

T-12771

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-12771  
Classification No. .... Edition No. .... 1  
Field Edited

## LOCALITY

State .. Alaska .....  
General Locality .. Glacier Bay .....  
Locality .. Tlingit Point .....

19 64 TO 19 70

## REGISTRY IN ARCHIVES

DATE .....

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.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TP. <u>12771</u> MAP EDITION NO. (1) MAP CLASS 1 JOB PH. <u>6502</u>	
DESCRIPTIVE REPORT - DATA RECORD				LAST PRECEDING MAP EDITION			
				TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
PHOTOGRAMMETRIC OFFICE  Coastal Mapping Division (Norfolk)				OFFICER-IN-CHARGE  Jeffrey G. Carlen, CDR			
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 Alaska ZONE 1			
5. SCALE 1:10,000				STATE ZONE			
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION METHOD: Analytic LANDMARKS AND AIDS BY				G. Ball		Aug., 1965	
2. CONTROL AND BRIDGE POINTS METHOD: Coordinatograph PLOTTED BY				C. Blood		Apr., 1970	
				R. White		Apr., 1970	
3. STEREOSCOPIC INSTRUMENT COMPILATION PLANIMETRY BY				A.L. Shands		May, 1970	
INSTRUMENT: Wild B-8				L.O. Neterer		May, 1970	
SCALE: 1:15,000				N.A.			
4. MANUSCRIPT DELINEATION METHOD: Smooth ink drafting				F.P. Margiotta		May, 1970	
				R. Pate		May, 1970	
SCALE: 1:10,000				N.A.			
				N.A.			
5. OFFICE INSPECTION PRIOR TO FIELD EDIT				F. Margiotta		May, 1970	
				R. Pate		May, 1970	
6. APPLICATION OF FIELD EDIT DATA				R. Pate		May, 1970	
				A. Shands		Oct., 1971	
7. COMPILATION SECTION REVIEW Field E. Checker				B. Barge		Nov., 1971	
8. FINAL REVIEW				B. Barge		Nov., 1971	
				C. Bishop		June, 1975	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH							
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH							
11. MAP REGISTERED - COASTAL SURVEY SECTION				N. J. Francis		Aug. 26, 1975	

1. COMPILATION PHOTOGRAPHY					
CAMERA(S)		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE JUNEAU		(C) COLOR X (P) PANCHROMATIC (I) INFRARED		ZONE	
<input checked="" type="checkbox"/> PREDICTED TIDES (Willoughby Id)				Pacific	
<input type="checkbox"/> REFERENCE STATION RECORDS				MERIDIAN	
<input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				120 W	
				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
64 M(P) 3761 - 3763	6/12/64	12:32	1:40,000	1.9 ft. above MLLW	
REMARKS					
2. SOURCE OF MEAN HIGH-WATER LINE:					
Field inspection (Aug. 1964), Field Edit (Aug. 1970), and office interpretation of above photographs.					
3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:					
Office interpretation of photographs 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 No		EAST	SOUTH No		WEST
Contemporary Survey		T-12772	Contemporary Survey		T-12770
REMARKS					

T-12771  
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 N.A. PRE-MARKED OR IDENTIFIED BY W.H. Shearouse	Aug. 1964
3. VERTICAL CONTROL	RECOVERED BY N.A. ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None LOCATED (Field Methods) BY IDENTIFIED BY	
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 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 3762	CASE 1939		
64 M 3761	DONE 1939		
64 M 3761	TLINGIT 1939		

3. PHOTO NUMBERS (Clarification of details)

64 M 3761 and 3762

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 Geodasy Division)

Field Inspection Report and 3 CSI cards.

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-12771  
HISTORY OF FIELD OPERATIONS

I. <input type="checkbox"/> FIELD INSPECTION OPERATION				<input checked="" type="checkbox"/> FIELD EDIT OPERATION			
OPERATION		NAME		DATE			
1. CHIEF OF FIELD PARTY		John B. Watkins, Jr.		Summer 1970			
2. HORIZONTAL CONTROL		RECOVERED BY		N.A.			
		ESTABLISHED BY					
		PRE-MARKED OR IDENTIFIED BY					
3. VERTICAL CONTROL		RECOVERED BY		N.A.			
		ESTABLISHED BY					
		PRE-MARKED OR IDENTIFIED BY					
4. LANDMARKS AND AIDS TO NAVIGATION		RECOVERED (Triangulation Stations) BY		None			
		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		M.R. Mulhern		Aug. 1970	
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		
	N.A.						
3. PHOTO NUMBERS (Clarification of details)							
64 M 3761, 3762, and 3763							
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED							
None							
PHOTO NUMBER	OBJECT NAME			PHOTO NUMBER	OBJECT NAME		
5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE				6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> 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 and Field Edit Ozalid							

NOAA FORM 76-36D  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12771  
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		May, 1970
Field Edit applied, compilation complete	Oct. 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
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL



REVISED 9-5-72 RWH

# JOB PH-6502 GLACIER BAY ALASKA

Shoreline Mapping

SCALE 1:10,000



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12771

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 and identification of horizontal control required for bridging was done in August 1964.

Bridging was done by analytic aerotriangulation methods in the Rockville Office in August 1965, using 1:40,000 scale 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. Photographs were ratioed to 1:10,000 scale for photo-hydro support and field edit use. The time of photography was near low tide.

Field edit was done in conjunction with hydrography in August 1970. Data submitted was contradictory. See Par. 41, Compilation Report, bound with this Descriptive Report.

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 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 fore-shore 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	ne	
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	<del>no</del> 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 (enlarg) contact
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

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	}

STAR, 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

ELSE, 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

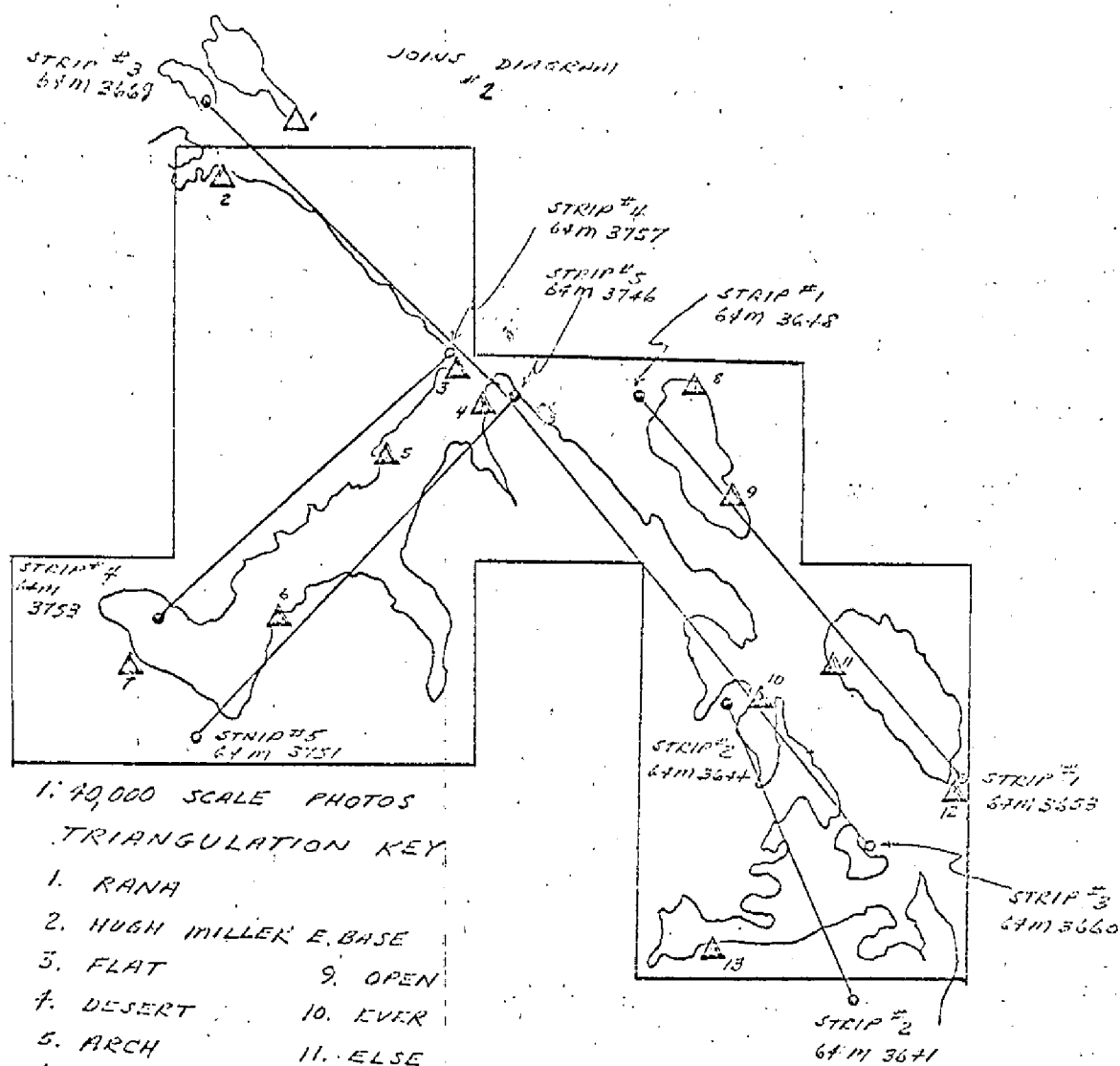
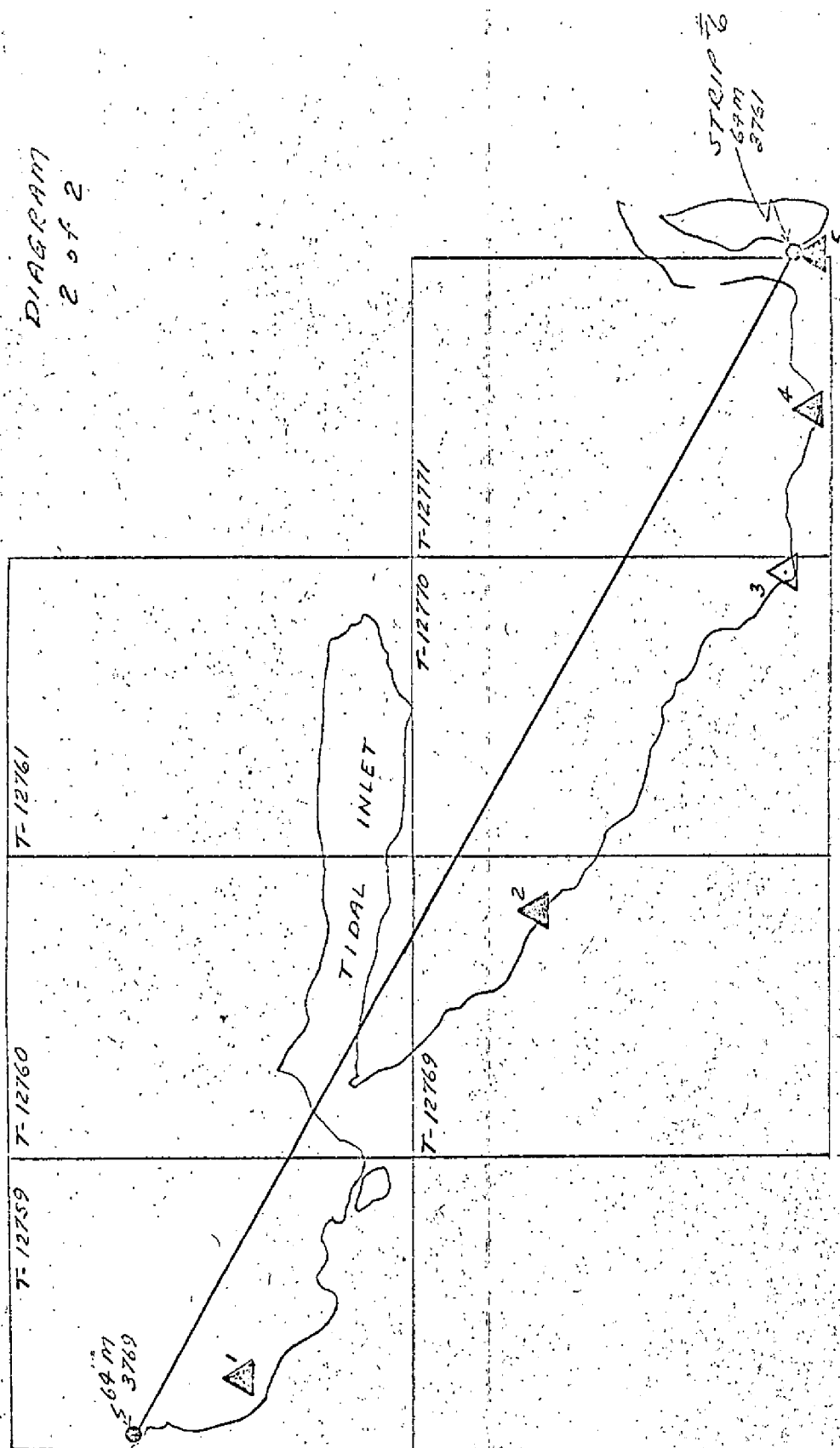


DIAGRAM  
2 of 2



1:40,000 SCALE PHOTOS  
TRIANGULATION KEY

- 1 GLOOMY (I.B.C.)
- 2 ACE
- 3 CASE
- 4 DONE
- 5 TL INLET

△ USED IN ADJUSTMENT  
△ NOT USED IN ADJUSTMENT

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 12771 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	DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter) FORWARD (BACK)	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 ft. = 3048006 meter) (BACK)
TLINGIT, 1939	G.P. Vol. 3 Pg. 806	N.A. 1927	58° 45' 00.800"	24.8	(1831.8)
			136° 10' 26.741"	430.0	(534.9)
DONE, 1939	G.P. Vol. 3 Pg. 806	N.A. 1927	58° 45' 03.080"	95.3	(1761.3)
			136° 12' 47.824"	769.1	(195.8)
CASE, 1939	G.P. Vol. 3 Pg. 791	N.A. 1927	58° 45' 13.806"	427.2	(1429.4)
			136° 14' 55.151"	886.8	(78.0)
COMPUTED BY C. Blood	DATE 4/24/70	CHECKED BY R. White	DATE 4/24/70	20	

## COMPILATION REPORT

T-12771

31. DELINEATION

The Wild B-8 plotter was used. Photographic coverage was adequate. Delineation was accomplished by field inspection notes and by office interpretation of the photographs.

32. CONTROL

See "Photogrammetric Plot Report", dated August 1965.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage was office interpreted and compiled by the Wild B-8 plotter.

35. SHORELINE AND ALONGSHORE DETAILS

The mean high water line, lower low water line and along-shore details were compiled with the Wild B-8, using 1:40,000 scale diapositives.

36. OFFSHORE DETAILS

No statement

37. LANDMARKS AND AIDS

None



38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

A satisfactory junction was made with T-12770 to the west, and T-12772 to the east. There is no contemporary survey to the north or south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement

41. FIELD EDIT

Field edit was contradictory. On the Field Edit Ozalid, statements were made that the mean high water line was correct as compiled, and cross-referenced to Photos 64 M 3761 and 3762. The same stretches of shoreline were identified on both of these photos in different places, neither in agreement with the MHWL on the ozalid. Therefore, the location of the MHWL was a matter of the compilers judgment as to which data to use. For the most part, MHWL identification on Photo 64 M 3761 was used.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S. Quadrangle MT. FAIR-WEATHER (D-1), ALASKA, scale 1:63,360, dated 1948.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with USC&GS Chart 8202, STEPHENS PASSAGE TO CROSS SOUND, scale 1:209,978, dated October 21, 1968, 15th edition.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

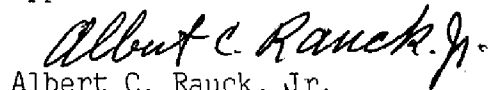
None

Submitted:



Frank P. Margotta, Cartographic Aid  
May 15, 1970

Approved:



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

28 March 1975

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12771

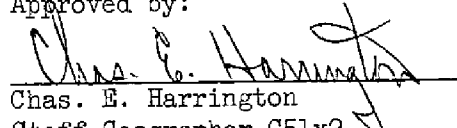
Glacier Bay

Glacier Bay National Monument

Sebree Cove

Tlingit

Approved by:

  
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-12771

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) X X		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 X X	
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 X X		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 RJP	
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. REVIEWED for R.J. Pate		Date 5/21/70		SUPERVISOR, REVIEW SECTION OR UNIT 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.							
COMPILED for A.L. Shands		Date 10/27/71		SUPERVISOR Albert C. Rauck, Jr.			
Reviewer: B.L. Barge		11/1/71		Albert C. Rauck, Jr.			
43. REMARKS  Field Edit Applied From - Field Edit Ozalid and Ratio Photos 64 M 3761 - 3763.							

FIELD EDIT REPORT

MAP T-12771

Glacier Bay

Field edit of map T-12771 was accomplished during August, 1970. Inspection was done from a skiff and from a launch during 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 photographs 64M3761, 64M3762, and 64M3763. 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.

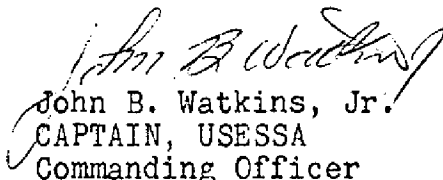
Respectfully submitted,

*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-12771

## SHORELINE

June 17, 1975

61. GENERAL STATEMENT:

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

A comparison print, showing differences noted in Par. 62, is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No registered topographic surveys were available for comparison west of Long.  $136^{\circ} 13'$ . East of this longitude, a comparison was made with Survey T-6756, scale 1:20,000, dated May - June 1940. Significant differences were indicated in blue on the comparison print.

In the area compared, T-12771 supersedes T-6756 for nautical chart construction purposes. T-6756 is the latest registered prior survey of the area.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle MT. FAIRWEATHER (D-1), ALASKA, scale 1:63,360, dated 1954. 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 adequate comparison.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Reviewed by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer  
June 17, 1975

Approved for forwarding:

*Victor E. Serena*

Victor E. Serena  
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Div.

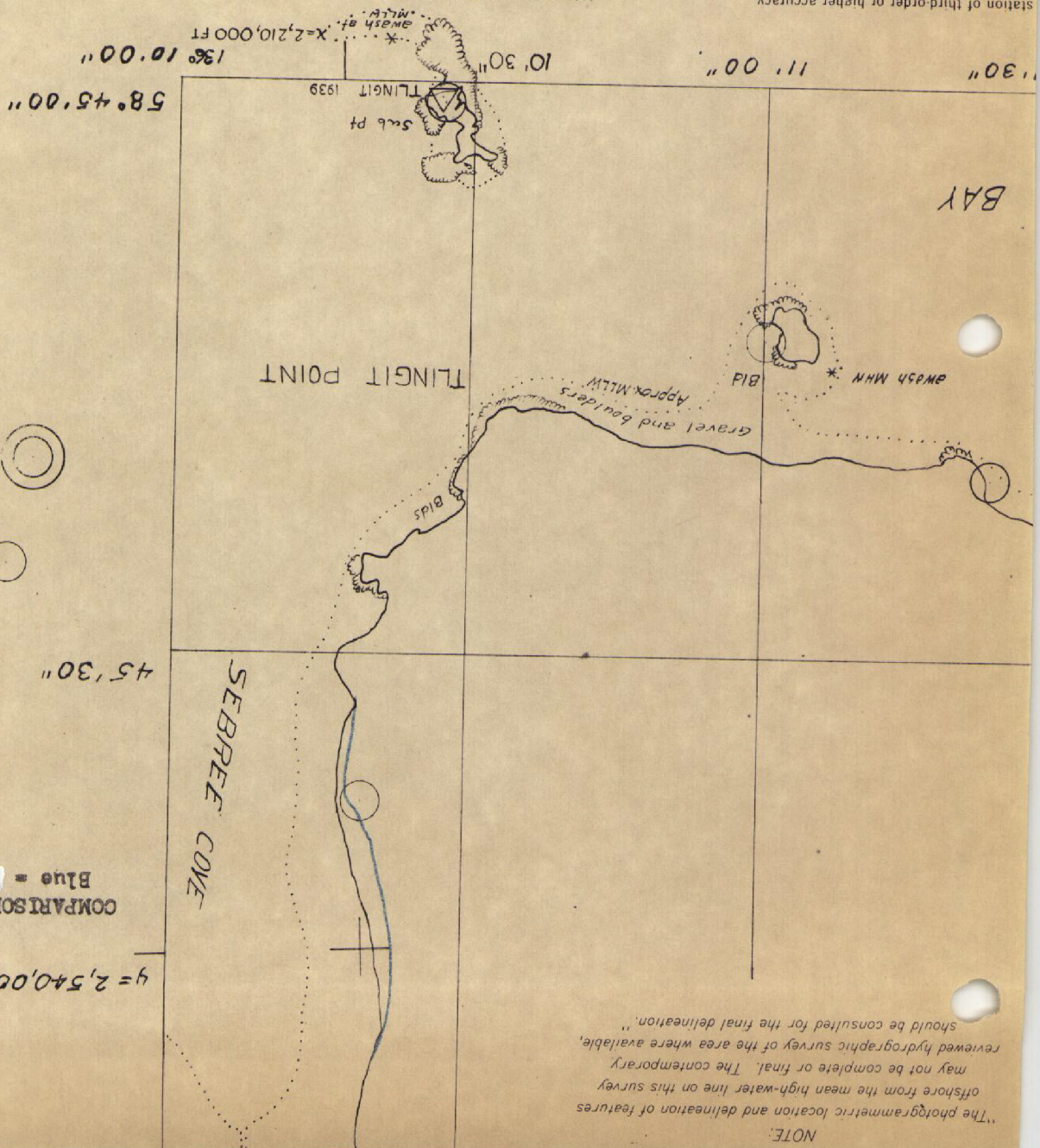


Station of third-order or higher accuracy

NATIONAL OCEAN SURVEY  
T-1271  
ALASKA  
GLACIER BAY  
TLINGIT POINT

SCALE 1:10,000  
(1 inch = 833.33 ft.)  
CONTROL DATA  
Polyconic projection 1927 North American Datum  
5,000 foot grid based on Alaska (Zone 1) plane coordinate system  
Datum plane Mean High Water

T-12771



COMPARISON PRINT Blue = 6756

$$y = 2,540,000 \text{ Ft.}$$

64-M-3761