

T-12751

T-12751

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
<b>DESCRIPTIVE REPORT</b>	
Type of Survey .. Shoreline .....	
Job No. .... PH-6502 .....	Map No. .... T-12751 .....
Classification No. ....	Edition No. .... 1 .....
Field Edited	
<b>LOCALITY</b>	
State .... Alaska .....	
General Locality .... Glacier Bay .....	
Locality .... Granite Canyon .....	
<hr/> 1970 TO 1972 <hr/>	
<b>REGISTRY IN ARCHIVES</b>	
DATE .....	

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR  
TO REGISTRATION

NOAA FORM 76-36A (3-72)	U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>12751</u>  MAP EDITION NO. ( )  MAP CLASS  JOB PH. <u>6502</u>
<b>DESCRIPTIVE REPORT - DATA RECORD</b>			

PHOTOGRAMMETRIC OFFICE  Coastal Mapping Division(Rockville) Coastal Mapping Division(Norfolk)	LAST PRECEDING MAP EDITION  TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED
OFFICER-IN-CHARGE Wesley V. Hull Jeffrey G. Carlen	JOB PH. _____  MAP CLASS _____  SURVEY DATES: 19__ TO 19__

<b>I. INSTRUCTIONS DATED</b>	
<b>1. OFFICE</b>	<b>2. FIELD</b>
May 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 checked="" type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL	OTHER (Specify)
3. MAP PROJECTION  Polyconic	4. GRID(S) STATE      ZONE Alaska      No. 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	May, 1972
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradamat      CHECKED BY	D. Phillips	June, 1972
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION      CHECKED BY INSTRUMENT: B-8      CONTOURS BY SCALE: 1:10,000      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	M.C. Webber	July, 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	Feb., 1975
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		
11. MAP REGISTERED - COASTAL SURVEY SECTION BY	<i>N.J. Francis</i>	<i>Aug. 26, 1975</i>

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

## COMPILATION SOURCES

T-12751

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) "E" 6" Focal length		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		(C) COLOR X (P) PANCHROMATIC (I) INFRARED		ZONE Pacific	
				MERIDIAN 120th	
				<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
70E(C) 7727 - 7728	7/27/70	12:07	1:40,000	10.1 ft. above MLLW	
71E(C) 4498 - 4500	6/5/71	8:35	1:20,000	4.6 ft. above MLLW	
71E(C) 4519 - 4521	6/5/71	8:53	1:20,000	5.5 ft. above MLLW	

REMARKS 1:20,000 scale photographs ratioed to 1:10,000 for Hydro support.

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

Office interpretation of 1:40,000 scale color photographs  
dated July 27, 1970

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

None

## 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
No contemporary survey	T-12752	T-12765	T-12750

REMARKS

T-12751  
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		
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  NONE

6. 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.

RECORD OF SURVEY USE

T-12751

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Shoreline, rocks along-shore and inshore detail	July 1972	Class III Manuscript		July 1972
Field Edit Applied	June 1974	Class III		
Corrections and additions made, Final Reviewed as Class I	Feb. 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

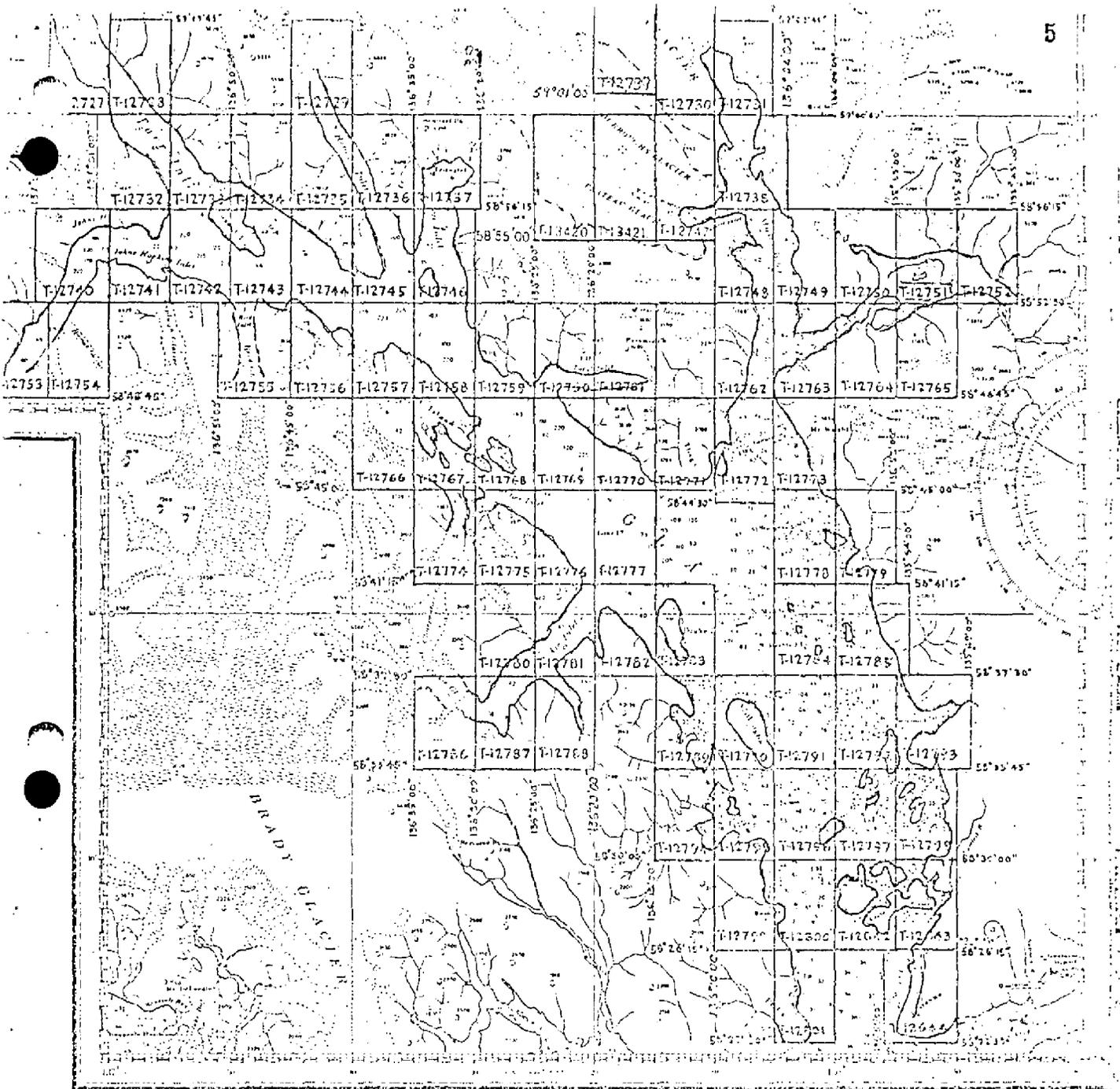
2.  REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_  
 3.  REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

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 R.W.H.

JOB PH-6502  
 GLACIER BAY  
 ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12751

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 10 maps that comprise Part III, Muir Inlet, and is near the east end of Adams Inlet. The project diagram shows its location in the project.

No field work was done before 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, also color, 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 almost all of the signals used were of photogrammetric origin. Field edit was applied at the Rockville Office and forwarded for final review as a Class III Manuscript. Comments on this application follow the Compilation Report. After careful consideration and several 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 cronaflex 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-12751

31. DELINEATION

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

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 the 1:40,000 scale photography 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 dated July 27, 1970. An approximate shallow and shoal line was shown.

36. OFFSHORE DETAILS

The compilation photography was hazy and the difference in the tide level between the 1:40,000 and 1:10,000 scale photography, 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-12765

To the East T-12752

To the West T-12750

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to "Photogrammetric Plot Report."

*Lost  
CRB  
9-17-75*

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-12751

Adams Inlet

Glacier Bay National Monument

Granite Canyon

Approved by:

  
C. E. Harrington  
Staff Geographer-C51x2

GLACIER BAY, ALASKA, JOB PH-6502  
HYDRO SUPPORT SHORELINE MANUSCRIPTS  
T-12738, 12743, 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.

2

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 ( $58^{\circ}54.0'N$ ,  $136^{\circ}55.2'W$ ) 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  $58^{\circ}54.05'N$ ,  $136^{\circ}55.3'W$  forms an islet at MHW and has been delineated on the field edit ozalid.

T-12742

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

A cove is shown on the manuscript at  $58^{\circ}53.7'N$ ,  $136^{\circ}54.8'W$  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  $58^{\circ}55.3'N$ ,  $136^{\circ}46.1'W$  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  $58^{\circ}55'20''N$ ,  $136^{\circ}47'45''W$ . 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  $58^{\circ}53.8'N$ ,  $136^{\circ}41.0'W$  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'		

T-12757

The field editor's inspection for rocks at 58°50.75'N, 136°38.8'W and 58°50.8N, 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°10.0W 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, M-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-12751

## SHORELINE

January 31, 1975

61. GENERAL STATEMENT:

See Summary which is page 6 of this Descriptive Report.

A comparison print showing differences noted in Items 64 and 65 is bound with the original of this 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 the manuscript on the overlay and see where the field edit fixes plotted, without taping T-sheets together. Shoreline corrections were made where necessary. Some rocks on or very close to the MHWL were deleted. See Comparison Print.

Some field edit which had not been applied previously was applied at the time of final review. All elevations appearing on the manuscript are from field edit information, using hourly heights on the Adams Inlet gage. Some of the elevations differ greatly from the hydrographer's elevation of the same feature. The elevations determined by using predicted tides appear to be more compatible with images visible on the photographs than the hydrographer's elevations.

Bluff lines were removed. See Field Editor's comment in the Field Edit Report bound with this Descriptive Report. Tree lines were removed; see memorandums dated October 18, 1965 and October 22, 1965. Shallow lines were removed from this map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No registered topographic surveys were available for comparison.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle JUNEAU (D-6), ALASKA, scale 1:63,360, dated 1949, with minor revisions in 1966. There appears to be accretion at the mouth of Granite Canyon. The shoal at Lat.  $58^{\circ} 52.7'$ , Long.  $135^{\circ} 53.9'$  is shown as an island on JUNEAU (D-6).

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a verified copy of the smooth sheet for Survey H-9318. Discrepancies are noted on the comparison print in purple.

65. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated Nov. 3, 1973. A rock at Lat.  $58^{\circ} 52.7'$ , Long.  $135^{\circ} 53.9'$  is shown as a bare rock on the chart, with a least depth of 1.8 fathoms on H-9318, and with an elevation of 5 feet above MLLW by the field editor. The field editor's elevation is recommended by final review. No other differences were noted.

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.

51'30"

135° 51' 00"

50'30"

135° 50' 00"

24  
4

55'30"

COMPARISON PRINT

Purple = H-9318

28320



58° 55'

Granite Canyon

This rk is bare  
several feet  
on photos

No rk visible  
on photo at  
this position

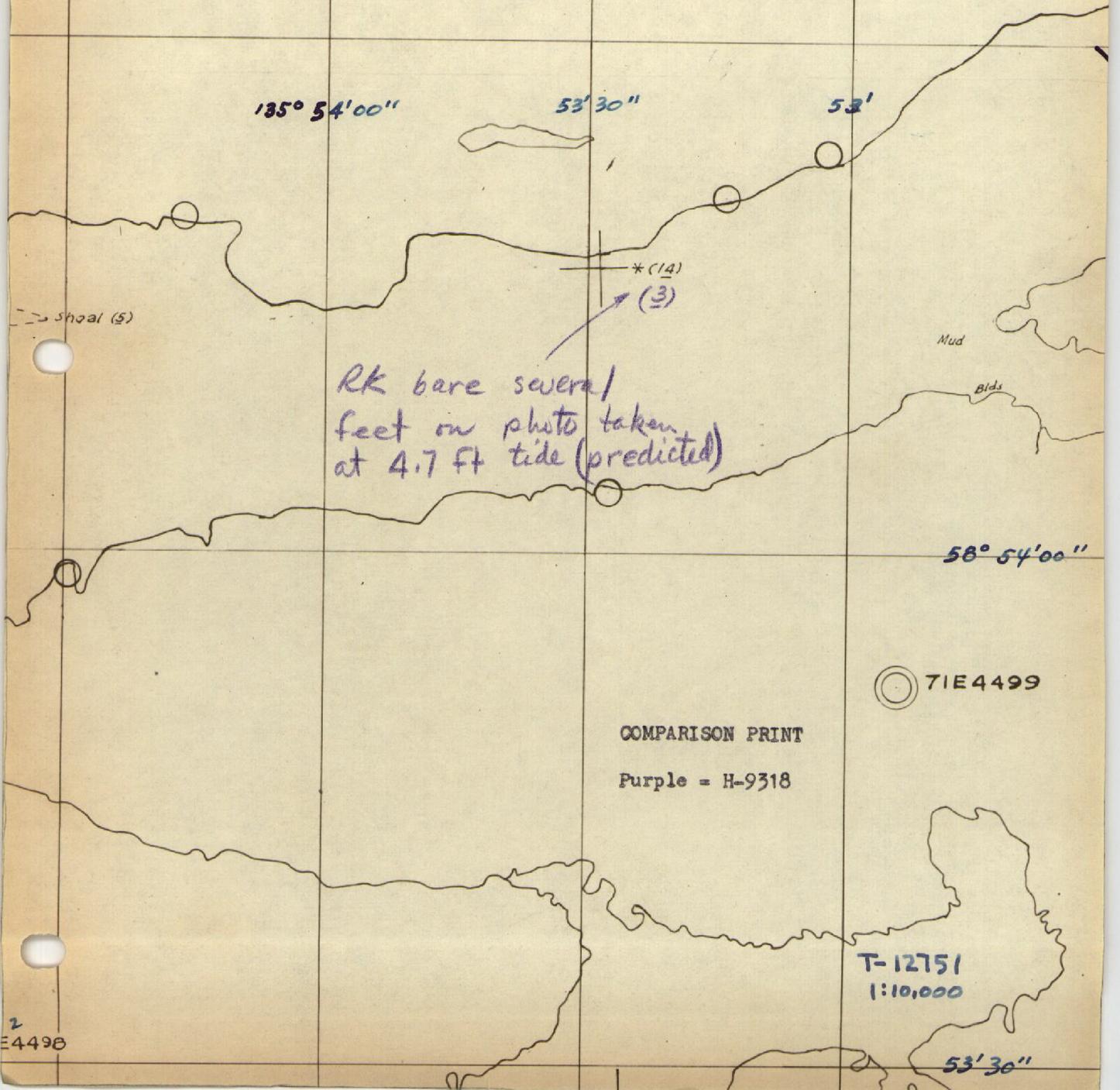
(1)

T-12751

1:10,000

54'30"

# GLACIER BAY NATIONAL MONUMENT



RK bare several feet on photo taken at 4.7 ft tide (predicted)

COMPARISON PRINT

Purple = H-9318

71E4499

T-12751  
1:10,000

2  
E4498

COMPARISON PRINT

Purple = H-9318

RK. almost on MHWL  
not mapped on  
T-12751

Ends of this shoal  
bare on photos

(5) Shoal

H-9318 shows least  
depth of 12 fm.  
This rock is awash  
on photos taken at  
5 ft above MLLW  
(predicted 54' tide)

Chart 8202 shows  
this as a bare rock.  
(5) recommended for this  
rock.

NOTE:  
plot p

Y = 2,580,000 FT.

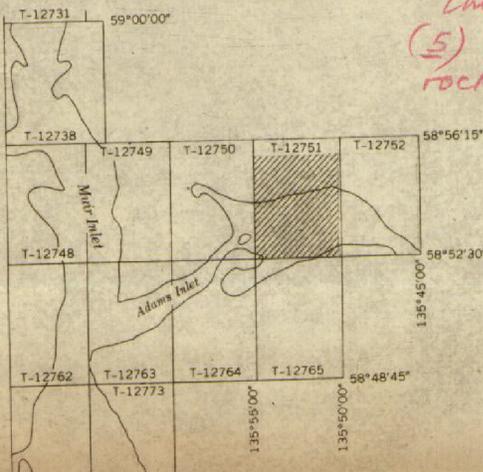
58°52'30"

135°55'00"

54'30"

X = 2,260,000 FT.

INDEX TO ADJOINING SHEETS JOB PH 6502



T-12751

1:10,000

The entire shoal area 52' indicated by the field editor is actually part of the foreshore area extending south to the MHWL

Shoal covers approx 1 ft at MHW

51'30"

135° 51'00"

27

(2) Covered 1 ft at MLLW

\* not visible on photo.

No rks visible on photos

These rks bare when photos were taken at 4.7 ft stage of tide (predicted)

Rk on MHWL not mapped on T-12751.

58° 54' 00"

NOTE:  
"The photogrammetric location and distance offshore from the mean high-water may not be complete or final. The reviewed hydrographic survey of the area should be consulted for the final data."

53'30"

COMPARISON PRINT  
Purple = H-9318

(5) (18) (18) (3) (3)  
Rks on or almost on MHWL not mapped on T-12751.

71E 452

T-12751  
1:10,000

