ORIGINAL

T-12776

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-12776

Classification No. *Edition No.* 1

Field Edited

LOCALITY

State Alaska

General Locality Glacier Bay

Locality Hugh Miller Rocks

1964 TO 1970

REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-775

T-12776

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR

TO REGISTRATION

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TR. 12776

MAP EDITION NO. (1)

MAP CLASS 1

JOB PH. 6502

PHOTOGRAMMETRIC OFFICE: Coastal Mapping Division, Norfolk

OFFICER-IN-CHARGE: Jeffrey G. Carlen, CDR

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH. ____

MAP CLASS ____

SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
November 16, 1964 December 18, 1969	

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [ ] MEAN LOW-WATER [X] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Polyconic

4. GRID(S): STATE: Alaska; ZONE: 1

5. SCALE: 1:10,000 — STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	G. Ball	Aug., 1965
METHOD: Analytic	LANDMARKS AND AIDS BY	None	
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	C. Blood	Apr., 1970
METHOD: Coordinatograph	CHECKED BY	R. White	Apr., 1970
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	A. Shands	May, 1970
	CHECKED BY	A. Rauck & L. Neterer	May, 1970
INSTRUMENT: Wild B-8	CONTOURS BY	N.A.	
SCALE: 1:15,000	CHECKED BY		
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	B. Wilson	May, 1970
	CHECKED BY	R. Pate	May, 1970
METHOD: Smooth ink drafting	CONTOURS BY	N.A.	
	CHECKED BY		
SCALE: 1:10,000	HYDRO SUPPORT DATA BY	B. Wilson	May, 1970
	CHECKED BY	R. Pate	May, 1970
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	R. Pate	May, 1970
6. APPLICATION OF FIELD EDIT DATA	BY	A. Shands	Nov., 1971
	CHECKED BY	B. Barge	Nov., 1971
7. COMPILATION SECTION REVIEW	BY	B. Barge	Nov., 1971
8. FINAL REVIEW	BY	C. Bishop	June, 1975
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY		
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	N. J. Frances	Aug 26, 1975

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

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

T-12776

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S)	TYPES OF PHOTOGRAPHY LEGEND	TIME REFERENCE
Wild RC-9 "M"	(C) COLOR X (P) PANCHROMATIC (I) INFRARED	ZONE: Pacific ☒ STANDARD ☐ DAYLIGHT MERIDIAN: 120 W

TIDE STAGE REFERENCE JUNEAU
☒ PREDICTED TIDES (Willoughby I.d.)
☐ REFERENCE STATION RECORDS
☐ TIDE CONTROLLED PHOTOGRAPHY

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
64 M(P) 3757	6/12/64	12:19	1:40,000	1.0 ft. above MLLW
64 M(P) 3666 & 3667	6/12/64	10:06	1:40,000	4.0 ft. below MLLW

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Field inspection (Aug., 1964), Field edit (Aug., 1970), and office interpretation of above listed photos.

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

Office interpretation of above listed photos.

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-12769	T-12777	T-12781	T-12775

REMARKS

NOAA FORM 76-36C
(3-72)

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

T-12776

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION ☐ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R.H. Houlder	Summer 1964
2. HORIZONTAL CONTROL	RECOVERED BY		
	None ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
3. VERTICAL CONTROL	RECOVERED BY		
	None ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY		
	LOCATED *(Field Methods)* BY		
	None IDENTIFIED BY		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	W.H. Shearouse	Aug. 1964
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. *SOURCE DATA*

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

64 M(P) 3667

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE

6. 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)*

Field Inspection Report.

* U.S. G.P.O. 1972-769381/567 REG.#6

NOAA FORM 76-36C
(3-72)

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

T-12776

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		J.B. Watkins, Jr.	Summer 1970
2. HORIZONTAL CONTROL	None — RECOVERED BY		
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
3. VERTICAL CONTROL	None — RECOVERED BY		
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION	None — RECOVERED *(Triangulation Stations)* BY		
	LOCATED *(Field Methods)* BY		
	IDENTIFIED BY		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION — BY		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	M.R. Mulhern	Aug. 1970
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED: None

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

64 M(P) 3666

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE

6. 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)*

Field Edit Report, Field Edit Ozalid.

NOAA FORM 76-36C
(3-72)

U.S. G.P.O. 1972-769381/567 REG.#6

NOAA FORM 76-36D
(3-72)

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

T-12776

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	May, 1970	Superseded		5/21/70
Field edit applied, compilation complete	Nov. 1971	Class I Superseded		
Final Review	June 1975			

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

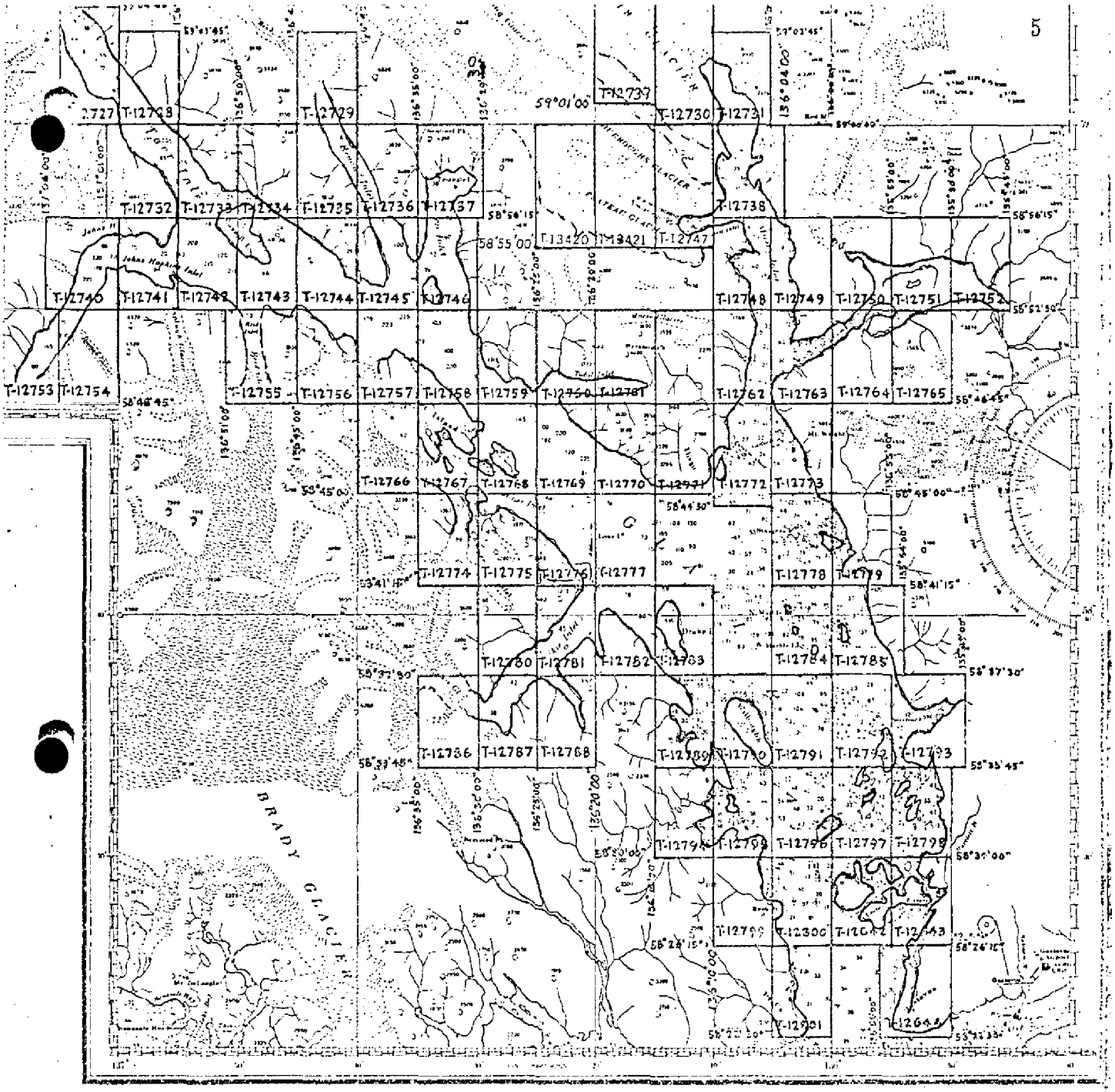
1. ☐ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☐ COMPUTER READOUTS.
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:
4. ☐ DATA TO FEDERAL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

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

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

NOAA FORM 76-36D

* U.S. G.P.O. 1972-769380/548 REG.#6



REVISED 9-5-72 RWW

JOB PH-6502
GLACIER BAY
ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-12776

This 1:10,000 scale shoreline manuscript is one of 80 maps that comprise Project PH-6502 which covers Glacier Bay, Alaska and its numerous tributaries. For convenience of compilation, the project was divided into five parts, according to aerotriangulation bridges. This map is one of 21 maps that comprise Part I which covers Glacier Bay from Geikie Inlet to Composite Island.

Field inspection was done by an experienced photogrammetrist in August, 1964. No horizontal control identification was required in the area covered by this map.

Bridging was done by analytic aerotriangulation methods in the Rockville Office in August, 1965, using 1:40,000 scale panchromatic wide angle photography taken in June, 1964.

Compilation was done at the Atlantic Marine Center, Norfolk, in May, 1970, using the Wild B-8 plotter, with 1:40,000 scale photography taken in June, 1964. Photographs were ratioed to 1:10,000 scale for photo-hydro support and field edit use. The time of photography was near low water.

Field edit was done in conjunction with hydrography in June, and August, 1970.

Final review was done at the Atlantic Marine Center in June, 1975.

The original manuscript was a stabilene sheet 3 minutes 45 seconds in latitude by 5 minutes on longitude.

A stable base positive copy and a negative of the final reviewed manuscript were forwarded for record and registry.

USC&GSS LESTER JONES 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° 43' 20.492", Long. 136°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 KNOB was identified.

A 11 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 quadrangal 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 northwestward 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.
VEIN 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 3768 (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 (contact ~~enlarg~~)
ACE 1964	yes	yes	64 M 3765 (contact)
FLAG 1944	yes	no	
NORTE 1939	yes	no	
QUICK 1939	yes	no	

PHOTOGRAMMETRIC PLOT REPORT
Project 21511
Alaska
August 1965

21. Area Covered

This report covers an area of Alaska in a portion of Glacier Bay from 136° 05' 00" W to 136° 36' 00" W, including Geikie Inlet.

22. Method

Analytic aerotriangulation methods were used: to bridge six strips of "M" photography at the scale of 1:40,000. The attached sketches of strips bridged shows the triangulation used in the adjustments. Closures to control and tie points have been tabulated.

23. Adequacy of Control

Horizontal control identified and required to adjust these strips was very fine. Control identification, with the exception of RANA, 1964 and CASE, 1939 which could not be positively identify by the instrument operators, was of superior quality. The field party is to be complimented on their excellent work. For the most part, triangulation sub points were clearly visible on the cross flights, this was accomplished in an area of extremely rough terrain. All stations were used in this adjustment except RANA, 1964 and CASE 1939, the results of the six bridges should comply to the National Standards of Map Accuracy for the twenty shoreline sheets to be compiled.

24. Supplemental Data

Numerous USGS quads were used to obtain elevations required for the final horizontal and vertical adjustments.

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

STRIP #1

DRAKE, 1939

SS#1	(-0.7	+0.3)
SS#2	(-3.1	+3.7)

OPEN, 1939

SS#1	(+4.7	+2.0)
SS#2	(+0.4	-1.1)

ELSE, 1939

SS#1	(-0.5	+5.5)
SS#2	(+9.8	+5.1)

EVER, 1939

SS#1	(-3.0	-3.0)
SS#2	(-1.7	-0.8)

TAR, 1939

SS#1	(+0.3	+0.8)
SS#2	(+3.6	+12.7)

Ties to Strip #2

13501	(-6.5	-3.4)
13504	(+2.6	-3.4)
13505	(-4.3	-3.5)

STRIP #2

JILL, 1938

SS#1	(0.0	0.0)
SS#2	(+4.9	-1.9)

EVER, 1939

SS#1	(+0.8	+1.6)
SS#2	(0.0	0.0)

STRIP #3

LSE, 1939

SS#1	(-0.1	-0.5)
SS#2	(This pt. could not be seen on this strip)	

EVER, 1939

SS#1	(+3.8	-3.2)
SS#2	(+1.8	-1.3)

OPEN, 1939

SS#1	(-0.3	+1.3)
SS#2	(-1.1	+4.4)

DESERT, 1944

SS#1	(0.0	-4.3)
SS#2	(+2.2	-2.5)

FLAT, 1939

SS#1	(-0.8	+3.1)
SS#2	(-0.3	+3.6)

ARCH, 1944

SS#1	(+0.9	+0.3)
SS#2	(-0.4	-2.5)

HUGH MILLER E. BASE, 1907

SS#1	(-0.1	-0.1)
SS#2	(+4.5	+0.1)

RANA, 1964

(Neither of these points could be clearly seen)

Home Sta.	(+8.2	-11.7)
SS#1	(+7.9	16.9)

Ties to Strip #2

13501	(+6.8	-8.9)
15502	(+4.6	-9.6)
15504	(+1.2	-7.6)
15505	(-1.5	-7.7)

Ties to Strip #1

15504	(+3.9	-10.5)
15505	(+1.0	-4.4)
19501	(-0.9	+1.3)
19502	(-6.7	-0.9)
19503	(-12.8	-4.2)

STRIP #4

STRIP #4 (continued from page 2)

CUBE, 1944

SS#1	(+0.6	-1.0)
SS#2	(-1.8	-1.2)

KNOB, 1944

SS#1	(+1.2	-5.8)
SS#2	(-1.9	+1.1)

ARCH, 1944

SS#1	(+0.8	+1.2)
SS#2	(+3.8	+0.3)

DESERT, 1944

SS#1	(+2.7	+0.9)
SS#2	(+2.8	+2.7)

FLAT, 1939

SS#1	(+0.5	-0.7)
SS#2	(-2.3	-2.4)

STRIP #5

DESERT, 1944

SS#1	(+0.6	-1.0)
SS#2	(+2.3	-0.5)

FLAT, 1939

SS#1	(+3.5 +2.0)
SS#2	(Point not visible on this strip)

ARCH, 1944

SS#1	(-1.8	+1.3)
SS#2	(+1.5	+1.5)

KNOB, 1944

SS#1	(+2.5	-8.4)
SS#2	(+1.6	-0.9)

CUBE, 1944

SS#1	(-0.5	+0.3)
SS#2	(-2.8	+1.0)

Tie points to Strip #3

35503	(+4.9	-1.3)
35504	(+5.4	-1.2)

Tie points to Strip #4

56501	(+1.8	+1.0)
56502	(-4.7	-4.9)
56503	(-1.7	-1.0)
54501	(-2.3	+0.7)

STRIP #6

TLINGIT, 1939

SS#1	(0.0	0.0)
SS#2	(+3.5	-3.5)

DONE, 1939

SS#1	(+1.3	+0.1)
SS#2	(0.0	-0.1)

CASE, 1939 (Neither of these points were clearly seen)

SS#1	(-3.4	-25.2)
SS#2	(-1.5	-8.3)

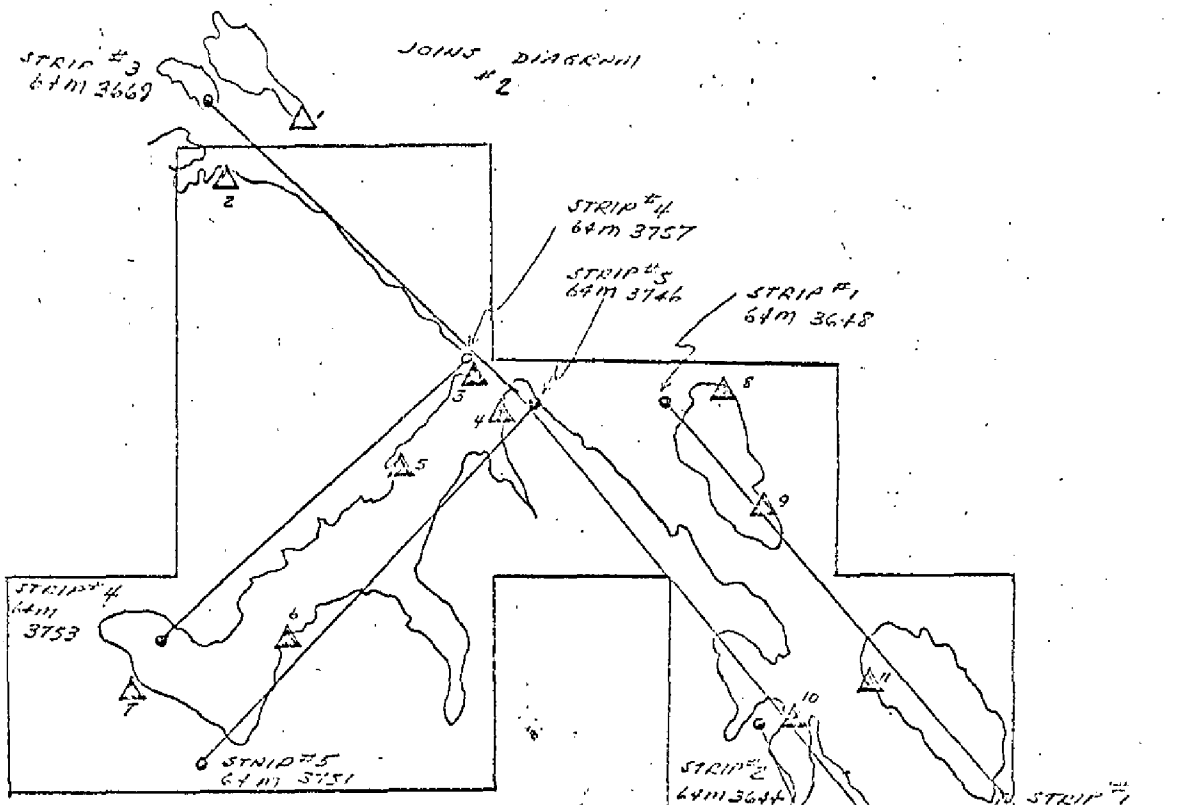
ACE, 1964

SS#1	(0.0	0.0)
SS#2	(+0.1	+1.7)

GLOOMY, 1907

SS#1	(+0.1	+2.7)
SS#2	(-0.1	0.0)

GLACIER BAY
DIAGRAM
1 of 2



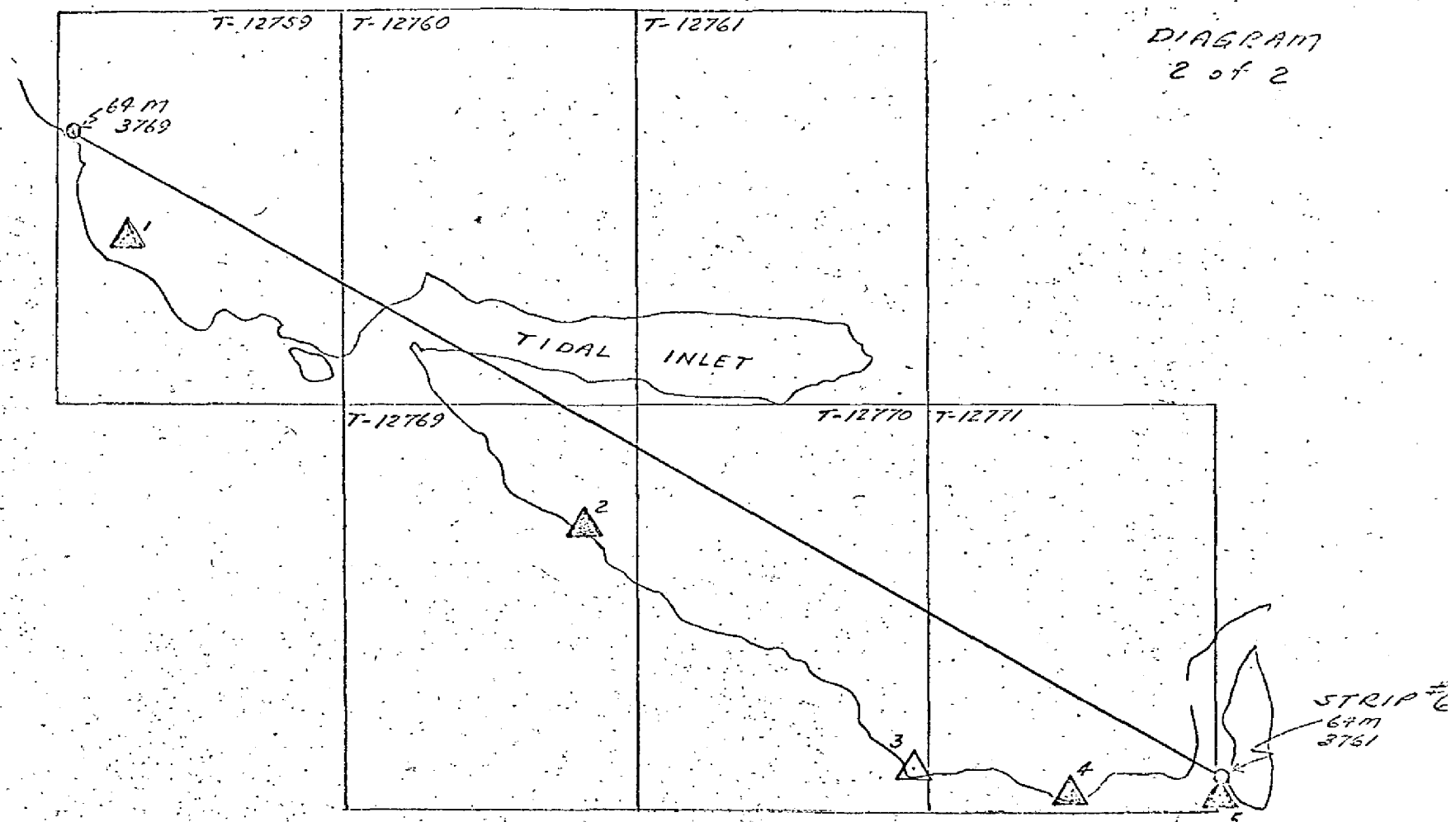
1:40,000 SCALE PHOTOS

TRIANGULATION KEY

1. RANA
2. HUGH MILLER E. BASE
3. FLAT
4. DESERT
5. ARCH
6. KNOB
7. CUBE
8. DYKE
9. OPEN
10. EVER
11. ELSE
12. STAR
13. JILL

▲ USED IN ADJUSTMENTS

△ NOT USED IN ADJUSTMENTS


T-12759
T-12760
T-12761
DIAGRAM
2 of 2
69 M
3769
1
TIDAL
INLET
T-12769
T-12770
T-12771
2
3
4
5
STRIP #6
69M
3761
1:40,000 SCALE PHOTOS
TRIANGULATION KEY
1 GLOOMY (I.B.C.)
2 ACE
3 CASE
4 DONE
5 TLINGIT
USED IN ADJUSTMENT
NOT USED IN ADJUSTMENT

NOAA FORM 76-41
(2-71)
USCOMM-DC
34168-P71
(FORMERLY FORM C&GS-164)

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP T-12776 PROJECT NO. PH-6502 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS *(1 Ft. = 3048006 meter)* FORWARD	(BACK)
ZOE, 1944	G.P. Vol. 3 Pg. 1038	N.A. 1927	58° 43' 30.03537	929.3	(927.2)
			136° 24' 23.04476	370.9	(594.7)

COMPUTED BY	DATE	CHECKED BY	DATE
C. Blood	4/24/70	R. White	4/24/70

COMPILATION REPORT

T-12776

31. DELINEATION

The Wild B-8 plotter was used. The photography was satisfactory. Field inspection was adequate.

32. CONTROL

See "Photogrammetric Plot Report", for Project 21511, dated Aug., 1965.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage was delineated from office interpretation of the photos.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline was delineated as inspected. The approximate mean lower low water line was shown from office interpretation of the photos.

36. OFFSHORE DETAILS

The cluster of offshore rocks was not indicated by the field inspector; they were delineated from office interpretation of the photos.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Satisfactory junctions were made with:

T-12775 to the west	T-12781 to the south
T-12777 to the east	T-12769 to the north

40. HORIZONTAL AND VERTICAL ACCURACY

No statement

41. FIELD EDIT

Field edit was adequate

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Quadrangle MT. FAIRWEATHER (C-2), ALASKA, scale 63,360, dated 1950. The offshore rocks do not appear on this quadrangle.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 8202, scale 1:209,978, 15th edition, dated Oct. 21, 1968.

There is shown on the chart an unidentified obstruction at 50° 44' 45" latitude and 136° 24' 45" longitude. At chart scale this is about 4 millimeters difference in latitude and 3 millimeters in longitude from the position on the manuscript of the offshore rock cluster.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDITELY

None

ITEMS TO BE CARRIED FORWARD

None

Respectfully submitted:

Charles H. Bishop

for B. Wilson, May 8, 1970
Cartographic Technician

Approved:

Albert C. Rauck Jr.

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

28 March 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12776

Glacier Bay

Glacier Bay National Monument

Hugh Miller Rocks

Approved by:

Chas. E. Harrington

Chas. E. Harrington
Staff Geographer-C51x2

NOAA FORM 75-74
(2-74)

U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEAN SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T-12776

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
RJP	RJP	RJP	RJP

CONTROL STATIONS

5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY *(Topographic stations)*	7. PHOTO HYDRO STATIONS
RJP		X X

8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
		RJP	RJP

ALONGSHORE AREAS *(Nautical Chart Data)*

12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
RJP	RJP	RJP	

16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES

PHYSICAL FEATURES

20. WATER FEATURES	21. NATURAL GROUND COVER	22. PLANETABLE CONTOURS
	X X	X X

23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
X X	X X	X X	

CULTURAL FEATURES

27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES
X X	X X	X X	X X

BOUNDARIES

31. BOUNDARY LINES	32. PUBLIC LAND LINES
X X	X X

MISCELLANEOUS

33. GEOGRAPHIC NAMES	34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT
RJP	RJP	RJP

36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
RJP	RJP	RJP	X X

40. REVIEWER	Date	SUPERVISOR, REVIEW SECTION OR UNIT
RJP	5/12/70	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	Date	SUPERVISOR
for A.L. Shands	11/2/71	Albert C. Rauck, Jr.
Reviewer: B.L. Barge	11/4/71	Albert C. Rauck, Jr.

43. REMARKS

Field Edit Applied From: field edit ozalid and field ratio 64 M-3666

NOAA FORM 75-74
(2-74)

SUPERSEDES C&GS FORM 1002 WHICH MAY BE USED UNTIL EXISTING STOCK IS DEPLETED.

FIELD EDIT REPORT

MAP T-12776

Glacier Bay

Field edit of map T-12776 was accomplished during August, 1970. Inspection was done from a launch following hydrographic survey.

METHOD

The shoreline features and mean high water line were verified by visual comparison of the shore area to the field ratio photographs and field edit ozalid of the map manuscript. Notes have been made in violet on the field edit ozalid and cross referenced where necessary to field ratio photograph 64M3666. Unless otherwise indicated all shoreline features are correct as interpreted.

All times are based on meridian 105° W.

ADEQUACY OF COMPILATION

Compilation of the map is good. Hydrographic location of features compares well to photogrammetric location. Corrections and additional identifiable features have been indicated on the field edit ozalid and photographs.

Field inspection of the map is complete.

RECOMMENDATIONS

It is recommended that the map be revised in accordance with the notes and be accepted as an advance manuscript.

Respectfully submitted,

Martin R Mulhern

Martin R. Mulhern
LTJG, USESSA

TRANSMITTAL SHEET

Preparation of these reports was done under the supervision of this Command and was found to be accurate and complete.

John B. Watkins, Jr.
CAPTAIN, USESSA
Commanding Officer
USC&GSS FAIRWEATHER

REVIEW REPORT T-12776

SHORELINE

June 26, 1976

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:

No registered topographic surveys were available for comparison.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle MT. FAIRWEATHER (C-2), ALASKA, scale 1:63,360, dated 1950. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a verified copy of the smooth sheet for Survey H-9139 (FA-20-4-70), scale 1:20,000, dated 1970. No significant differences were noted.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated Nov. 23, 1973. No significant differences were noted. The chart scale is too small for an adequate comparison.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with job instructions and meets Bureau Standards and the requirements for National Standards of Map Accuracy.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer
26 June 1975

Approved for forwarding:

Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Div.