should be delineated "Perennial", as the snow and ice melts all summer, never entirely dissipating in most areas.

6. WOODLAND COVER

Except where covered by snow, the wooded areas are obvious on the photographs. Usually where there is a beach, it is fringed with dense alder. The alder seems to be gaining in its northward growth as the glaciers recede. It is thick and tall and is worthy of being mapped as trees or woods and has been so labelled numerous times. Other trees are mostly conifers with some deciduous here and there.

7. SHORELINE AND ALONGSHORE FEATURES

These were visually inspected from a skiff running close to shore.

Mean high-water line has been indicated by dashes in red ink on the photographs. An attempt was made to place the ink line in its true position as viewed from the skiff. In some instances the compiler, working under more favorable conditions can delineate the line more accurately, particularly with regards small indentures and added character that will readily be seen on large scale photos or plates. At times, notes were made indicating that the mean high-water line was obvious, such as at the base of a bare rock mountain where high-water and low-water lines are synonymous, or practically so. Along numerous stretches of shoreline where there is a narrow beach, the mean high-water line lies against the vegetation; other stretches find the line offshore 3 to 5 meters from the vegetation. Notes cover most of these cases.

The photographs were taken at or near low-water. The low-water line is obvious and has been indicated as approximate with green dots at many places.

7. Cont.

A large part of the inspection was done at low tide and the foreshore classified at that time. It is reasonably thorough and accurate.

There are no man-made shoreline structures. Many protruding ledges are visible, a large number being labelled.

There is no "apparent" shoreline.

Mean high-water lines crossing the tidal flats have been labelled "approximate". The line as shown was arrived at by observing (1) slight change of photographic tone, (2) crossing the flat from a snow line which comes down to high water, (3) detecting a tiny streak of debris deposited at high-water, or (4) accomplishing the inspection at or near high water.

8. OFFSHORE FEATURES

Rocks and a few shoals constitute the offshore features. These were visited and labelled. Height of rocks above mean high-water was obtained by carefully estimating the amount (in feet) that is above the high-water markings on the rock, or the height bare at hour and date of inspection. Time did not permit accurately measuring these features but it is believed they are labelled within a foot or two of true heights.

Refer to item 7 for a discussion of low-water line and foreshore.

9. LANDMARKS

None

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

None established.

12. OTHER INTERIOR FEATURES

None.

13. GEOGRAPHIC NAMES

No systematic investigation was made. No conflicts or new names came to light during the course of the work. It is suggested that comparison of charted names be made with the latest U. S. Geological Survey quadrangals.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

None.

15. SUMMARY

The recovery and identification of horizontal control was completed for the central section of Glacier Bay between Willoughby Island and Gilbert Island. Field inspection of this area was also completed.

It appears that it will be necessary to establish an extensive sea level control scheme northwest of Gilbert Island and in Tarr Inlet in order to meet photogrammetric and hydrographic requirements. The only stations in this area are 1909 IBC stations on mountains peaks normally covered with snow thus difficult to recover and impossible to identify on the photography. In order to comply with 2nd order specifications, this scheme should start in central Glacier Bay at stations CASE and GEIKIE and should consist of a combination of triangulation and electronic traverse.

William H. Shearouse

William H. Shearouse
Cartographer

Approved and Forwarded

Richard H. Houlder

Richard H. Houlder, LCDR, USC&GS

Stations which were recovered, or searched for, or established, and/or identified are tabulated below.

STATION NAME	RECOVERED	IDENTIFIED	PHOTO NO.
JILL 1938	yes	yes	64 M 3692 (enlarg)
NONE 1938	yes	no	
ALUM 1938	yes	no	
TREE 1938	yes	no	
SPIT, 1938	yes	no	
STAR 1938	yes	yes	64 M 3653 (contact)
EVER 1939	yes	yes	64 M 3661 (enlarg)
ELSE 1939	yes	yes	64 M 3649 (enlarg)
VENT 1939	yes	no	
SINK 1939	yes	no	
FRANK 1939	yes	no	
OPEN 1939	yes	yes	64 M 3649 (contact)
GOLD 1939	yes	no	
JUST 1939	yes	no	
DUCE 1939	yes	no	
ENTER 1939	yes	no	
KILL 1939	yes	no	
DRAKE 1939	yes	yes	64 M 3648 (contact)
RIDGE 1939	yes	no	
DESERT 1944	yes	yes	64 M 3746 (enlarg)
KELP 1944	yes	no	
JUMBO 1944	yes	no	
MID 1944	yes	no	
BUTE 1944	yes	no	

STATION NAME	RECOVERED	IDENTIFIED	PHOTO NO.
VELN 1944	yes	no	
ROUND ?	yes	no	
SNOW 1944	yes	no	
BALD 1944	yes	no	
KNOB 1944	yes	yes	64 M 3749 (contact)
DINGO 1944	no		
CUBE 1944	yes	yes	64 M 3750 (enlarg)
POINT 1944	yes	no	
FOX 1944	yes	no	
MINK 1944	yes	no	
ARCH 1944	yes	yes	64 M 3685 (enlarg)
RAMPART 1944	yes	yes no	
FLAT 1939	yes	yes	64 M 3666 (enlarg)
HUGH MILLER W BASE 1907	no		
HUGH MILLER E BASE 1907/1944	yes	yes	64 M 3668 (enlarg)
GLOOMY 1907	yes	yes	64 M 3763 (enlarg)
CASE 1939	yes	yes	64 M 3762 (enlarg)
DONE 1939	yes	yes	64 M 3761 (enlarg)
TLINGIT 1939	yes	yes	64 M 3761 (enlarg)
GEIKIE 1939	yes	no	
LONE 1939	yes	no	
RANA 1964	yes	yes	64 M 3669 (enlarg) contact
ACE 1964	yes	yes	64 M 3765 (contact)
FLAG 1944	yes	no	
NORTE 1939	yes	no	
QUICK 1939	yes	no	

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

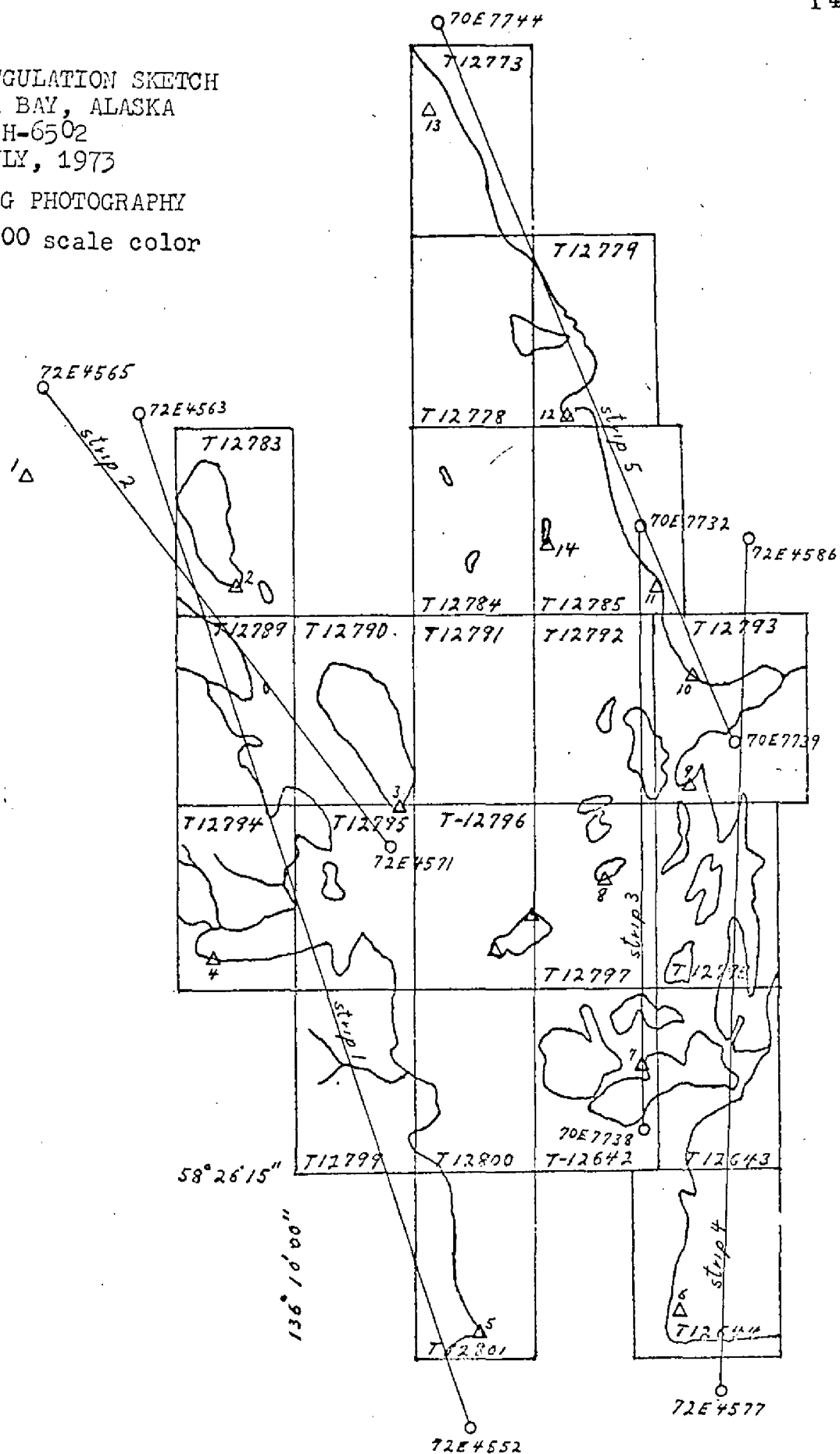
Don O. Norman

approved by:

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

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

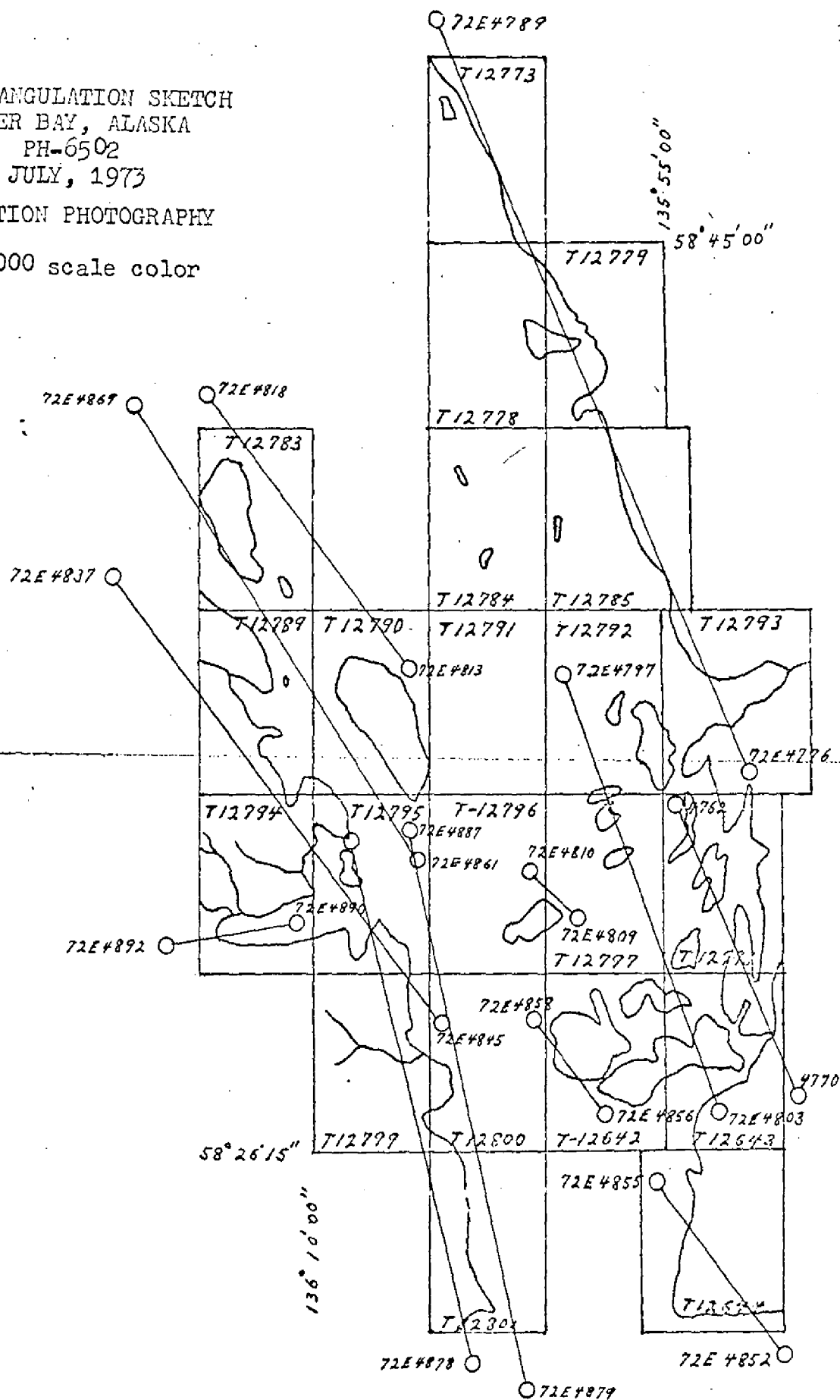
BRIDGING PHOTOGRAPHY
01:40000 scale color



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

COMPILATION PHOTOGRAPHY

O 1:30000 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
				STATE	ZONE			Div.	AMC, Norfolk, Va.	
		SOURCE OF INFORMATION (Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET		GEOGRAPHIC POSITION		REMARKS		
				STATE	ZONE	ϕ	λ	LONGITUDE	BACK	
	DRAKE, 1939	G.P. VOL 3 P. 806				ϕ 58	40	31.344	969.8' (886.7)	
						λ 136	13	14.413	232.3' (734.6)	
	ENTER, 1939	G.P. VOL 3 P. 792				ϕ 58	39	30.307	937.8' (918.7)	
						λ 136	14	40.532	653.5' (313.9)	
	DUCE, 1939	G.P. VOL 3 P. 806				ϕ 58	38	51.068	1580.1' (276.4)	
						λ 136	12	29.731	479.5' (488.3)	
	OPEN, 1939	G.P. VOL 3 P. 801				ϕ 58	38	02.130	65.9' (179Q.6)	
						λ 136	12	35.243	568.6' (399.5)	
	JUST, 1939	G.P. VOL 3 P. 801				ϕ 58	38	30.037	929.4' (927.1)	
						λ 136	13	36.814	593.8' (374.1)	
	FRANK, 1939	G.P. VOL 3 P. 801				ϕ 58	37	29.789	921.7' (934.8)	
						λ 136	10	37.639	607.5' (360.9)	
	GOLD, 1939	G.P. VOL 3 P. 806				ϕ 58	37	54.489	1686.0' (170.5)	
						λ 136	14	30.413	490.7' (477.5)	
						ϕ				
						λ				
						ϕ				
						λ				
						ϕ				
						λ				
COMPUTED BY	A. C. Rauck, Jr.			DATE	7/3/73	COMPUTATION CHECKED BY		Charles Parker	DATE	July 5, 1973
LISTED BY				DATE		LISTING CHECKED BY			DATE	
HAND PLOTTING BY				DATE		HAND PLOTTING CHECKED BY			DATE	

COMPILATION REPORT

T-12783

31. DELINEATION:

The alongshore details of Drake Island beginning at latitude $58^{\circ} 39.7'$, longitude $136^{\circ} 14.6'$ northward and around to latitude $58^{\circ} 40.4'$, longitude $136^{\circ} 13.1'$ were compiled graphically. All other details were compiled 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. See Item 31.

The mean high water line was delineated from the photographs.

36. OFFSHORE DETAILS:

None.

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: Mt. Fairweather (c-1), ALASKA, scale 1:63,360, dated 1949.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison has been made with the following Coast & Geodetic Survey chart: 8202, scale 1:209,978, 15th edition, Oct. 21, 1968.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

Albert C. Rauck, Jr. FOR
G. R. Vanderhaven
Cartographer
Sept. 1973

Approved:

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

ADDENDUM TO COMPILATION REPORT

T-12783

At the time of Final Review, field inspection, which was not utilized when the manuscript was originally compiled, was applied. The dashed line around the foreshore area was removed and the mean lower low water line was added.

Submitted by:

Charles H. Bishop

Charles H. Bishop
Final Reviewer
August 2, 1977

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12783

Drake Island

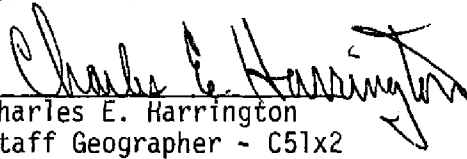
Francis Island

Glacier Bay

Whidbey Passage

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			
TR - 12783			
1. PROJECTION AND GRIDS ALS	2. TITLE ALS	3. MANUSCRIPT NUMBERS ALS	4. MANUSCRIPT SIZE ALS
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY ALS	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES NA	10. PHOTOGRAMMETRIC PLOT REPORT ALS	11. DETAIL POINTS ALS
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE ALS	13. LOW-WATER LINE ALS	14. ROCKS, SHOALS, ETC. ALS	15. BRIDGES ALS
16. AIDS TO NAVIGATION ALS	17. LANDMARKS ALS	18. OTHER ALONGSHORE PHYSICAL FEATURES ALS	19. OTHER ALONGSHORE CULTURAL FEATURES ALS
PHYSICAL FEATURES			
20. WATER FEATURES ALS	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 ALS
CULTURAL FEATURES			
27. ROADS ALS	28. BUILDINGS ALS	29. RAILROADS ALS	30. OTHER CULTURAL FEATURES ALS
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES ALS	34. JUNCTIONS ALS		35. LEGIBILITY OF THE MANUSCRIPT ALS
36. DISCREPANCY OVERLAY ALS	37. DESCRIPTIVE REPORT ALS	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS ALS
40. REVIEWER <i>A. L. Shands</i> A. L. Shands 10/31/73		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-12783

SHORELINE

August 1977

61. GENERAL STATEMENT:

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

No comparison print was made for this map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

A comparison was made with a copy of Survey T-6754, 1:20,000 scale, dated Aug.-Sept. 1940. Generally, the shoreline compared well, but in the places that are in disagreement, the T-6754 shoreline is inshore of the T-12783 shoreline.

In the area compared, T-12783 supersedes T-6754 for nautical chart construction purposes. T-6754 is the latest registered prior survey of the area.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with USGS Quadrangle MT. FAIRWEATHER (C-1), ALASKA, 1:63,360 scale, dated 1949. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a copy of the verified smooth sheet for Survey H-8817 (LJ-20-2-64). Several discrepancies were noted.

Apparently registered topographic Survey 6754 was the source of shoreline for the area compared. Therefore, there are some shoreline discrepancies.

The MLLW line at approximate Latitude $58^{\circ} 39.6'$, Long. $136^{\circ} 12.8'$ is approximately 100 meters offshore from the waterline on photography taken at a minus 3.5 ft. tide (Photo 64 M 3646, June, 1964). This does not seem reasonable.

The MLLW line at approximate Latitude $58^{\circ} 40.1'$, Long. $136^{\circ} 14.6'$ is likewise approximately 100 meters offshore from the waterline on Photo 64 M 3646. In both of these areas, the MLLW line on H-8817 is in what appears on the photographs to be deep water. The soundings reading minus 0.5 fm. and shoaler should be bare on the photographs; they are not. There was ~~either~~ considerable up-lift of the bottom in these areas in less than three months or the positions of the soundings are in error. The date of photography was June 12, 1964; the date of hydrography was June-August, 1964.

Rocks on H-8817 at approximate Lat. $58^{\circ} 38' 40.5''$, Long. $136^{\circ} 12' 30''$ (Elev. (12)) and approximate Lat. $58^{\circ} 39' 03''$, Long $136^{\circ} 14' 08''$ (Elev. (16)) are not visible on the photographs at the same positions. Rocks near these positions are visible and were mapped on T-12783.

Rocks awash without elevations were apparently carried forward to H-8817 from Survey 6754. These areas are labeled "rky" on T-12783.

Just north of Station ENTER 1939, the MHW line, a rock bare 3 ft. at mHW, and a rock awash, on H-8817 are approximately 40 meters inshore from the MHW line on T-12783. This situation can not be resolved photogrammetrically.

In areas where the MLLW line was in disagreement it was removed from T-12783.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 17300 (8202), 1:209,078 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
August 2, 1977

Approved for forwarding:

Joseph W. Vonasek

Joseph W. Vonasek
Chief, Photogrammetric Branch, AMC

Approved:

R.K. Hanson

Chief, Photogrammetric Branch

James L. ...

Chief, Coastal Mapping Div.