

12753

12753

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-12753  
Classification No. ..... Edition No. 1  
Field Edited

## LOCALITY

State ..... Alaska  
General Locality ..... Glacier Bay  
Locality ..... Head of Johns Hopkins Inlet

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19 70 TO 1972

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## REGISTRY IN ARCHIVES

DATE .....

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
<b>DESCRIPTIVE REPORT - DATA RECORD</b>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE  Atlantic Marine Center		SURVEY TP. <u>12753</u>  MAP EDITION NO. ( / )  MAP CLASS  JOB PH. <u>6502</u>	
OFFICER-IN-CHARGE  Alfred C. Holmes, RADM - Director		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__	
<b>I. INSTRUCTIONS DATED</b>			
<b>1. OFFICE</b>		<b>2. FIELD</b>	
Aerotriangulation Jan. 20, 1972 Compilation - Supp. I Apr. 5, 1972 Compilation - Amend. Apr. 17, 1972			
<b>II. DATUMS</b>			
1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify)	
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION  Polyconic		4. GRID(S) STATE Alaska ZONE 1	
5. SCALE 1:10,000		STATE ZONE	
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytical LANDMARKS AND AIDS BY		R. Kelly	Mar. 1972
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		D. Phillips D. Phillips	3/27/72 3/27/72
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild B-8 SCALE: 1:20,000 CONTOURS BY CHECKED BY		L.O. Neterer, Jr. R.R. White NA NA	4/28/72 4/28/72
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY METHOD: SCALE: 1:10,000 HYDRO SUPPORT DATA BY CHECKED BY		R.J. Pate A.L. Shands NA NA R.J. Pate A.L. Shands	5/8/72 5/12/72
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		A.L. Shands	5/12/72
6. APPLICATION OF FIELD EDIT DATA BY		G.R. Vanderhaven	4/4/74
7. COMPILATION SECTION REVIEW BY		L.O. Neterer, Jr.	5/10/74
8. FINAL REVIEW BY		Charles H. Bishop	6/3/74
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		11	Nov. 74
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		S. Blankenbaker	Feb. 1975
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		R. CATOR	MAR. 1975

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-12753  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E"		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR X (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				ZONE Pacific	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 120th	<input type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
70E(C)-7683 & 7684	7/27/70	11:15	1:40,000	11.0 ft. above MLLW	
71E(C)-4686 & 4687	6/5/71	10:46	1:20,000	10.8 ft. above MLLW	

REMARKS All photo time has been converted from zulu time and daylight time to Pacific Standard Time.

## 2. SOURCE OF MEAN HIGH-WATER LINE:

Office interpretation of Photography of July 27, 1970.

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

None compiled.

## 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-12740	T-12754	No Survey	No Survey

REMARKS

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

T- 12753

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	J.B. Watkins, Jr. CAPT.	6/6/70
2. HORIZONTAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	AFD AFD 6/6/70
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
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	None
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	None

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED  
N.A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
70E(C)7684	TRAVERSE POINT "C"		

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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

7. SUPPLEMENTAL MAPS AND PLANS

None

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

1 Form 152

T-12753  
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	George M. Poor	June - Sept. 1972
2. HORIZONTAL CONTROL <i>None</i>	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	
3. VERTICAL CONTROL <i>None</i>	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	
4. LANDMARKS AND AIDS TO NAVIGATION <i>None</i>	RECOVERED ( <i>Triangulation Stations</i> ) BY LOCATED ( <i>Field Methods</i> ) 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	BY
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	<i>None</i>

## 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*)

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-12753  
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	5/8/72	Class III manuscript Superseded	5/19/72	5/19/72
All field edit, except that which has been plotted by hydro, has been applied. Compilation Complete.	4/4/74	Class I Superseded		
Final Review	June, 1974		HAINT. PRINT NOV. 1974	

## II. LANDMARKS AND AIDS TO NAVIGATION None

## 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: \_\_\_\_\_

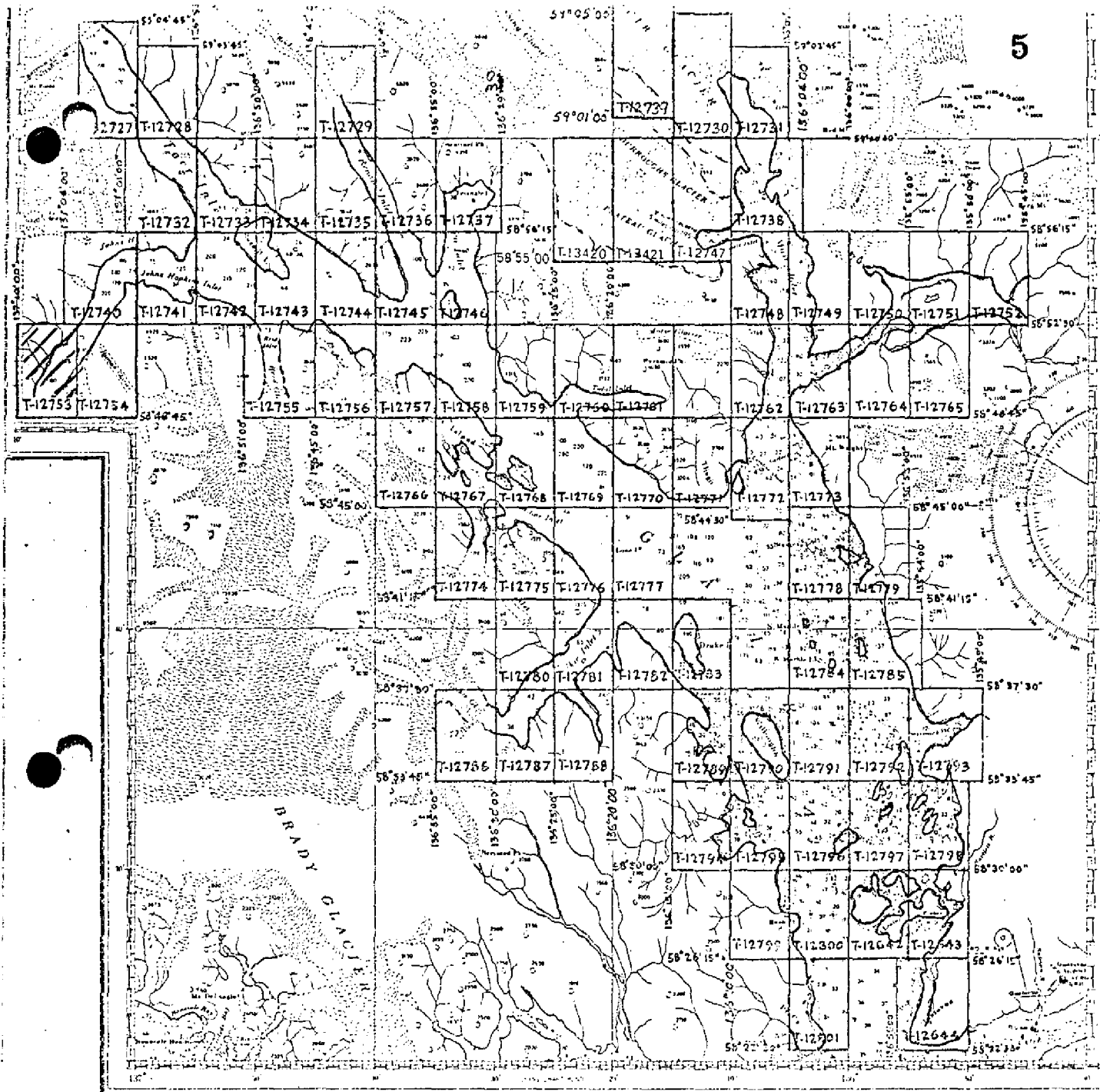
## III. FEDERAL RECORDS CENTER DATA

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-12753

This 1:10,000 scale shoreline project is comprised of 80 maps which cover Glacier Bay and its numerous tributaries. For convenience of compilation, it was divided into five parts, according to aerotriangulation bridges. This map is one of fourteen maps that comprise Part II. The job diagram shows the location of this map in the project.

The only field work done before compilation was the recovery (or establishment), identification, and premarking of horizontal control required for aerotriangulation.

Compilation was done by Wild B-8 Plotter, using 1:40,000 scale color photography taken in July, 1970. The stage of tide at time of photography was near mean high water, therefore, no foreshore detail was mapped, except one rock which was visible on the photographs after it was pointed out by the field editor. Floating ice at the time of photography made rock identification almost impossible.

Field edit was done in conjunction with hydrography in August, 1972. Numerous sextant fixes were copied from the hydrographic survey records to the field edit ozalid and submitted as field edit. Fixes taken on the mean high water line verified the compilation of this feature, with one exception. See Addendum to the Compilation Report. Fixes taken on rocks offshore from the mean high water line were not applied to T-12753 unless they were visible on the photographs. Only one rock was visible; it was located on the manuscript photogrammetrically.

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

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



## FIELD INSPECTION REPORT

PH - 6502

There was no field inspection prior to compilation.

## PHOTOGRAMMETRIC PLOT REPORT

Job PH-6502

Glacier Bay, Alaska

March 1972

21. Area Covered

This report covers T-sheets T-12727, T-12728, T-12732, T-12733, T-12734, T-12735, T-12740, T-12741, T-12742, T-12743, T-12744, T-12745 and T-12755 in Glacier Bay, Alaska.

22. Method

Three strips of 1:40,000 scale color photography were bridged by analytical methods to provide horizontal control points for compilation and shoreline points for ordering 1:10,000 scale ratio prints. All strips were adjusted on Alaska State Plane coordinates zone 1. The attached sketch of the strips bridged shows the placement of horizontal control points used in the strip adjustments. A list of closures to control is part of this report. Data for plotting manuscripts for compilation were assembled for ruling and plotting by the Coradomat.

23. Adequacy of Control

All targets that were visible on the 1970 photography could be seen on the 1971 photography with exception of Tini 1966 which was covered by snow. Photographs 70-E-7700 and 7701 on which Tini 1966 was visible were substituted in the bridging of strip 31 in place of photographs 71-E-4801 and 4802. Common pass points were used between the 1970 and 1971 photography. The horizontal control used was adequate and held well within the accuracy required by National Standards of Map Accuracy at 1:10,000 scale. Tie points were used to augment datum tie between the three strips.

24. Supplemental Data

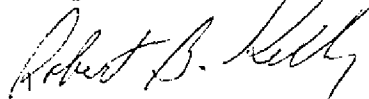
U. S. Geological Survey quadrangles were used to provide elevations for vertical adjustments of bridges.

2

25. Photography

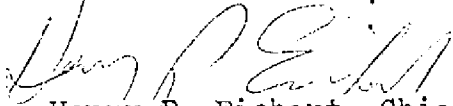
RC-8E color film positives were adequate as to coverage, overlap and definition, but the contact prints appeared to be out of focus.

Respectfully submitted:



Robert B. Kelly  
Carto Tech

Approved and forwarded:



Henry P. Eichert, Chief  
Aerotriangulation Section

Notes to Compiler

Additional sheets (T-12735, T-12736W and T-12746W) have been plotted on the Coradomat to aid in compilation.

## LEGEND

- ▲ CONTROL USED IN ADJUSTMENT  
 ( ) CLOSURES OF BRIDGE TO CONTROL SHOWN  
 IN PARENTHESES  
 △ CONTROL USED AS CHECK

## STRIP 31

▲ TINI, 1966	(0.0, 0.0)
▲ TERRY 1970	(-1.1, 1.1)
△ TRACIE, 1970	(-0.7, -2.5)
▲ MARTY, 1970	(1.4, -1.6)
▲ JIM, 1970	(-0.6, 0.7)

## STRIP 32

▲ TRACIE, 1970	(0.2, -0.2)
△ TERRY, 1970	(-1.6, -0.2)
▲ SARAH, 1970	(-0.3, 0.5)
▲ TRAVERSE PT. B, PANEL	(0.2, -0.7)
▲ TRAVERSE PT. C, PANEL	(-0.2, 0.3)

## STRIP 33

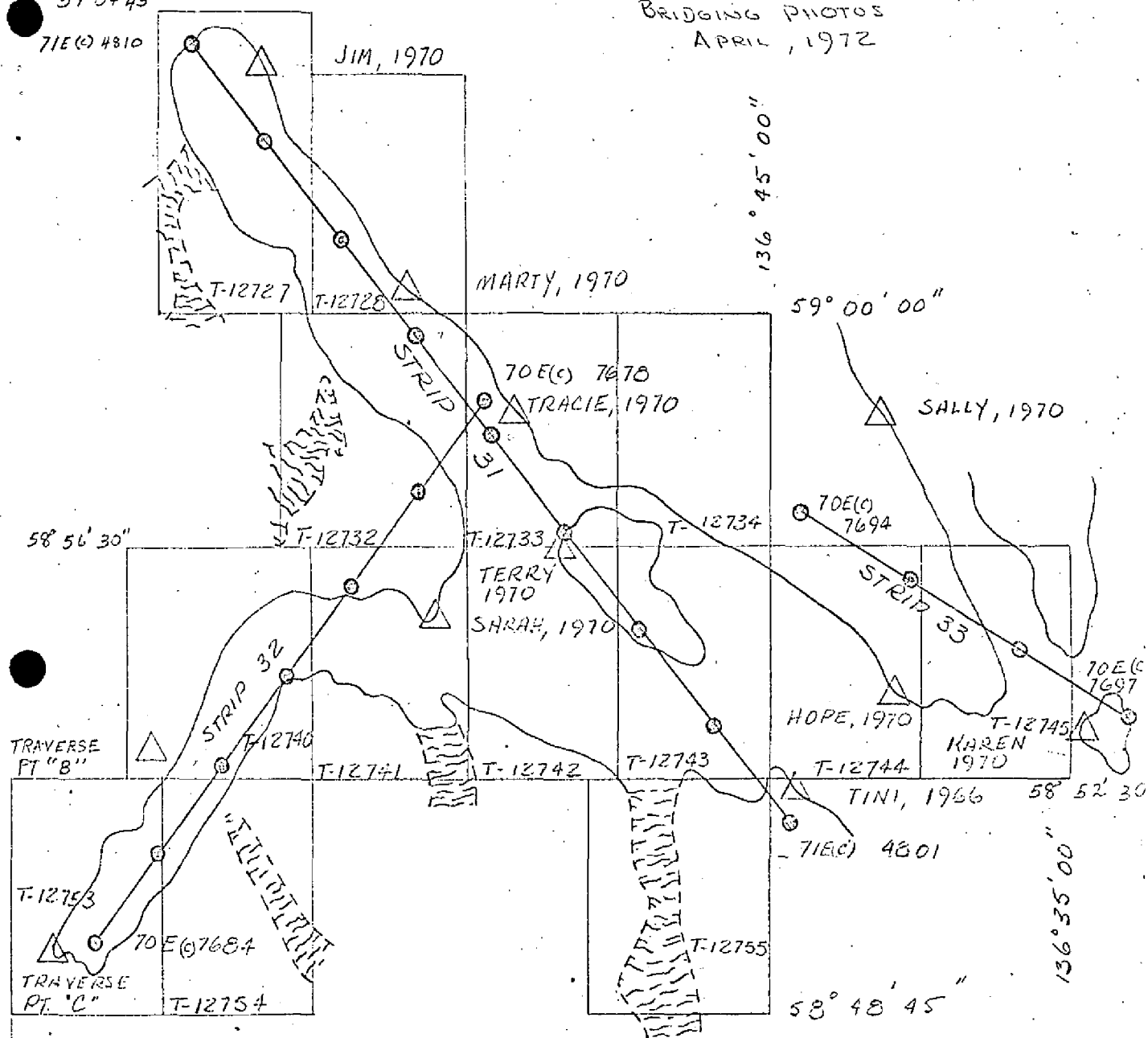
▲ SALLY, 1970	(0.0, 0.0)
△ HOPE, 1970	(1.6, 0.0)
▲ KAREN, 1970	(0.0, 0.0)

GLACIER BAY ALASKA  
PH-6502

12

SCALE 1:40,000

BRIDGING PHOTOS  
APRIL, 1972



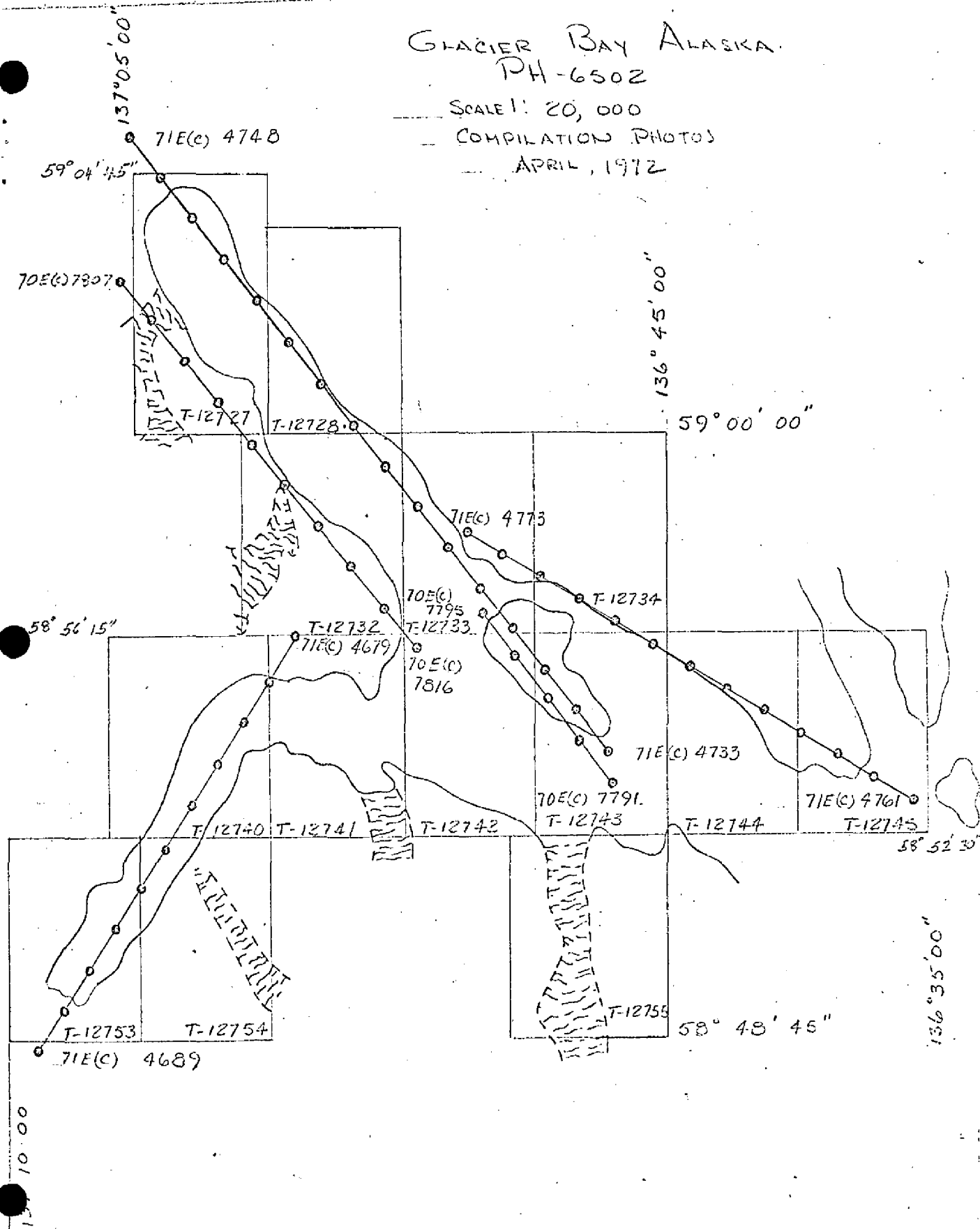
# GLACIER BAY ALASKA.

## PH-6502

SCALE 1: 20,000

COMPILATION PHOTOS

APRIL, 1972







## COMPILATION REPORT

T-12753

31. DELINEATION

The Wild B-8 Plotter was used to delineate the mean high water line from the 1970 color photography.

32. CONTROL

See "Photogrammetric Plot Report," dated March, 1972.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage has been shown from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

There was no low water photography for delineation of alongshore details or showing a low water line.

36. OFFSHORE DETAILS

None

37. LANDMARKS AND AIDS

None

T-12753

38. CONTROL FOR FUTURE SURVEYS:

None

39. JUNCTIONS

See form 76-36b, item #5.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S. Quadrangle MT. FAIR-WEATHER (D-4), ALASKA, scale 1:63,360, dated 1961.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 8202, scale 1:209,978, 17th edition, dated Sept. 11, 1971.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:

*Charles H. Bishop*

*for* R.J. Pate, Carto. Tech.  
May 8, 1972

Approved:

*Albert C. Rauck, Jr.*

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

ADDENDUM TO THE COMPILATION REPORT

T-12753

FIELD EDIT:

Field edit was accomplished by taking sextant fixes to verify the mean high water line and to locate rocks offshore from the MHWL. All of these fixes are part of the hydrographic survey records; all of the rocks were located on the boat sheet.

One fix (9706) on the MHWL is obviously in error; it's position as recorded on the Field Edit Ozalid is on the side of a hill approximately 80 meters inshore from the MHWL. If one degree is added to the right angle, the position falls on the MHWL.

One rock located by sextant fix is visible on the photographs and was located on the map. None of the other rocks located by sextant fix were visible on the photos and were not mapped on T-12753 because the signals used for location are on three T-sheets. The smooth sheet compiler can plot these fixes more accurately.

*Charles H. Bishop*

Charles H. Bishop  
Final Reviewer  
June 3, 1974

16 May 1974

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

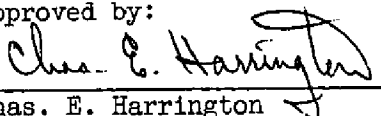
T-12753

Gilman Glacier

Johns Hopkins Glacier

Johns Hopkins Inlet

Approved by:

  
Chas. E. Harrington  
Staff Geographer

NOAA FORM 75-74 (2-74)		U.S. DEPARTMENT OF COMMERCE NOAA NATIONAL OCEAN SURVEY	
PHOTOGRAMMETRIC OFFICE REVIEW			
T-12753			
1. PROJECTION AND GRIDS ALS	2. TITLE ALS	3. MANUSCRIPT NUMBERS X X	4. MANUSCRIPT SIZE ALS
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY ALS	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) X X		7. PHOTO HYDRO STATIONS X X
8. BENCH MARKS X X	9. PLOTTING OF SEXTANT FIXES X X	10. PHOTOGRAMMETRIC PLOT REPORT ALS	11. DETAIL POINTS ALS
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE ALS	13. LOW-WATER LINE X X	14. ROCKS, SHOALS, ETC. X X	15. BRIDGES X X
16. AIDS TO NAVIGATION X X	17. LANDMARKS X X	18. OTHER ALONGSHORE PHYSICAL FEATURES ALS	19. OTHER ALONGSHORE CULTURAL FEATURES X X
PHYSICAL FEATURES			
20. WATER FEATURES X X	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 XX	26. OTHER PHYSICAL FEATURES
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 ALS		34. JUNCTIONS ALS	35. LEGIBILITY OF THE MANUSCRIPT ALS
36. DISCREPANCY OVERLAY ALS	37. DESCRIPTIVE REPORT ALS	38. FIELD INSPECTION PHOTOGRAPHS X X	39. FORMS
40. REVIEWER Arnold L. Shands 5/12/72		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> A.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 G.R. Vanderhaven 4/4/74		SUPERVISOR <i>Albert C. Rauck, Jr.</i> A.C. Rauck, Jr.	
Checked: L.O. Neterer Jr. May, 1974			
43. REMARKS Field edit compiled from field edit ozalid.			

## Field Edit Report, OPR-460

Glacier Bay, Alaska

NOAA Ship McARTHUR

June - September, 1972

In accordance with project instructions OPR-460, Glacier Bay, Alaska, all shoreline of the Glacier Bay area within the project limits was inspected. All significant rocks were noted and the mean high water line was delineated. All questions on the field edit ozalid were answered.

Three-point sextant fixes on signals established for hydrography were most commonly used to locate positions. Photos were used on occasion; however, with the abundance of signals it was more expedient to use sextant fixes. Check angles were provided when possible. A list of the signals and their geographic positions accompanies this report.

Rocks were noted with their height above water and the time and date of observation. In some cases, where it was more convenient, rocks were noted with height above the apparent mean high water line. Only larger, more prominent and/or navigationally significant rocks were noted, since the area as a whole is quite rocky. All times are given in PDT, which is 105°W time meridian.

No attempt was made to delineate the MHWL (mean high water line) in low flat tidal areas. Areas of this nature possess very little relief and the mean high water line is characteristically obscure. In such areas, a sextant fix at the water's edge was obtained at the time of inspection and noted on the field edit ozalid.

The seaward faces of glaciers are subject to constant change and for obvious reasons are not delineated by the editor.

There are no cultural objects in Glacier Bay except for the obscure ruins of a cabin in Reid Inlet. There is nothing of particular landmark value in the survey area. Bluffs of a precipitous and extensive nature were often cited by the compiler as potential landmarks. In a less primitive and stark environment replete with vegetation and soft contours, such bluffs might appear distinctive. However, Glacier Bay, in its upper regions, is a land devoid of vegetation, rich in bold relief, and characteristically monochromatic.

None of the fixes on the field edit ozalids were plotted directly. Compilation of T-sheets was accomplished at 1:10,000 scale and the boat sheets containing the plotted hydro signals, were at 1:20,000

scale; therefore, it was impractical to plot positions directly on the field edit ozalids. All three-point fixes were plotted on the boat-sheets (1:20,000 scale) and then transferred to the ozalid with proportional dividers.

Purple ink was used on the ozalid to mark positions and to note comments. Photos that were used in field edit have been annotated with orange-red ink. A commentary on the editing of individual T-sheets follows.

T-12740

There are many large rocks shown that are probably rock and dirt laden icebergs. On inspection of the areas where these rocks were said to be, no evidence of their existence was found. The misidentified icebergs have been noted on the field edit ozalid.

T-12741

An islet (58°54.0'N, 136°55.2'W) shown on USC&GS Chart 8202 (17th Ed. 11/71) is not detached from the mainland. A gorge in the rocky promontory might lead to this interpretation; however, the base of the gorge is well above MHW. A small extension of this same promontory at 58°54.05'N, 136°55.3'W forms an islet at MHW and has been delineated on the field edit ozalid.

T-12742

Compilation of this manuscript below 58°54'15"N is incomplete; however, a foul area replete with rocks and a reef were located at 58°53.0'N, 136°50.3'W. The area should be considered a hazard to navigation.

A cove is shown on the manuscript at 58°53.7'N, 136°54.8'W that does not exist. The true MHWL throughout this area is further to the seaward than is drawn on the manuscript. The MHWL is correctly delineated on the field edit ozalid.

T-12743

There is a dangerous reef at 58°55.3'N, 136°46.1'W which might prove especially hazardous to safe navigation. The reef is below the MHWL and near favorable sites for the anchorage of large vessels.

A large foul area is found in the vicinity of 58°55'20"N, 136°47'45"W. The many rocks and reefs in this area have been delineated on the field edit ozalid.

T-12744

An object suspected to be a rock at 58°53.8'N, 136°41.0'W is in all

probability a dirt and rock laden iceberg. No rock was found on inspecting the area. This misidentification of icebergs is a common problem in this area of Glacier Bay.

In the area around Joan Rocks (incorrect name, see Geographic Names Report, OPR-460), two reefs were delineated. A reef compiled at 58°54.4'N, 136°43.7'W on the manuscript does not exist.

T-12745

A rock (58°52.9'N, 136°37.95'W) shown on the manuscript was not found on inspection. See previous discussions on rock and dirt laden icebergs. Rendu Inlet was not inspected by the field editor. Its distance from the project area and the inefficient use of time attendant upon the establishment of hydrographic control in the area argued against inspection.

T-12754

The limits of Hoonah Glacier have been inked on photo 4685. The southern half of the face of this glacier hangs on a precipitous slope far above the water's edge. It is to be expected that this precarious position subjects the face to frequent changes in this area.

T-12755

(not in McARTHUR's inventory)

As noted, this manuscript was not transmitted to McARTHUR. Aerial photography for Reid Inlet was flown in June 1972. Presumably the manuscript will be compiled on receipt of the photographs from this flight. McARTHUR surveyed Reid Inlet in July 1972. The following list of field edit positions in Reid Inlet is appended for the convenience of the compiler.

# REID INLET ROCKS

August 10, 1972

\* denotes check angle

No.	Angles	Signal Nos.	Description
9744	41°56'	100	Rock bares 10'; 15' diameter. 0900 PDT
	53°56'	59	
	*70°28'	60	
		*114/59	
9745	31°48'	same	Rock bares 2'; 4' diameter. 0909 PDT
	67°12'		
	*58°56'		



No.	Angles	Signal Nos.	Description
9746	25°46' 70°43' *52°01'	same	Rock bares 2 1/2'; 5' diameter. 0917 PDT
9747	46°33' 75°07' *52°08'	114 59 60 *60/64	Rock bares 3'; 5' diameter 0920 PDT
9748	43°08' 70°41' *72°27'	same  *60/68	Rock bares 4'; 6' diameter. 0925 PDT
9749	61°42' 67°02' *82°22'	59 60 64 *60/68	Rock bares 12'; 20' diameter. 0930 PDT
MHWL FIXES			
9750	40°17' 24°47'	72 74 76	
9751	39°59' 23°53'	same	
9752	39°40' 24°23'	same	
9753	37°09' 24°45'	same	
9754	37°05' 25°53'	same	
9755	39°00' 22°05'	same	
9756	43°26' 20°31'	same	
9881	40°31' 79°33' *29°56'	90 114 59 *114/100	
9882	64°19' 57°31' *36°43'	114, 59, 60  *100/59	

No.	Angles	Signal Nos.
9883	55°20' 62°12' *28°59'	114 59 60 *100/59
9884	47°30' 68°21' *21°58'	same
9885	40°55' 52°41' *72°00'	59 60 62 *60/64
9886	27°42' 89°36'	59 60 64
9887	36°19' 99°36' *17°46'	72 60 64 *59/60
9888	26°46' 51°46' *34°06'	60 62 64 *62/59
9889	41°24' 63°05' *86°47'	66 68 72 *68/60
9890	18°56' 94°00' *46°54'	same *64/68
9891	104°59' 27°28' *114°47'	68 72 114 *66/72
9892	66°46' 75°42' *70°57'	68 72 114 *66/72
9893	40°35' 60°28' *42°33'	68 72 76 *72/74

T-12757

The field editor's inspection for rocks at 58°50.75'N, 136°38.8'W and 58°50.8'N, 136°39.3'W indicates that they probably do not exist. Many icebergs were observed to congregate in the area, and such bergs were most probably misidentified as rocks.

The area south of 58°50'00" was not inspected. Its distance from the hydrographic survey area, and the inefficient use of time attendant upon the establishment of hydrographic control in the area argued against inspection.

T-12748 -

Two isolated rocks at 58°54.85'N, 136°06.3'W are an especially noteworthy hazard to navigation. Both are below the MHWL and lie near favorable anchorage sites for large vessels.

A reef lies inside the mouth of Wachusett Inlet at 58°56.2'N, 136°10.0'W that is hazardous to the safe navigation of the inlet. The area between the reef and the south shore of the inlet is shallow (see boatsheet MA-20-3-72, H-9317).

T-12749 -

The large alluvial fan between latitudes 58°53.7'N, and 58°54.7'W possesses a particularly extensive network of offshore sand bars. The bars are composed of loose sand and are subject to frequent change.

## ADAMS INLET

Verification of the tree line in Adams Inlet was not accomplished by the field editor. The predominant tree in the inlet is the Sitka Alder. The Alder's overwhelming abundance and phenomenal growth rate argue against any constructive purpose being served by a description of Alder forest boundaries.

T-12750 -

A shoal at 58°53.25'N, 135°55.9'W was confirmed by indirect methods. Launch AR-1 struck the rocky shoal shortly after (10-20 seconds) a position fix at 1141 PDT, 24 September. As the launch was on a heading that would carry it directly over the shoal, the shoal's position is confirmed. The launches outdrives struck the shoal. They project approximately 2 feet below the waters surface.

T-12751 -

The narrow channel at 58°54.3'N, 135°51.5'W is a potentially hazardous passage because of the rocks (delineated on the field edit ozalid) and the strong tidal current.

Two shoals near 58°54.3'N, 135°54.6'W are composed of water-saturated mud and are hazardous for the unwary boater. The light grey color at lower stages of the tide blends well with the water. And one may speedily run firmly aground before being aware of it.

The shoal at 58°52.7'N, 135°53.9'W is composed of rock and because of its mid-channel location it is particularly noteworthy.

T-12764

A large mid-channel rock at 58°51.7'N, 135°59.1'W is the most distinctive hazard to navigation in Adams Inlet and the most impressive shoal in all of upper Glacier Bay. During periods of ebb and flood, the tidal velocity is greatly increased in the vicinity of this rock because of the constriction in the channel. Whitehorses dance madly about the rock as large whirlpools are shed from its sides.

Prepared by:

*Steven R. Birkey*

Steven R. Birkey  
LT(jg), NOAA

Approved by:

*George M. Poor*

George M. Poor  
CDR, NOAA  
Commanding Officer  
NOAA Ship McArthur



U.S. DEPARTMENT OF COMMERCE  
Environmental Science Services Administration  
COAST AND GEODETIC SURVEY

Date: June 16, 1974

Reply to NGS Party G-52 Gen. Del.  
Attn of: Twentynine Palms, Ca. 92277

Subject: Field Edit, Glacier Bay, Alaska

To: CAM 52x1, Mr. Charles Bishop

In regard to field edit work done by the MCARTHUR during the 1972 field season in Glacier Bay, rock fixes were listed on the field edit ozalids and also in two or three sounding volumes for "Detached Positions". To the best of my recollection, these rock fixes were also taped.

*Steven R. Birkey*  
Steven R. Birkey  
Lt., NOAA

## REVIEW REPORT T-12753

## SHORELINE

JUNE 3, 1974

61. GENERAL STATEMENT:

See Summary which is page six (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 that are suitable for comparison were available.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle MT. FAIRWEATHER (D-4), ALASKA, scale 1:63,360, dated 1961. The south shoreline of Johns Hopkins Inlet extends approximately 0.8 minutes farther south on the quadrangle than it is on T-12753. No other significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a copy of the boat sheet for Survey H-9315 (MA 20-1-72), scale 1:20,000, dated 1972. No significant differences were noted, other than rocks which were not visible on the photographs. Sextant fixes on these rocks are part of the hydrographic survey records. Their location should pose no difficulty for the smooth sheet compiler.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8202, 1:209,978, scale 18th edition, dated 3 Nov. 1973. No significant differences were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Reviewed by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer

Approved for forwarding:

*Victor E. Serena*

Victor E. Serena  
Chief, Photogrammetric Branch, AMC

Approved:

*Charles H. Bishop*

Chief, Photogrammetric Branch

*Charles H. Bishop*

Chief, Coastal Mapping Division



08' 30"

07' 30"

137° 07' 00"

30

52' 00"

COMPARISON PRINT

Purple = H-9315

Rocks not visible on  
photos, not mapped  
on T-12753.

51' 30"

\* (12)

58° 51' 00"

T-12753

1:10,000



(NO SURVEY) — (JOINS T-12740)

06'30"

X=2,035,000 FT 06'00"

05'30"

137° 05'00"

58° 52'30"

Rocks not visible on  
photos, not mapped  
on T-12753.

52'00"

y=2,585,000 FT.

TIE(C)-4685

COMPARISON PRINT

Purple = H-9315

51'30"

T-12753  
1:10,000