

12742

12742

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-12742
Classification No. Edition No. 1
Field Edited

LOCALITY

State Alaska
General Locality Glacier Bay
Locality Russell Island, West

19 70 TO 1972

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY TP. <u>12742</u>	
DESCRIPTIVE REPORT - DATA RECORD				<input checked="" type="checkbox"/> ORIGINAL		MAP EDITION NO. <u>(1)</u>	
				<input type="checkbox"/> RESURVEY		MAP CLASS	
				<input type="checkbox"/> REVISED		JOB PH. <u>6502</u>	
PHOTOGRAMMETRIC OFFICE				LAST PRECEDING MAP EDITION			
Atlantic Marine Center				TYPE OF SURVEY		JOB PH. _____	
OFFICER-IN-CHARGE				<input type="checkbox"/> ORIGINAL		MAP CLASS _____	
Alfred C. Holmes, RADM - Director				<input type="checkbox"/> RESURVEY		SURVEY DATES:	
				<input type="checkbox"/> REVISED		19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
Aerotriangulation Jan. 20, 1972 Compilation Supp I Apr. 5, 1972 Compilation Amend Apr. 17, 1972							
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 type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION				4. GRID(S)			
Polyconic				STATE		ZONE	
				Alaska		1	
5. SCALE				STATE		ZONE	
1:10,000							
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				R. Kelly		Mar 1972	
METHOD: Analytical LANDMARKS AND AIDS BY							
2. CONTROL AND BRIDGE POINTS PLOTTED BY				D. Phillips		Mar 27/72	
METHOD: Coradomat CHECKED BY				D. Phillips		Mar 27/72	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				L.O. Neterer, Jr(N. part)		May 6/72	
COMPILATION CHECKED BY				R.R. White & R. Pate "		May 6/72	
INSTRUMENT: Wild B-8				CONTOURS BY		NA	
SCALE: 1:20,000				CHECKED BY		NA	
4. MANUSCRIPT DELINEATION PLANIMETRY BY				A.L. Shands (N. part)		May 19/72	
CHECKED BY				B. Wilson "		Jun 6/72	
METHOD:				CONTOURS BY		NA	
CHECKED BY				NA			
SCALE: 1:10,000 HYDRO SUPPORT DATA BY				A.L. Shands (N. part)		May 19/72	
CHECKED BY				B. Wilson "		Jun 6/72	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				B. Wilson		May 23/72	
6. APPLICATION OF FIELD EDIT DATA BY				F. Margiotta		Apr 1974	
CHECKED BY				G.R. Vanderhaven		Apr 1974	
7. COMPILATION SECTION REVIEW BY				G.R. Vanderhaven		Apr 1974	
8. FINAL REVIEW BY				C.H. Bishop		June 1974	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				N		NOV. 1974	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				S. BLANKENBAKER		FEB. 1975	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				C. EATOR		MAR 1975	

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12742
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 "E"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR X (P) PANCHROMATIC (I) INFRARED		ZONE	
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				Pacific	
				MERIDIAN	
				120th	
				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
70-E(C)-7793 - 7795	7/27/70	14:57	1:20,000	6.1 ft. above MLLW	
70-E(C)-7816	7/27/70	15:08	1:20,000	5.9 ft. above MLLW	
70-E(C)-7679 & 7680	7/27/70	11:15	1:40,000	11.0 ft. above MLLW	
71-E(C)-4718 - 4722	6/5/71	11:05	1:20,000	11.4 ft. above MLLW	
71-E(C)-4805 - 4807	6/5/71	12:42	1:40,000	12.9 ft. above	
71-E(C)-4735 & 4736	6/5/71	11:23	1:20,000	12.0 ft. above MLLW	
71-E(C) 4801 & 4802	6/5/71	12:42	1:40,000	12.9 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:

71 E(C)4718 thru 4722, South of Lat. 58° 54', graphic compilation,
using sextant fixes for control.
70 E(C)7816 N.W. corner of map.
70 E(C)7793 thru 7795 Russell Island.

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-12733	T-12743	T-12755	T-12741

REMARKS

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

T-12742

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	None None None
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 None None
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	None

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

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)

None

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

T-12742

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

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

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)

Field Edit Ozalid, Field Edit Report

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12742
RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation Complete In North Portion Only Pending Field Edit	5/23/72	Class III manuscript Superseded	6/6/72	6/5/72
Southern Shoreline com- plete Field edit applied Compilation Complete	Apr 1974	Class I Superseded		
			HAINT. PRINT NOV. 1974	
Final Review	June 1974			

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	



JOB PH-6502 GLACIER BAY ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-12742

This 1:10,000 scale shoreline project is comprised of 80 maps which cover Glacier Bay and its numerous tributaries. For convenience of compiling, 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 its location in the project.

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

Compilation was done by Wild B-8 Plotter, using 1:40,000 scale color photographs taken in July, 1970.

Field edit was done in conjunction with hydrography in July, 1972. See Addendum to Compilation Report.

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.

FIELD INSPECTION

T-12742

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

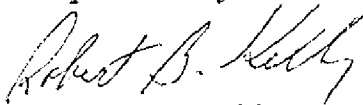
U. S. Geological Survey quadrangles were used to provide elevations for vertical adjustments of bridges.

2

—25. Photography

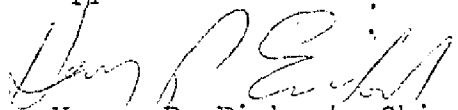
RC-8E color film positives were adequate as to coverage, overlap and definition, but the contact prints appeared to be out of focus.

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 PARENTHESIS
 △ 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)

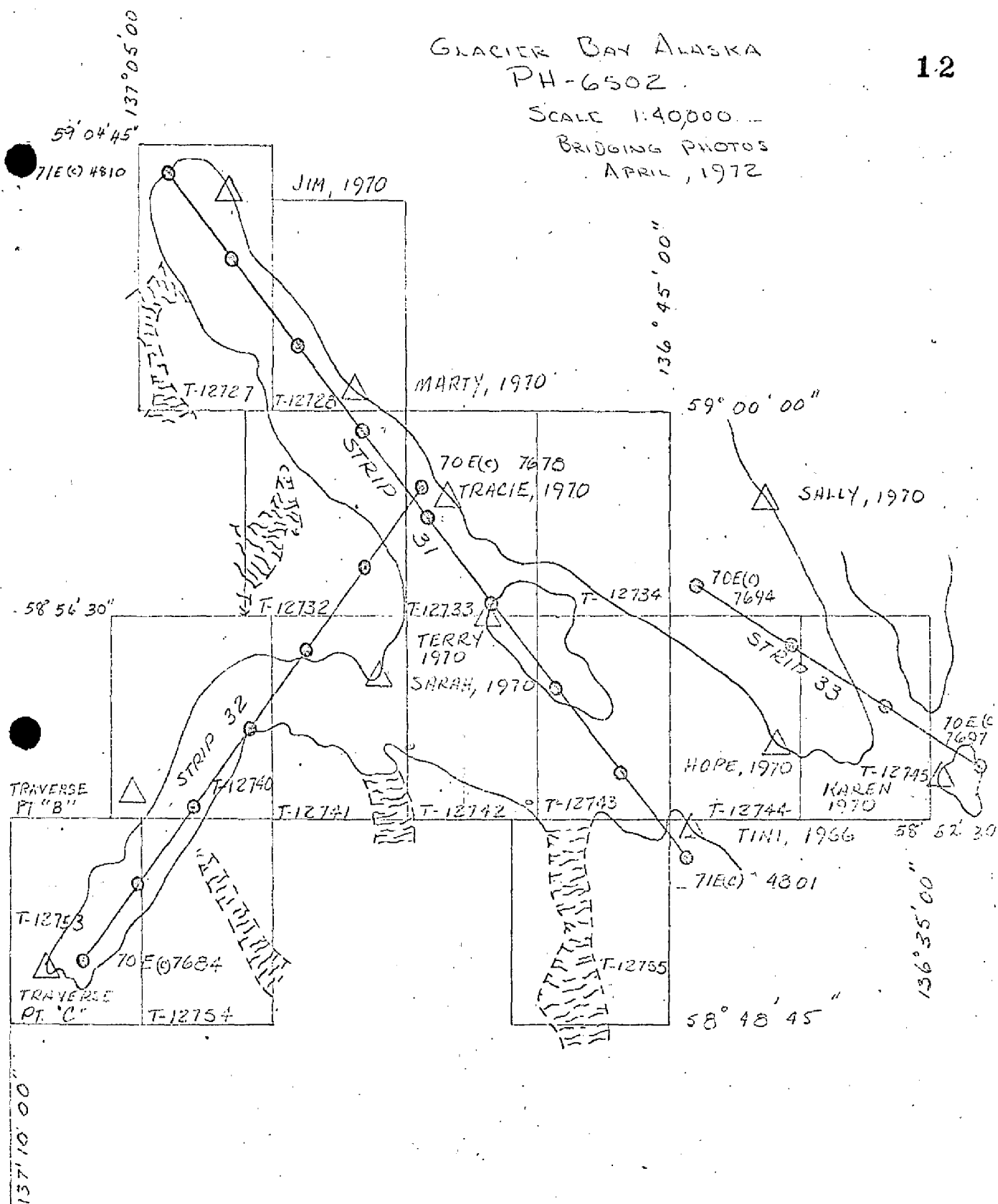
STRIP 33

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

12

BRIDGING PHOTOS

APRIL, 1972



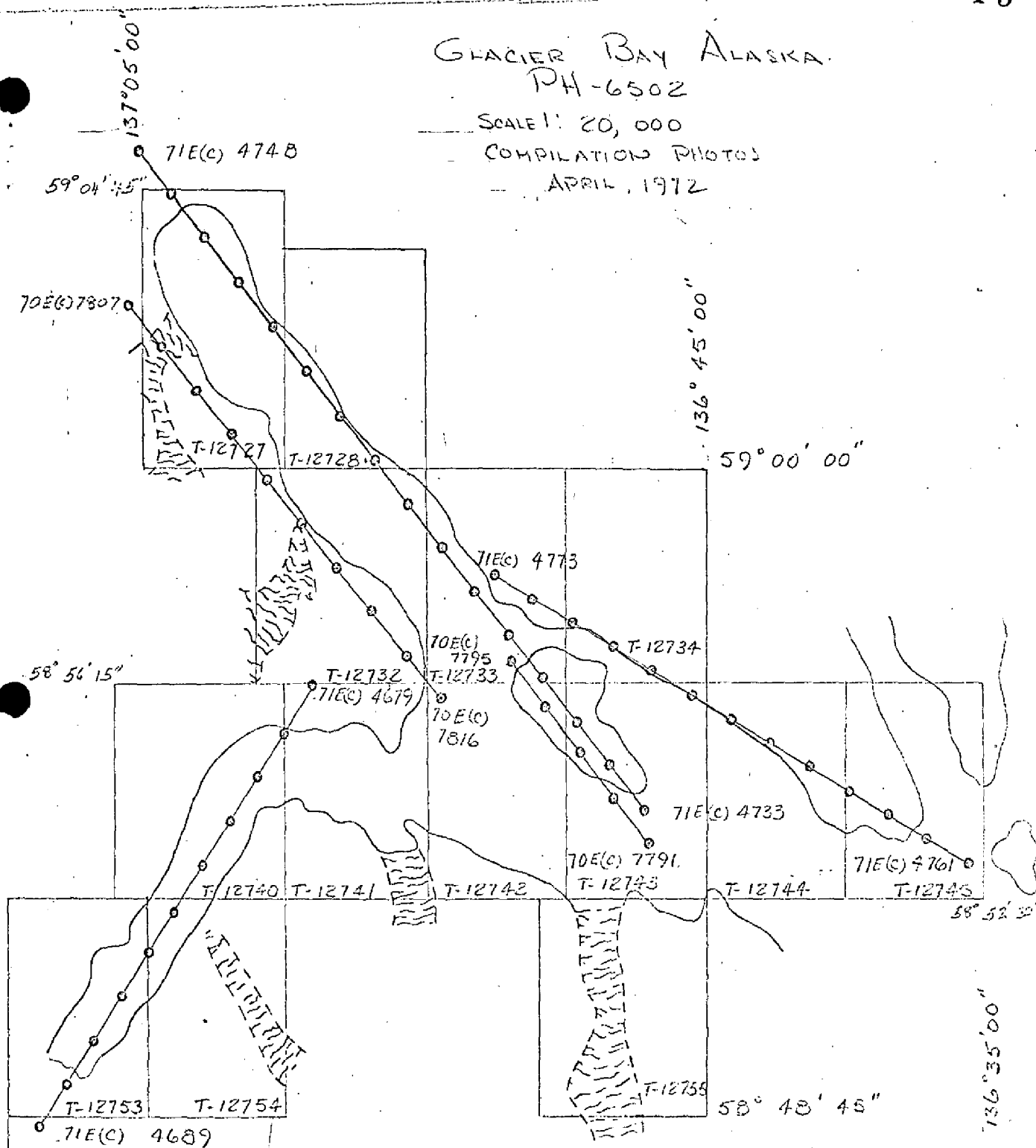
GLACIER BAY ALASKA

PH-6502

SCALE 1: 20,000

COMPILATION PHOTOS

APRIL, 1972



DESCRIPTIVE REPORT CONTROL RECORD

MAP T. 12742 PROJECT NO. PH-6502 SCALE OF MAP 1:10,000 SCALE FACTOR None

[illegible]

COMPILATION REPORT

T-12742

31. DELINEATION

Delineation north of Lat. $58^{\circ}54'$ was by Wild B-8 Plotter.

South of that latitude, compilation was incomplete. Approximately 10,000 feet of shoreline was not compiled because of the lack of control and no stereo-models to cover the area.

32. CONTROL

See Photogrammetric Plot Report, dated: March, 1972.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

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

35. SHORELINE AND ALONGSHORE DETAILS

The mean high water line and alongshore details were delineated from office interpretation of the photographs which were taken at a stage of tide approximately 3 feet below MHW.

36. OFFSHORE DETAILS

No statement.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

See form 76-36b, item #5, of the Descriptive Report.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison has been made with the following U.S. Geological Survey quadrangle: MT. FAIRWEATHER (D-3), ALASKA, scale 1:63,360, dated 1961.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison has been made with the following National Ocean Survey chart: 8202, scale 1:209,978, 17th Edition, Sept. 11, 1971.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:

Charles H. Bishop

for B. Wilson, Carto. Tech., 5/23/72

Approved:

Albert C. Rauck, Jr.

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

ADDENDUM TO THE COMPILATION REPORT

T-12742

FIELD EDIT:

No details were identified or clarified on the photographs.

The extent of field edit was verification of the mean high water line and the location of numerous rocks by sextant fixes. All sextant fixes are part of the hydrographic records.

Fixes on rocks located by sextant fixes and also identifiable on the photographs were applied as field edit. Sextant fixes on other rocks were not plotted, as signals used spanned three maps. They should be applied to the hydrographic smooth sheet covering the area.

The shoreline on the south side of Glacier Bay between Long. $136^{\circ} 52' 00''$ and $136^{\circ} 54' 45''$ was not in the stereoscopic models. One pass point was dropped from Model 4801 - 4802 at the east edge of the sheet. Another point, at the west side of the sheet, located by only two cuts was a poor extension of control from Bridge Strip 32. The mean high water line between these pass points was traced from Photo 71 E(C) 4720, holding the office interpretation of the mean high water line to sextant fixes on that line taken by the field editor. To be of value as control, the fixes should have been identified on the photographs; they were not. For that reason, this stretch of shoreline - approximately three miles - does not meet the requirements for National Standards of Map Accuracy.

Charles H. Bishop

Charles H. Bishop
Final Reviewer
25 June 1974

16 May 1974

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

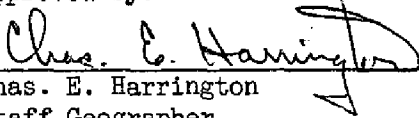
T-12742

Glacier Bay

Ptarmigan Creek

Russell Island

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-12742			
1. PROJECTION AND GRIDS BW	2. TITLE BW	3. MANUSCRIPT NUMBERS X X	4. MANUSCRIPT SIZE
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY None	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 BW	11. DETAIL POINTS
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE BW	13. LOW-WATER LINE Not Compiled	14. ROCKS, SHOALS, ETC. Not Compiled	15. BRIDGES X X
16. AIDS TO NAVIGATION X X	17. LANDMARKS X X	18. OTHER ALONGSHORE PHYSICAL FEATURES X X	19. OTHER ALONGSHORE CULTURAL FEATURES X X
PHYSICAL FEATURES			
20. WATER FEATURES BW*	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 BW*
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 BW	34. JUNCTIONS BW	35. LEGIBILITY OF THE MANUSCRIPT BW	
36. DISCREPANCY OVERLAY BW	37. DESCRIPTIVE REPORT BW	38. FIELD INSPECTION PHOTOGRAPHS X X	39. FORMS BW
40. REVIEWER B. Wilson (N. part only) <i>Albert C. Rauch, Jr.</i> 5/24/72 FOR		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauch, Jr.</i>	
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 F. Margiotta Apr. 1974		SUPERVISOR <i>Albert C. Rauch, Jr.</i>	
Reviewer: G.R. Vanderhaven Apr. 1974			
43. REMARKS Field Edit Applied From: Field Edit Ozalid & Overlay			

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'
	53°56'	59	diameter. 0900 PDT
	*70°28'	60	
		*114/59	
9745	31°48'		Rock bares 2'; 4'
	67°12'	same	diameter. 0909 PDT
	*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 outriggers struck the shoal. They project approximately 2 feet below the water 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-12742

SHORELINE

JUNE 25, 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:

There are no registered topographic surveys of this area that are suitable for comparison.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle MT. FAIR-WEATHER (D-3), ALASKA, scale 1:63,360, dated 1961. No 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, scale 1:20,000, dated 1972. 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 3 Nov. 1973. No significant differences were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

The north half of this map complies with Project Instructions and meets the requirements for National Standards of Map Accuracy. The south half of the map is very poorly controlled and does not meet the accuracy requirements.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer

Approved for forwarding:

Victor E. Serena

Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

D. K. [unclear]

Chief, Photogrammetric Branch

Charles H. Bishop

Chief, Coastal Mapping Division

70-E(C)-7795

71-E(C)-4736

51'30"

51'

X=2,085,000 FT. 50'30"

136°50'00"

58°56'15"

56'

Russell
IslandRocks are not
visible on the
photographs.

70-E(C)-7794

Y=2,605,00

55'30"

COMPARISON PRINT

Purple = H-9315

T-12742

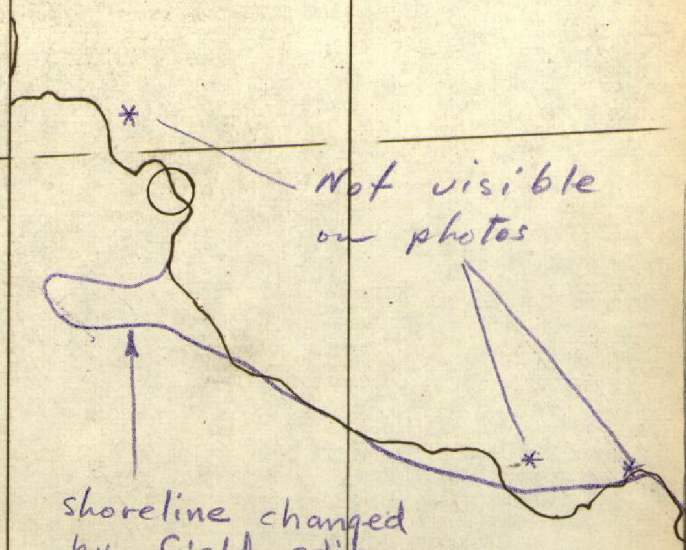
1:10,000

136°55'00"

064

58°54"

Y=2,595,000 FT



53'30"

COMPARISON PRINT

Purple - H-9315

53'

Y=2,590,000 FT

T-12742

1:10,000

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for hydro. partially completed. Southern shoreline incomplete.	May, 1972	Superseded
Field Edit Applied	April, 1974	
Compilation Complete		
All field edit, except that which has been plotted by hydro, has been applied		

Mean high water line between Long. $136^{\circ}52'00''$ and $136^{\circ}54'45''$ was traced directly from Photo 71 E(c) 4720, which was poorly controlled. Accuracy of the shoreline compiled from this photo is substandard.

Rocks not visible on photos at positions indicated.

Ptarmigan Creek

COMPARISON PRINT

Purple = H-9315

4' X=2,075,000 FT.

53'30"

58°53'

52'30

X=2,080,000 FT.

52'

58°52'36"

NOTE: Unlabeled circles are photogrammetric plot points; not map features.

T-12742

1:10,000

The
Con
Dat

Rocks not visible on
photos at positions indicated
by purple *.

53'30"

33

Y=2,590,000

53'

58°52'30"

COMPARISON PRINT

Purple = H-9315

51'30"

51

50'30"

X=2,065,000 FT

136°50'00"

heavy shoreline defines the approximate mean high water.
compiled by photogrammetric methods, from aerial photographs

Date of Photography July 1970
 Date of Field Inspection None
 Date of Field Edit July 1972
 Date of Final Compilation April 1974
 Date of Final Review June 1974

NATIONAL OCEAN SURVEY
 SHORELINE MANUSCRIPT
 T-12742

ALASKA

GLACIER BAY

RUSSELL ISLAND WEST

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