

T-12775

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-12775

Classification No. Edition No. 1

Field Edited

LOCALITY

State Alaska

General Locality .. Glacier Bay

Locality Hugh Miller Inlet

 1964 TO 19 70

REGISTRY IN ARCHIVES

DATE

T-12775

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 <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division, Norfolk		SURVEY TP. <u>12775</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>1</u> JOB PH. <u>6502</u>	
OFFICER-IN-CHARGE Jeffrey G. Carlen		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> 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: <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 Polyconic		4. GRID(S) STATE <u>Alaska</u> ZONE <u>1</u>	
5. SCALE <u>1:10,000</u>		STATE _____ ZONE _____	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: <u>Analytic</u>		G. Ball; D. Brant	8/65; 1/68
2. CONTROL AND BRIDGE POINTS METHOD: <u>Coordinatograph</u>		C. Blood R. White	Apr., 1970 Apr., 1970
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: <u>Wild B-8 and Graphig</u> SCALE: <u>1:15,000 and 1:10,000</u>		A.L. Shands L.O. Neterer N.A.	May, 1970 May, 1970
4. MANUSCRIPT DELINEATION METHOD: <u>Smooth ink drafting</u> SCALE: <u>1:10,000</u>		B. Wilson N.A. R. Pate B. Wilson R. Pate	May, 1970 May, 1970 May, 1970 May, 1970
5. OFFICE INSPECTION PRIOR TO FIELD EDIT		R. Pate	May, 1970
6. APPLICATION OF FIELD EDIT DATA		B. Barge A. Shands	Nov., 1971 Nov., 1971
7. COMPILATION SECTION REVIEW		A. Shands	Nov., 1971
8. FINAL REVIEW		C. Bishop	June, 1975
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH			
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH			
11. MAP REGISTERED - COASTAL SURVEY SECTION		<i>N. J. Francis</i>	<u>Aug 26, 1975</u>

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12775
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-9 "M"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE JUNEAU		(C) COLOR X (P) PANCHROMATIC (I) INFRARED		ZONE Pacific	<input checked="" type="checkbox"/> STANDARD
<input checked="" type="checkbox"/> PREDICTED TIDES (Willoughby Island) <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				MERIDIAN 120 W	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE			TIME	SCALE
64 M(P) 3668 & 3669	6/12/64	10:06	1:40,000	4.0 ft. below MLLW	
64 M(P) 3683	6/12/64	10:25	1:40,000	3.9 ft. below MLLW	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

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

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

Office interpretation of photos listed above.

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-12768	T-12776	T-12780	T-12774

REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12775
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.H. Houlder	Summer 1964
2. HORIZONTAL CONTROL	RECOVERED BY R.H. Houlder ESTABLISHED BY W.H. Shearouse PRE-MARKED OR IDENTIFIED BY	Aug., 1964 Aug., 1964
3. VERTICAL CONTROL	N.A. RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
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		2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
64 M 3668	HUGH MILLER INLET EAST BASE 1907		

3. PHOTO NUMBERS (Clarification of details)

64 M 3668, 3669, 3683

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)

Field Inspection Report, CSI card.

NOAA FORM 76-36C
(3-72)

T-12775
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J.B. Watkins, Jr.	Summer 1966
2. HORIZONTAL CONTROL	RECOVERED BY J.B. Watkins, Jr. ESTABLISHED BY J.B. Watkins, Jr. PRE-MARKED OR IDENTIFIED BY L.L. Riggers	Sept. 1966 Sept. 1966
3. VERTICAL CONTROL N.A.	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
64 M 3682	SIX 1966		

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)

CSI card

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12775
HISTORY OF FIELD OPERATIONS1. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	John B. Watkins, Jr.	Summer 1970
2. HORIZONTAL CONTROL None RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY		
3. VERTICAL CONTROL N.A. 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 <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION		
6. PHOTO INSPECTION CLARIFICATION OF DETAILS BY	W. D. Neff	July & Aug. 1970
7. BOUNDARIES AND LIMITS SURVEYED OR IDENTIFIED BY	None	

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 3668 and 3669

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)

Field Edit Report, Field Edit Ozalid

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12775
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	Advance 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

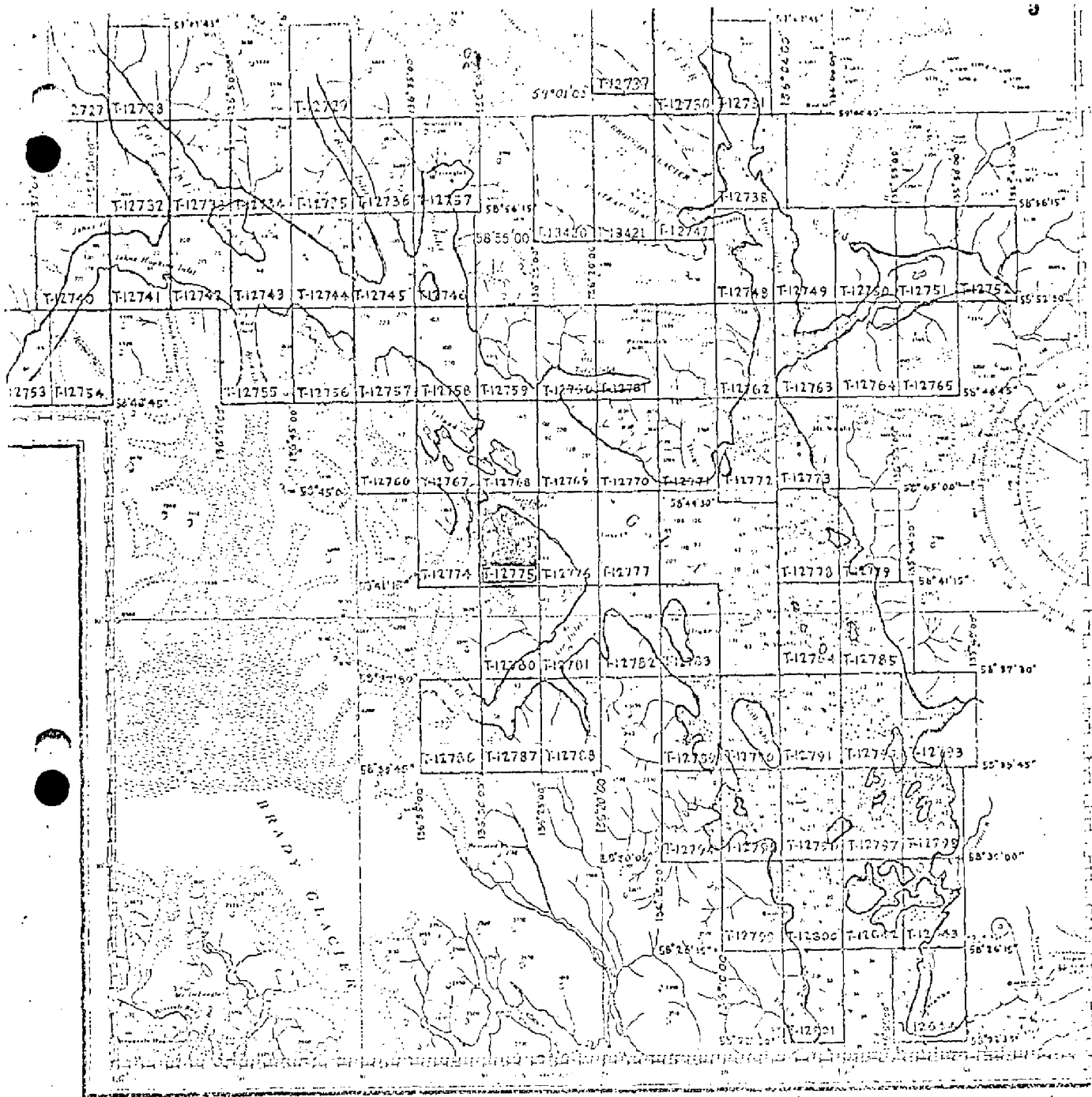
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

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)

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 RWH

JOB PH-6502 GLACIER BAY ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12775

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 in August 1964. Horizontal control required for bridging was identified at this time. One additional required station was established and identified in the summer of 1966.

Bridging was done by analytic aerotriangulation methods in the Rockville Office in August 1964 and January 1968, using 1:40,000 scale panchromatic wide angle photography taken in June 1964.

Compilation was done at the Atlantic Marine Center, Norfolk, using the Wild B-8 stereoplotter, with 1:40,000 scale photography, taken in June 1964. Because of the lack of stereoscopic coverage of shoreline north of Lat. $58^{\circ} 44'$ and west of Long. $136^{\circ} 29'$, compilation in this area was accomplished by means of a graphic extension to the B-8 model. The time of photography was near low tide.

Field edit was done in conjunction with hydrography in July 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 in longitude.

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

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 KNOB 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 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 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.
VEIN 1944	yes	no	
ROUND ?	yes	no	
SNOW 1944	yes	no	
BAID 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	no yes	
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 $136^{\circ} 05' 00''$ W to $136^{\circ} 36' 00''$ 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

$$\begin{array}{l} \text{SS\#1} \quad \{-0.7 \quad +0.3\} \\ \text{SS\#2} \quad \{-3.1 \quad +3.7\} \end{array}$$

OPEN, 1939

$$\begin{array}{l} \text{SS\#1} \quad \{+4.7 \quad +2.0\} \\ \text{SS\#2} \quad \{+0.4 \quad -1.1\} \end{array}$$

ELSE, 1939

$$\begin{array}{l} \text{SS\#1} \quad \{-0.5 \quad +5.5\} \\ \text{SS\#2} \quad \{+9.8 \quad +5.1\} \end{array}$$

EVER, 1939

$$\begin{array}{l} \text{SS\#1} \quad \{-3.0 \quad -3.0\} \\ \text{SS\#2} \quad \{-1.7 \quad -0.8\} \end{array}$$

TAR, 1939

$$\begin{array}{l} \text{SS\#1} \quad \{+0.3 \quad +0.8\} \\ \text{SS\#2} \quad \{+3.6 \quad +12.7\} \end{array}$$

Ties to Strip #2

$$\begin{array}{l} 13501 \quad \{-6.5 \quad -3.4\} \\ 13504 \quad \{+2.6 \quad -3.4\} \\ 13505 \quad \{-4.3 \quad -3.5\} \end{array}$$

STRIP #2

JILL, 1938

$$\begin{array}{l} \text{SS\#1} \quad \{0.0 \quad 0.0\} \\ \text{SS\#2} \quad \{+4.9 \quad -1.9\} \end{array}$$

EVER, 1939

$$\begin{array}{l} \text{SS\#1} \quad \{+0.8 \quad +1.6\} \\ \text{SS\#2} \quad \{0.0 \quad 0.0\} \end{array}$$

STRIP #3

LSE, 1939

$$\begin{array}{l} \text{SS\#1} \quad \{-0.1 \quad -0.5\} \\ \text{SS\#2} \quad \{\text{This pt. could not be seen on this strip}\} \end{array}$$

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)
9503 (-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 $\begin{pmatrix} +4.9 & -1.3 \end{pmatrix}$
 35504 $\begin{pmatrix} +5.4 & -1.2 \end{pmatrix}$

Tie points to Strip #4

56501 $\begin{pmatrix} +1.8 & +1.0 \end{pmatrix}$
 56502 $\begin{pmatrix} -4.7 & -4.9 \end{pmatrix}$
 56503 $\begin{pmatrix} -1.7 & -1.0 \end{pmatrix}$
 54501 $\begin{pmatrix} -2.3 & +0.7 \end{pmatrix}$

STRIP #6

TLINGIT, 1939

SS#1 $\begin{pmatrix} 0.0 & 0.0 \end{pmatrix}$
 SS#2 $\begin{pmatrix} +3.5 & -3.5 \end{pmatrix}$

DONE, 1939

SS#1 $\begin{pmatrix} +1.3 & +0.1 \end{pmatrix}$
 SS#2 $\begin{pmatrix} 0.0 & -0.1 \end{pmatrix}$

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

SS#1 $\begin{pmatrix} -3.4 & -25.2 \end{pmatrix}$
 SS#2 $\begin{pmatrix} -1.5 & -8.3 \end{pmatrix}$

ACE, 1964

SS#1 $\begin{pmatrix} 0.0 & 0.0 \end{pmatrix}$
 SS#2 $\begin{pmatrix} +0.1 & +1.7 \end{pmatrix}$

GLOOMY, 1907

SS#1 $\begin{pmatrix} +0.1 & +2.7 \end{pmatrix}$
 SS#2 $\begin{pmatrix} -0.1 & 0.0 \end{pmatrix}$

GLACIER BAY DIAGRAM

1 of 2

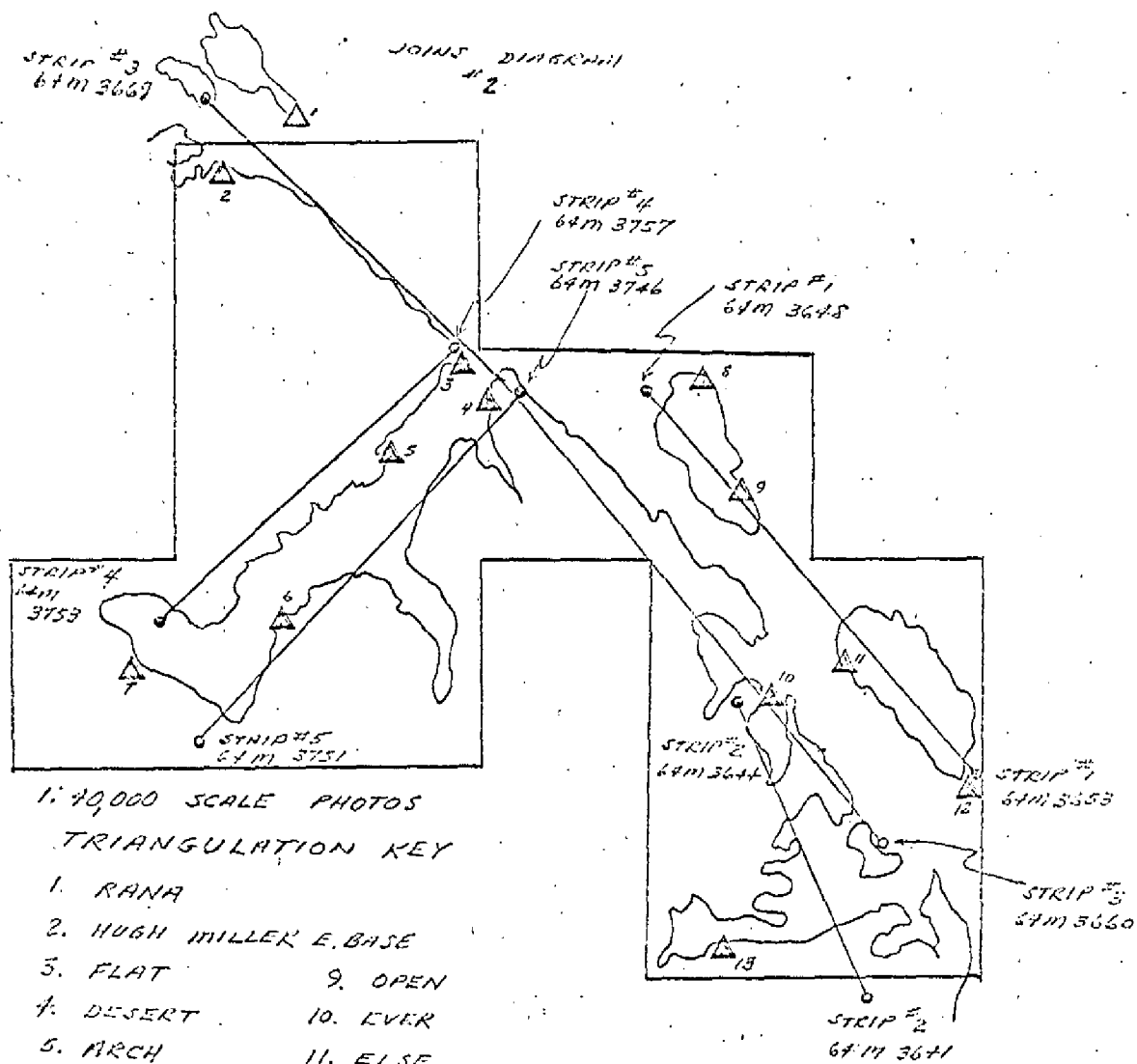
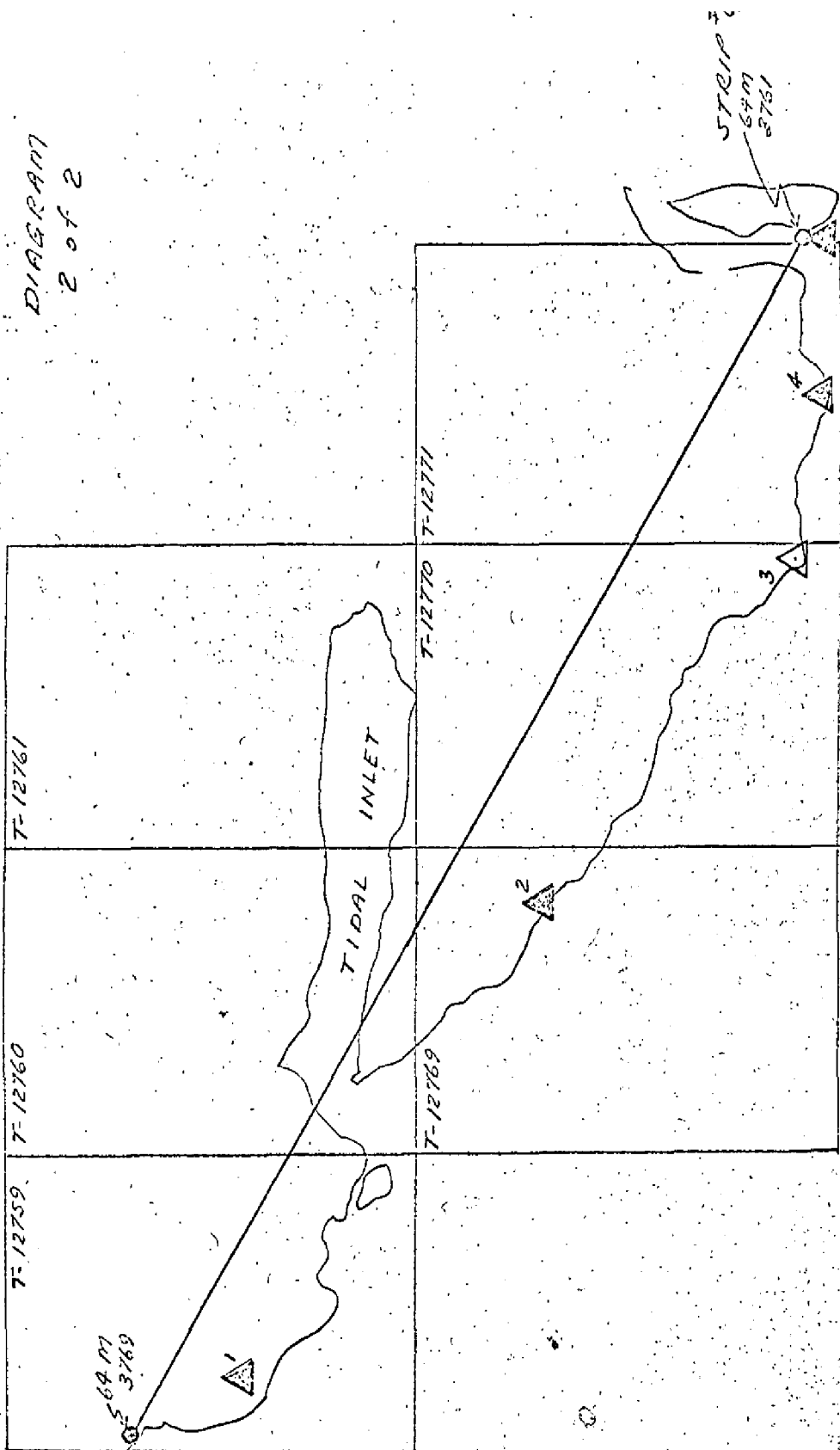


DIAGRAM
2 of 2



1:40,000 SCALE PHOTOS
TRIANGULATION KEY
1 GLOOMY (I.B.C.)
2 ACE
3 CASE
4 DONE
5 TLINGIT

Δ USED IN ADJUSTMENT
Δ NOT USED IN ADJUSTMENT

PHOTOGRAMMETRIC PLOT REPORT
Job PH-6502
Glacier Bay, Alaska

January 8, 1968

21. Area Covered

The area covered in this report is in the vicinity of Glacier Bay, Alaska, and is a continuation of Project 21511 dated August 1965. The registry numbers of the 1:10,000 scale maps are T-12756 thru T-12758, T-12766 and T-12767 and T-12774. Maps T-12768 and T-12775 were partially completed from a previous bridge. The purpose of this bridging is to furnish positions of points to control models for the compilation of shoreline mapping. The attached sketch of strips bridged shows the triangulation used in the adjustment.

22. Method

Two strips of photography were bridged using analytic aerotriangulation methods. Strips 7 and 8 (1:40,000 scale, RC-9 panchromatic photography) were adjusted to ground positions with field identified points. Satisfactory ties were made between strips. The photographic plates used in bridging are printed emulsion to emulsion.

23. Adequacy of Control

Horizontal control was adequate and complied with the project instructions. All field identified control points were natural objects. Closures to control are indicated on the listing of the aerotriangulation adjustments.

24. Supplemental Data

USGS quadrangles were used to obtain vertical control needed for the strip adjustments.

25. Photography

Photography was adequate and diapositives were of good quality.

Submitted by:

Donald M. Brant

Donald M. Brant

Approved and forwarded:

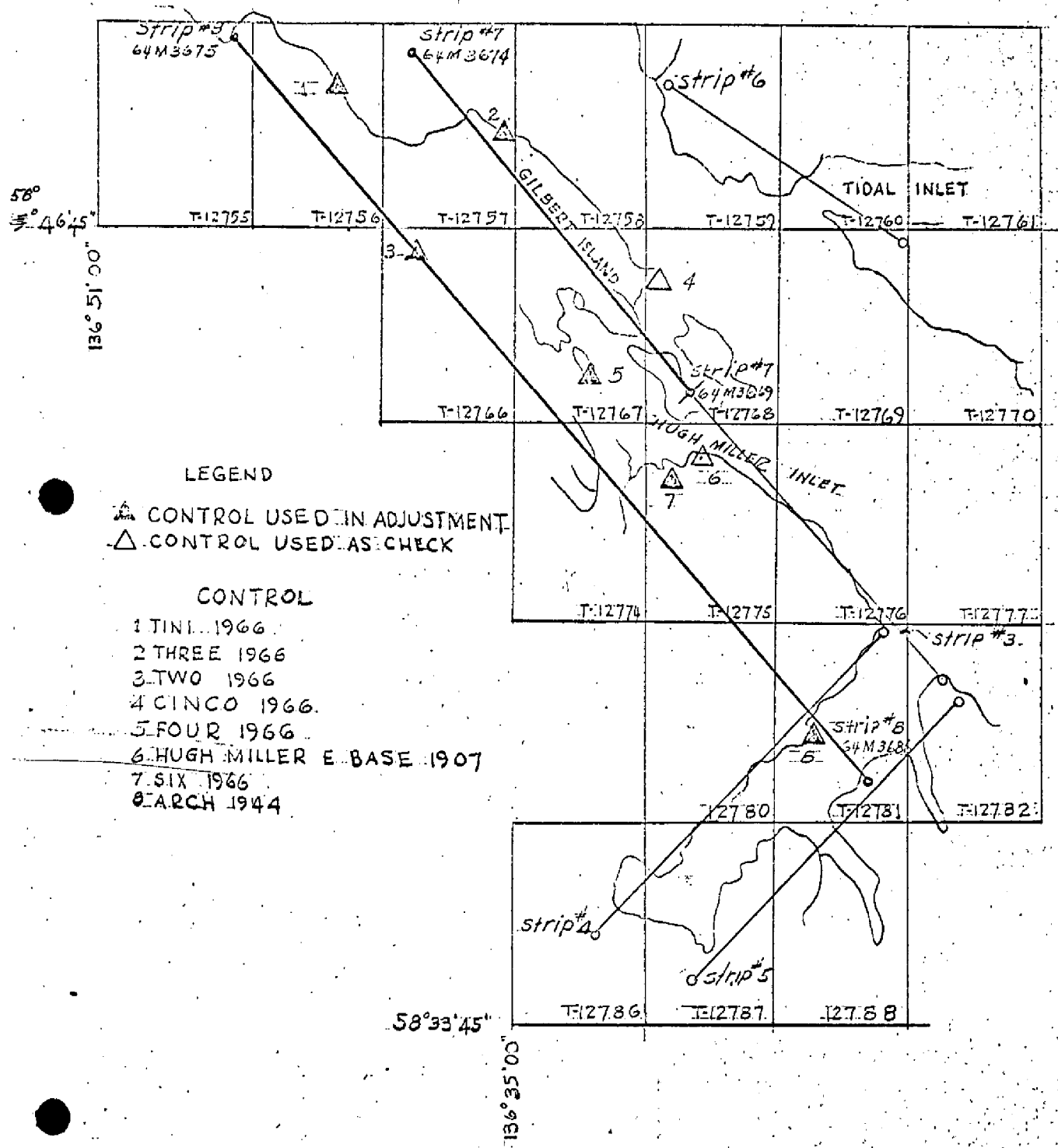
H. P. Elchert
H. P. Elchert, Chief
Aerotriangulation Section

NOTES TO COMPILER
Job PH-6502
Glacier Bay, Alaska

Common pass points on photo 64-M-3669 were used for Strip 3 (old bridge) and Strip 7 (new bridge). A discrepancy exists between common pass point positions from both bridges. However, it is believed that Strip 7 is the stronger bridge, as the pass points from the above mentioned photo on Strip 3 went beyond control.

In order to get a satisfactory junction between Strips 3 and 7 it may be advisable to mean positions of these common pass points.

AEROTRIANGULATION SKETCH
GLACIER BAY, ALASKA
JOB PH-6502



DESCRIPTIVE REPORT CONTROL RECORD

MAP T-12775 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)
SIX, 1966	G.P. Vol. 3	N.A. 1927	58° 44' 20.44260"	632.5 (1224.0)
	Pg. 1038		136° 29' 17.96212"	289.0 (676.2)
HUGH MILLER EAST BASE ALASKA, 1907	G.P. Vol. 9	N.A. 1927	58° 44' 15.467"	478.6 (1377.9)
	Pg. 66		136° 28' 16.621"	267.4 (697.9)
CAMP ALASKA, 1907	G.P. Vol. 9	N.A. 1927	58° 43' 54.338"	1681.3 (175.2)
	Pg. 65		136° 26' 56.416"	907.7 (57.7)
COMPUTED BY C. Blood	DATE 4/24/70	CHECKED BY R. White	DATE 4/24/70	23

COMPILATION REPORT

T-12775

31. DELINEATION

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

32. CONTROL

See "Photogrammetric Plot Report", for Project 21511 dated Aug., 1965 and Job PH-6502 dated Jan. 8, 1968.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

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

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline, all foreshore details and the mean lower low water line were delineated as inspected.

36. OFFSHORE DETAILS

None

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Satisfactory junctions have been made with:

T-12774 to the west
T-12776 to the east
T-12768 to the north
T-12780 to the south

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41. FIELD EDIT

Field edit was adequate.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle, MT. FAIRWEATHER (C-2), ALASKA, scale 1:63,360, dated 1950.

47. COMPARISON WITH NAUTICAL CHARTS

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

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None

ITEMS TO BE CARRIED FORWARD:

None

Respectfully submitted:

Charles H. Bishop

for B. Wilson, 15 May 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)

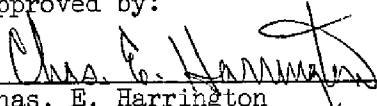
T-12775

Charpentier Inlet

Glacier Bay National Monument

Hugh Miller Inlet

Approved by:


Chas. E. Harrington
Staff Geographer-C51x2

PHOTOGRAMMETRIC OFFICE REVIEW

T-12775

1. PROJECTION AND GRIDS RJP	2. TITLE RJP	3. MANUSCRIPT NUMBERS RJP	4. MANUSCRIPT SIZE RJP
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) RJP		7. PHOTO HYDRO STATIONS X X
8. BENCH MARKS X X	9. PLOTTING OF SEXTANT FIXES X X	10. PHOTOGRAMMETRIC PLOT REPORT RJP	11. DETAIL POINTS RJP
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RJP	13. LOW-WATER LINE RJP	14. ROCKS, SHOALS, ETC. RJP	15. BRIDGES X X
16. AIDS TO NAVIGATION X X	17. LANDMARKS RJP	18. OTHER ALONGSHORE PHYSICAL FEATURES RJP	19. OTHER ALONGSHORE CULTURAL FEATURES X X
PHYSICAL FEATURES			
20. WATER FEATURES RJP	21. NATURAL GROUND COVER X X		22. PLANETABLE CONTOURS X X
23. STEREOSCOPIC INSTRUMENT CONTOURS X X	24. CONTOURS IN GENERAL X X	25. SPOT ELEVATIONS X X	26. OTHER PHYSICAL FEATURES X X
CULTURAL FEATURES			
27. ROADS X X	28. BUILDINGS X X	29. RAILROADS X X	30. OTHER CULTURAL FEATURES X X
BOUNDARIES			
31. BOUNDARY LINES X X		32. PUBLIC LAND LINES X X	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RJP	34. JUNCTIONS RJP		35. LEGIBILITY OF THE MANUSCRIPT RJP
36. DISCREPANCY OVERLAY RJP	37. DESCRIPTIVE REPORT RJP	38. FIELD INSPECTION PHOTOGRAPHS RJP	39. FORMS RJP
40. REVIEWER for <i>Charles H. Bishop</i> R.J. Pate		Date 5/19/70	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 <i>Charles H. Bishop</i> B.L. Barge		Date 11/3/71	SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.
Reviewed by A.L. Shands		Date 11/4/71	
43. REMARKS Field Edit Applied From: Field photographs 64 M 3668 and 3669 and the field edit ozalid T-12775.			

FIELD EDIT REPORT

MAP T-12775

Glacier Bay

Field edit of map T-12775 was accomplished during July and August, 1970. Inspection was done from a skiff after the hydrography.

METHOD

Field photographs and a copy of the Field Edit Ozalid were examined in the field. The mean high water line was verified by visual comparison of the shore area to field photographs and ozalid. Notes on the heights of rocks, location of the MHWL, and other data pertaining to photo identifiable features have been made in violet on the Field Edit Ozalid and cross referenced where necessary, to field matte ratio prints. Unless otherwise indicated all shoreline features have been verified correct as interpreted. All notes are in violet ink on the following 1:10,000 field photo: 64M3669.

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.

Features identified as ledges in Charpentier Inlet are talus areas.

Field inspection of the map is complete.

RECOMMENDATIONS

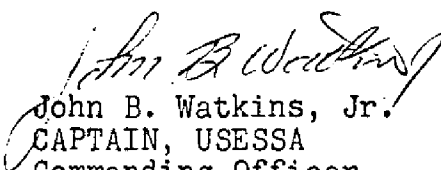
It is recommended that the map be revised in accordance with Field Edit data provided and be accepted as an advance manuscript.

Respectfully submitted,

William D. Neff
William D. Neff
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-12775

SHORELINE

June 24, 1975

61. GENERAL STATEMENT:

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

A comparison print, showing differences noted in Par. 64 is bound with the original of this report.

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 verified copies of the smooth sheets for Surveys H-9139 (FA-20-4-70), scale 1:20,000, dated 1970 and H-9143 (FA-10-8-70), scale 1:10,000, dated 1970. Significant differences were shown on the comparison print in purple.

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
June 24, 1975

Approved for forwarding:

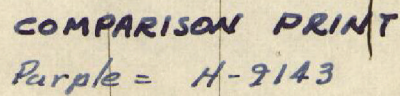
Victor E. Serena

Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Div.



T-12775

1:10,000

26' 30"

26' 00"

25' 30"

136° 25' 00"

38

58° 45' 00"

COMPARISON PRINT

Purple = H-9139

y=2,535,000 FT.

44' 30"

atures
vey
ry
ailable,

54 M 3668

This sounding (H-9139) is on a hillside. The photogrammetric location of the MHWL is firm; it cannot be moved to accommodate the sounding.

44' 00"

ALASKA 1907

y=2,530,000 FT

T-12775

1:10,000

