

T-12750

T-12750

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-12750
Classification No. Edition No. ...1.....
Field Edited

LOCALITY

State Alaska
General Locality Glacier Bay
Locality Adams Inlet

1970 TO 1972

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.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division(Rockville) Coastal Mapping Division(Norfolk)		SURVEY PP 12750 MAP EDITION NO. () MAP CLASS JOB PH. 6502	
OFFICER-IN-CHARGE Wesley V. Hull Jeffrey G. Carlen		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
May 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 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 No. 1	
5. SCALE 1:10,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytical LANDMARKS AND AIDS BY		R. Kelly	May, 1972
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		D. Phillips	June, 1972
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: B-8 SCALE: 1:10,000 CONTOURS BY CHECKED BY		J.C. Richter	June, 1972
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Graphic Worksheet CONTOURS BY CHECKED BY SCALE: 1:10,000 HYDRO SUPPORT DATA BY CHECKED BY		R. Rich & M. Webber	June, 1972
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY			
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		H. Lucas	June, 1974
7. COMPILATION SECTION REVIEW BY			
8. FINAL REVIEW BY		C.H. Bishop	Jan., 1975
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY			
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY			
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		n. J. Francis	Aug 26, 1975

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12750
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) "E" 6" Focal length		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	
70 E(C)7725 - 7727	7/27/70	12:07	1:40,000	10.0 ft. above MLLW	
71 E(C)4496 - 4498	6/5/71	8:35	1:20,000	4.7 ft. above MLLW	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Office Interpretation from 1:40,000 scale color photography
dated 27 Jul 70

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

Not mapped

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 Contemporary Survey	EAST T-12751	SOUTH T-12764	WEST T-12749
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REMARKS

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-12750
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	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	
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	NA
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA

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)

Field Edit Ozalid and Report.

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12750
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	June, 1972	Class III Manuscript Superseded		June, 1972
Final Review Applied	June, 1974	Class III		
Corrections and additions made, Final Reviewed as Class I	Jan., 1975		3/11/75	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
			None

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

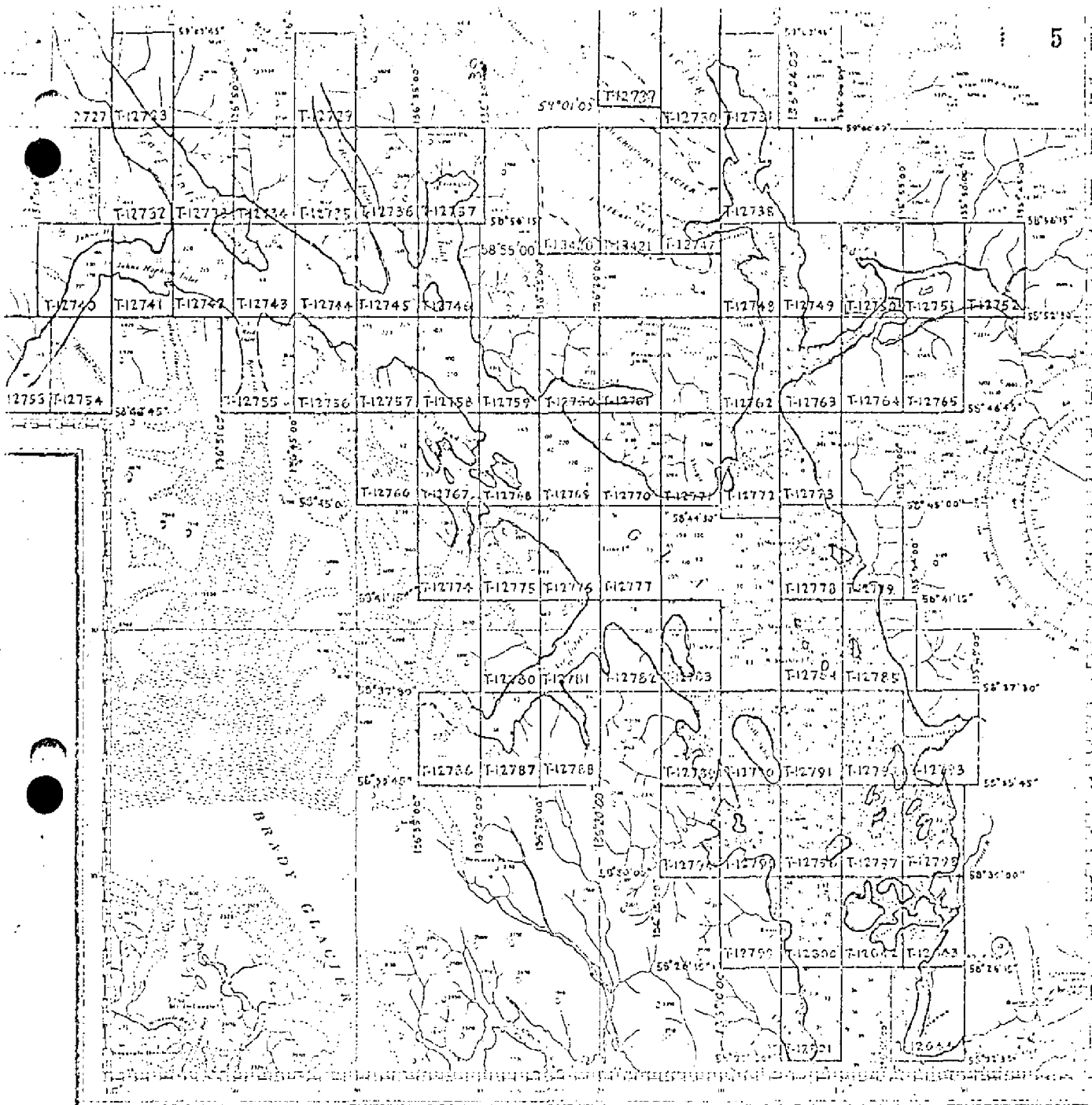
III. FEDERAL RECORDS CENTER DATA

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-12750

This shoreline manuscript is one of 80 maps that comprise Project PH-6502 which covers Glacier Bay and its numerous tributaries. For convenience of compilation, the project is divided into five parts, according to aerotriangulation bridges. This map is one of ten maps that comprise Part III, Muir Inlet. The job diagram shows its location in the project.

No field work was done prior to compilation except identification and premarking of horizontal control for bridging.

Aerotriangulation was done in the Rockville Office in May, 1972. The report could not be located at the time of final review and is not bound with this Descriptive Report.

Compilation was done in Rockville, using the B-8 stereo-plotter and 1:40,000 scale color photography taken in July, 1970. Photo-hydro photographs, ratioed from 1:20,000 scale to 1:10,000 scale were furnished for photo-hydro support and field edit.

Field edit was done in conjunction with hydrography in September, 1972. The list of control furnished the photogrammetrist indicates that 75 percent of the signals used were of photogrammetric origin. Field edit was applied at the Rockville office and forwarded for final review as Class III Manuscripts. Comments on this application follow the Compilation Report. After careful consideration and some changes, this final reviewer decided that the manuscript can be registered as a Class I Manuscript.

Final review was done at the Atlantic Marine Center, in January, 1975. See Final Review Report, Item 61, bound with this Descriptive Report.

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

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

AEROTRIANGULATION REPORT

GLACIER BAY - PART III

Maps T-12738, T-12748 thru T-12752, T-12762 thru T-12765

No aerotriangulation report for this part of Project PH-6502 was available to the final reviewer at the time of final review, nor could one be located at the Atlantic Marine Center or in the Rockville Office.

COMPILATION REPORT

T-12750

31. DELINEATION

1:40,000 scale color bridging photography was set on the B-8 stereoplotter to delineate shoreline, foreshore and off-shore features.

The photography was hazy which made the identification of many rocks along the shoreline difficult.

1:20,000 scale photography ratioed to 1:10,000 scale was used to try to locate rocks but chunks of ice along the shoreline made it difficult to see, so many rocks may have been missed and will have to be located by the hydrographer.

Common points were pricked on 1:40,000 scale and transferred to 1:10,000 scale ratioed photographs for hydro support.

32. CONTROL

Control was adequate for density and placement.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline was delineated by office interpretation of 1:40,000 color photography July 27, 1970. An approximate shallow and shoal line was shown, but no low water line was shown.

36. OFFSHORE DETAILS

The compilation photography was hazy and the difference in the tide level between the 1:40,000 scale and 1:10,000 scale

along with chunks of ice along the shoreline made it difficult to locate rocks.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

To the North No Contemporary Survey

To the South T-12764

To the East T-12751

To the West T-12749

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to "Photogrammetric Plot Report."

*Lost
C.H.B.
3-17-75*

41. - 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U.S. Geological Survey Quadrangle JUNEAU (D-6), ALASKA, scale 1:63,360 dated 1949 with minor revisions 1966.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart No. 8202, scale 1:209,978, dated September 11, 1971, 17th Edition.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Respectfully Submitted:

Martha C. Webber

27 Nov. 1974

GEOGRAPHIC NAMES

FINAL NAME SHEET

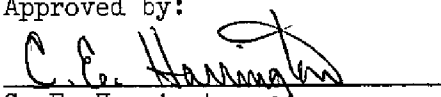
PH-6502 (Glacier Bay-Muir Inlet, Alaska)

T-12750

Adams Inlet

Glacier Bay National Monument

Approved by:


C. E. Harrington
Staff Geographer-C51x2

GLACIER BAY, ALASKA, JOB PH-6502
HYDRO SUPPORT SHORELINE MANUSCRIPTS
T-12738, 12748, 12749, 12750, 12751

Notes on application of field edit:

A review of Field Edit Report, (OPR-460) was made to determine the extent of field edit application required. The following conclusions were made:

After compiling the manuscripts at 1:10,000 scale, the hydrographic survey was conducted at 1:20,000 scale.

The ratio prints prepared for photo-hydro support and field edit were not utilized.

All hydro signals were located by traverse methods, positions computed and plotted on the boat sheet.

Sextant and T-2 fixes to foreshore rocks, the MHWL and other shoreline features were taken from these signals, plotted on the 1:20,000 scale boat sheets & transferred by proportional dividers to the 1:10,000 scale ozalid copy of the manuscripts.

The "spot" points transferred from the 1:20,000 scale boatsheets to the 1:10,000 scale manuscripts for the MHWL were inadequate to do revisions to the shoreline as compiled.

This project thus became a field hydrographic survey only.

All rocks and other foreshore features not visible on the photography that were plotted directly on the boat sheets from field fixes were not duplicated on the shoreline manuscripts as these were applied by hydrographic processing to the smooth sheet.

These conclusions were discussed with the Marine Chart Division and agreement was reached on the method of completing this project as far as the Coastal Mapping Division is concerned.

The ten manuscripts will be registered as a "Class III" map and is to be used as a source for shoreline compilation only.

Limited use was made of the field edit data. Corrections that could be applied on the 1:10,000 scale manuscripts were the removal of coralled rocks that were icebergs, the labeling of "rocky beach" and the addition of a few shoal areas.

A comparison was made between H-9317 and H-9318 (1:20,000) and the ten shoreline manuscripts. There was no conflict between the shoreline as compiled on the manuscripts and the hydrographic data.

Submitted by,

J. P. Battley, Jr.
Chief, Coastal Mapping
Section

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'		

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 berqs 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 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

REVIEW REPORT T-12750

SHORELINE

January 24, 1975

61. GENERAL STATEMENT:

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

A comparison print showing differences noted in Item 64 is bound with the original of this Descriptive Report.

An overlay sheet to cover Glacier Bay Part III was made in the electronic plotting section at AMC, showing fix and signal positions at 1:10,000 scale. This enabled the final reviewer to position each manuscript on the overlay and see where the field edit fixes plotted, without taping sheets together. Shoreline corrections were made where necessary. Some rocks on or at the MHWL were deleted. See Chart Maintenance Print.

The area of this map in the vicinity of Lat. $58^{\circ} 54'$, Long. $135^{\circ} 56'$ is a large run-off area from Casement Glacier. It is an extensive mud or gravel flat - foreshore area - and very changeable in nature. The mean lower low water line was not determined. The word "shallow" seems inappropriate for a foreshore area. It was removed from the foreshore area and the shallow line removed. The shallow line was removed from the entire map except one area at the southwest end of the sheet. This area is also a run-off area but is apparently different in nature with less elevation. The shall line was left on the seaward side of the area. See Survey H-9318.

Tree and bluff lines were removed. See Field Editor's comment about bluffs in the Field Edit Report bound with this Descriptive Report and memorandums concerning trees dated October 18, 1965 and October 27, 1965.

A shoal at Lat. $58^{\circ} 52.75'$, Long. $135^{\circ} 56'$ is visible on

Photo 71 E(C) 4497. It was originally compiled as two shoals, but was changed during final review; they are obviously connected.

The reef labeled "rock and mud shoal" at Lat. $58^{\circ} 53.2'$ Long. $135^{\circ} 56'$ was enlarged during final review. The reef shown on Survey H-9318 and the two reefs located by the field editor are within this area.

A shoal on the north side of Adams Inlet extending from 100 to 400 meters in an easterly direction from Station BASHFUL and a shoal on the south side of the inlet at Lat $58^{\circ} 52.1'$, Long. $135^{\circ} 27'$ were located by the field editor. They appear bare on photos taken between 4 and 5 feet above MLLW (Predicted tide). The field editor's elevation is from 5 to 9 feet which seems reasonable, according to what is visible on the photographs. The hydrographer's elevation on both shoals (Survey H-9318) is "covered 2 ft. at MLLW." This is a rather large discrepancy and could not be resolved by the final reviewer.

Hourly heights on the Adams Inlet gage for the dates of field edit (Sept. 26, 27, 28, 1975) were used to refer field edit elevations to MLLW.

Soundings plotted on shore between Lat. $58^{\circ} 53'$ and Lat. $58^{\circ} 53.5'$, on the west end of the large island in Adams Inlet. Three field edit sextant fixes verified the position of the MHWL in this area. This discrepancy could not be resolved photogrammetrically.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No registered topographic map of this area was available for comparison.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle JUNEAU (D-6), ALASKA, scale 1:63,360, dated 1949, with minor revisions in 1966. There appears to be accretion of shoreline in large run-off areas.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a verified copy of the smooth sheet for Survey H-9817. The only significant differences noted were that soundings on the east side of the channel between Lat. $58^{\circ} 53'$ and $58^{\circ} 53.5'$ plotted on shore, and that field edit elevations of shoals differed considerably from the hydrographer's

elevations. See Item 61, Par. 7. These discrepancies are shown in purple on the comparison print bound with this report.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated Nov. 3, 1973. No significant differences were noted. The chart scale is too small for adequate comparison.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

Although there is no Aerotriangulation Report with this section of PH-6502, this reviewer was assured by Mr. John Perrow, Chief of Bridging Section, by telephone conversation on January 21, 1975, that this job complies with Bureau Standards and meets requirements for National Standards of Map Accuracy.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer.

Approved for forwarding:

Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

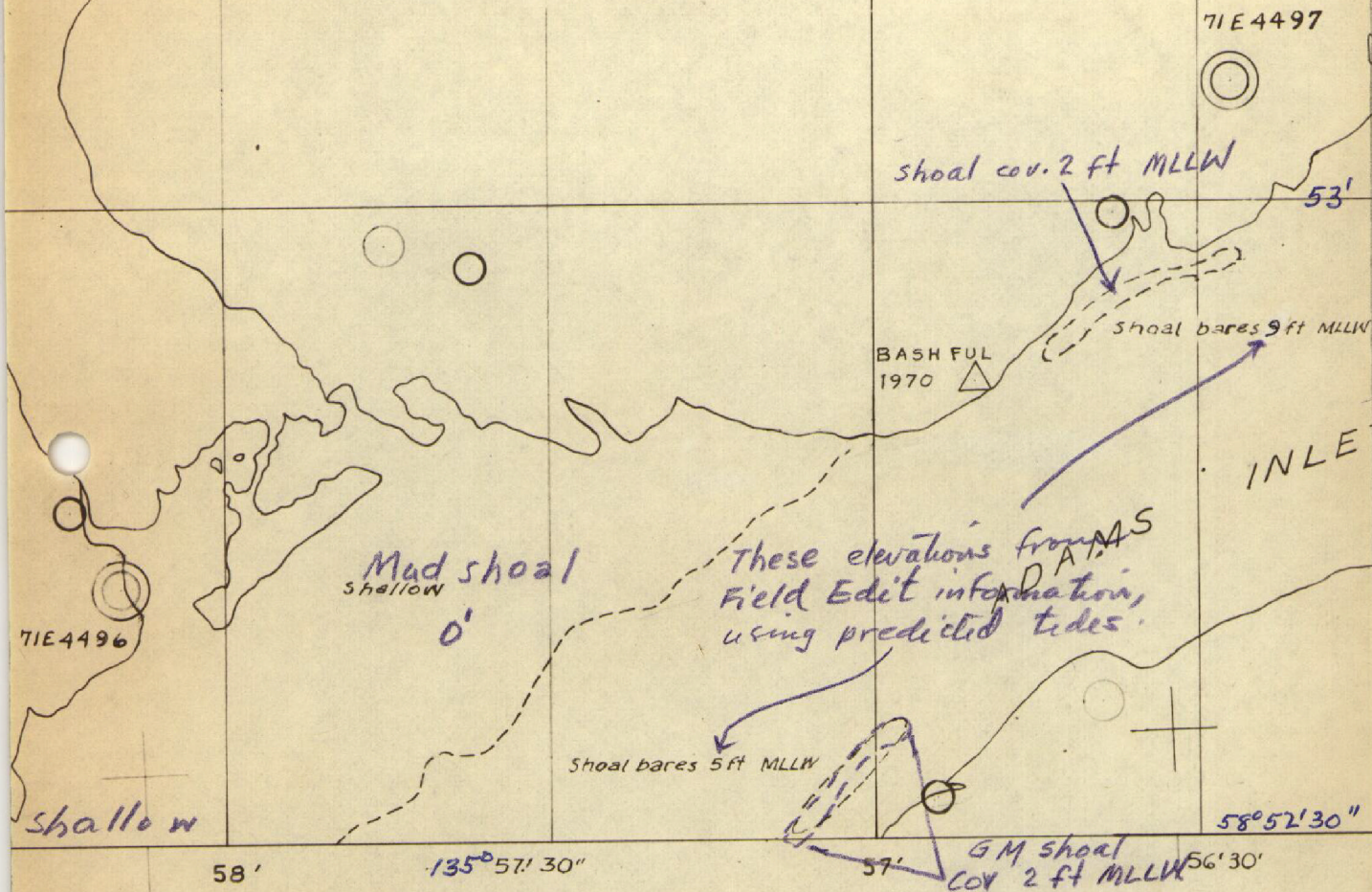
Chief, Coastal Mapping Div.

NOTE:

"The photogrammetric location and delineation of features offshore from the mean high-water line on this survey may not be complete or final. The contemporary reviewed hydrographic survey of the area where available, should be consulted for the final delineation."

COMPARISON PRINT

Purple - H-9318



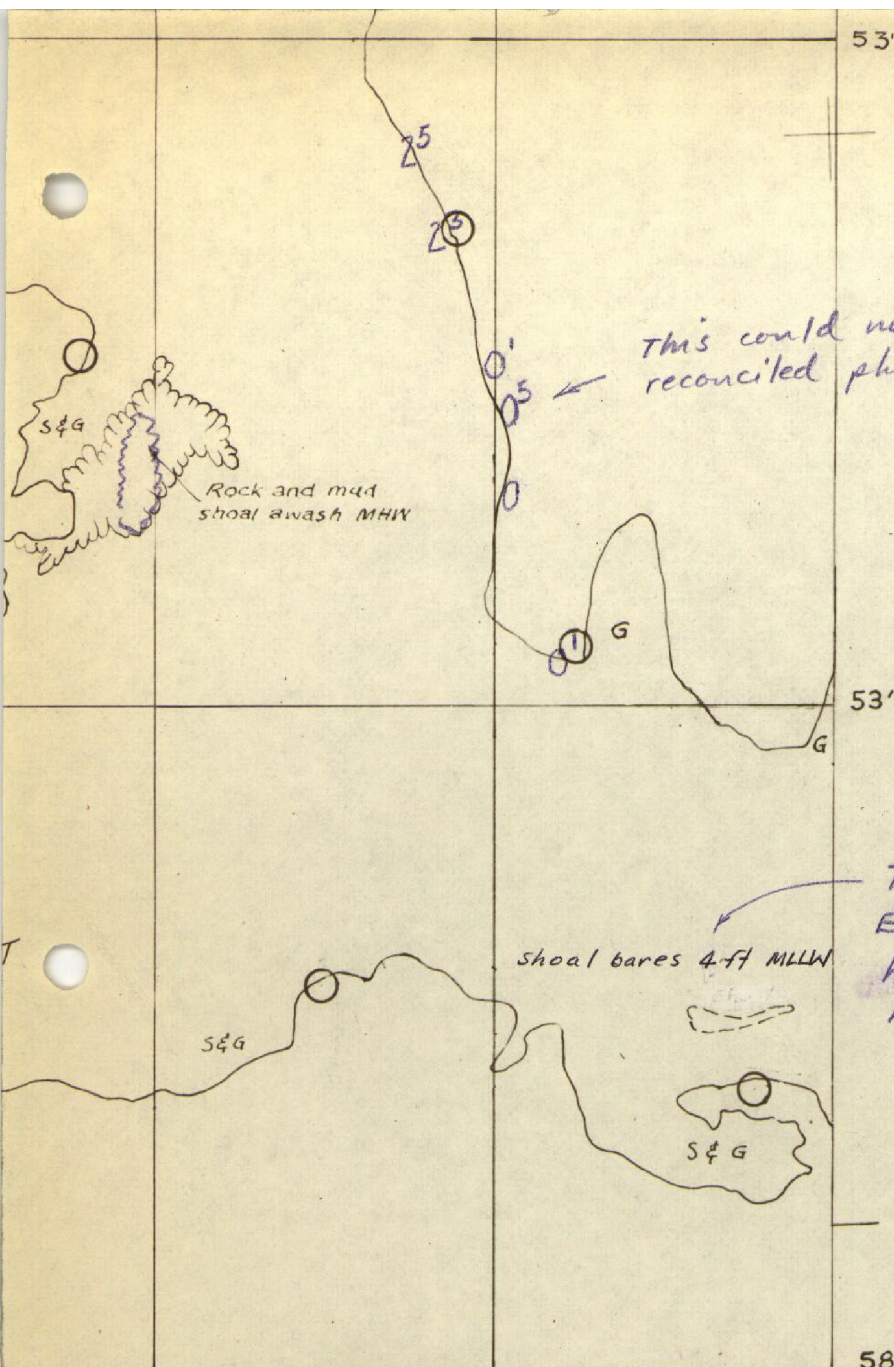
photogrammetric

- △ Recoverable horizontal control station of third-order or higher accuracy
 The heavy shoreline defines the approximate mean high water.
 Compiled by photogrammetric methods, from aerial photographs
- | | | |
|---------------------------|------------|-----------|
| Date of Photography | July 1970 | June 1971 |
| Date of Field Inspection | None | |
| Date of Field Edit | Sept. 1972 | |
| Date of Final Compilation | June 1974 | |
| Date of Final Review | Jan. 1975 | |

5000 FT G

53' 30"

71E4428



COMPARISON PRINT

Purple = H-9318

53'

58°52'30"

56'

55'30"

135°55'00"

NATIONAL OCEAN SURVEY
SHORELINE MANUSCRIPT

T-12750

ALASKA

GLACIER BAY-MUIR INLET

ADAMS INLET

SCALE 1:10,000

Polyconic projection 1927 N.A. Datum
 based on Alaska Zone I Plane Coordinate System
 Datum Plane - Mean High Water

T-12750