ORIGINAL

T-12767

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-12767

Classification No. *Edition No.* 1

Field Edited

LOCALITY

State Alaska

General Locality Glacier Bay

Locality Hugh Miller Inlet, Mouth Of

19 64 TO 19 70

REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-778

T-12767

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: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY NO. T-12767

MAP EDITION NO. (1)

MAP CLASS 1

JOB PH- 6502

PHOTOGRAMMETRIC OFFICE: Coastal Mapping Division, Norfolk

OFFICER-IN-CHARGE: Jeffrey G. Carlen

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH-

MAP CLASS

SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
Nov. 16, 1964 Dec. 18, 1969	

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [ ] MEAN LOW-WATER [X] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Polyconic

4. GRID(S): STATE: Alaska; ZONE: 1

5. SCALE: 1:10,000 — STATE; ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	D. Brant	Jan. 1968
	LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS METHOD: Coordinatograph	PLOTTED BY	C. Blood	Apr. 1970
	CHECKED BY	R. White	Apr. 1970
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:15,000	PLANIMETRY BY	A.L. Shands	Jul. 1970
	CHECKED BY	L.O. Neterer	Jul. 1970
	CONTOURS BY	NA	
	CHECKED BY		
4. MANUSCRIPT DELINEATION METHOD: Smooth ink drafting SCALE: 1:10,000	PLANIMETRY BY	A.L. Shands	Jul. 1970
	CHECKED BY		
	CONTOURS BY	NA	
	CHECKED BY		
	HYDRO SUPPORT DATA BY	L. Neterer	Jul. 1970
	CHECKED BY		
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	R. White (Part)	Jul. 1970
6. APPLICATION OF FIELD EDIT DATA	BY	A.L. Shands	Nov. 1971
	CHECKED BY	B.L. Barge	Nov. 1971
7. COMPILATION SECTION REVIEW	BY		
8. FINAL REVIEW	BY	C. Bishop	May, 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 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12767

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S): Wild RC-9 "M"

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
X (P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE
ZONE: Pacific [X] STANDARD
MERIDIAN: 120th [ ] DAYLIGHT

TIDE STAGE REFERENCE: JUNEAU
[X] PREDICTED TIDES Willoughby Id.
[ ] REFERENCE STATION RECORDS
[ ] TIDE CONTROLLED PHOTOGRAPHY

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
64 M(P) 3669 - 3671	6/12/64	10:25	1:40,000	3.9 ft. below MLLW
64 M(P) 3680	6/12/64	10:07	1:40,000	4.0 ft. below MLLW

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Photos listed above.

Field inspection (Aug., 1964) of 64 M(P) 3669 and 3670.

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

Office interpretation of photos listed above.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS *(List only those surveys that are sources for photogrammetric survey information.)*

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
T-12758	T-12768	T-12774	T-12766

REMARKS

NOAA FORM 76-36B
(3-72)

* U.S. G.P.O. 1972-769381/568 REG.#6

NOAA FORM 76-36C
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12767

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION ☐ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		R.H. Houlder	Summer 1964
2. HORIZONTAL CONTROL	RECOVERED BY	N.A.	
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
3. VERTICAL CONTROL	RECOVERED BY	N.A.	
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY	None	
	LOCATED *(Field Methods)* BY		
	IDENTIFIED BY		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	BY	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	W.H. Shearouse	Aug. 1964
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED: N.A.

2. VERTICAL CONTROL IDENTIFIED: N.A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS *(Clarification of details)*

64 M(P) 3669 and 3670

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 Inspection Report

NOAA FORM 76-36C
(3-72)

* U.S. G.P.O. 1972-769381/567 REG.#6

NOAA FORM 76-36C
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

T-12767

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		J.B. Watkins, Jr.	Summer 1966 & 1970
2. HORIZONTAL CONTROL	RECOVERED BY		
	ESTABLISHED BY	R.B. Melby	Sept. 1966
	PRE-MARKED OR IDENTIFIED BY	R.B. Melby	Sept. 1966
3. VERTICAL CONTROL	RECOVERED BY	N.A.	
	ESTABLISHED BY		
	PRE-MARKED OR IDENTIFIED BY		
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (*Triangulation Stations*) BY	None	
	LOCATED (*Field Methods*) BY		
	IDENTIFIED BY		
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	BY	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	W.D. Neff	Aug., 1970
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED
N.A.

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
64 M 3681	FOUR 1966		

3. PHOTO NUMBERS (*Clarification of details*)
64 M(P) 3670 and 3681

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 Field Edit Report.

NOAA FORM 76-36C
(3-72)

* U.S. G.P.O. 1972-769381/567 REG.#6

NOAA FORM 76-36D
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

T-12767

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	July, 1970	Advance Superseded		7/30/70
Field edit applied, Compilation complete	Nov., 1971	Class I Superseded		
Final Review	May, 1975			

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

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

III. FEDERAL RECORDS CENTER DATA

1. ☐ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☐ COMPUTER READOUTS.
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

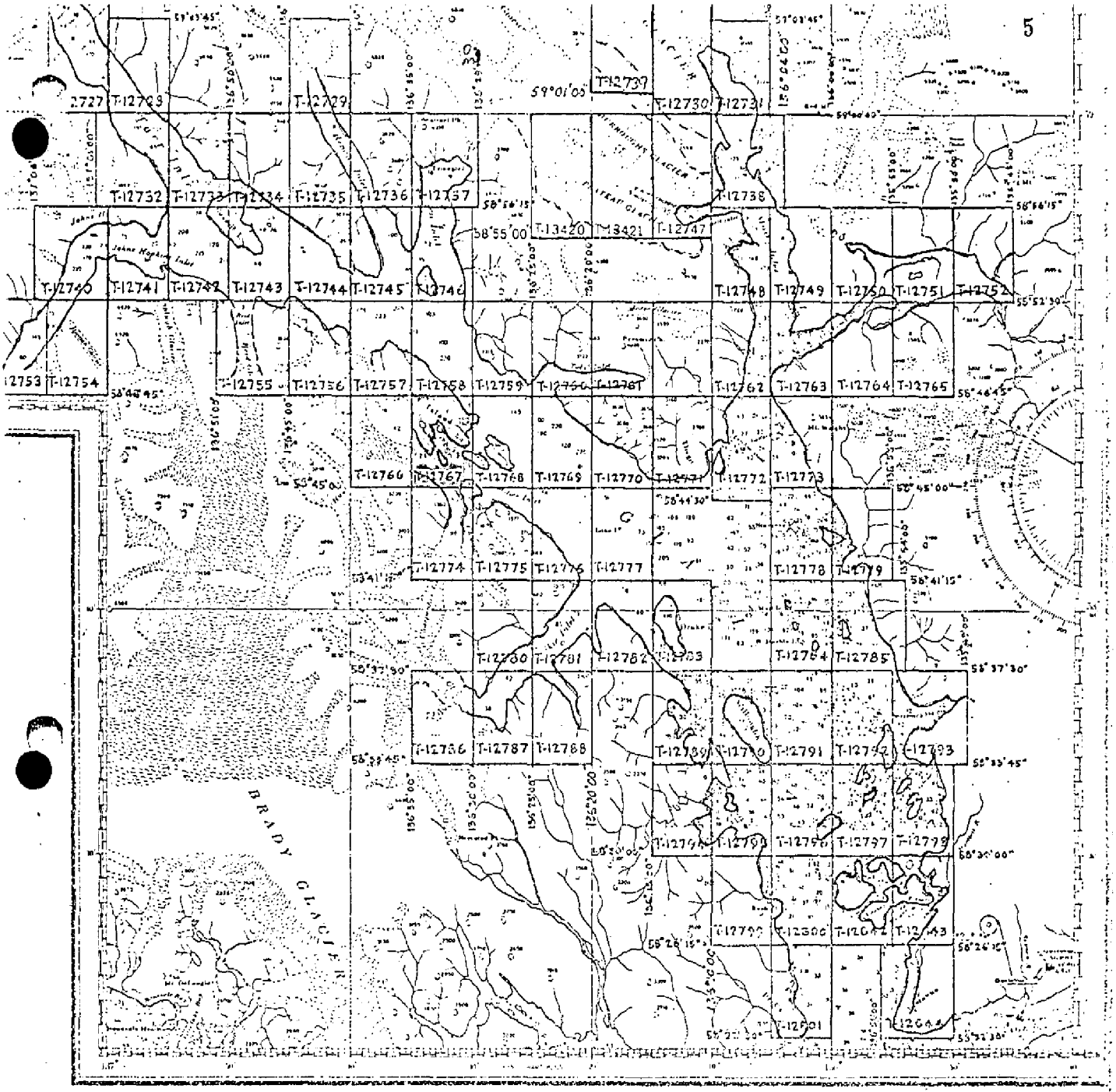
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS *(This section shall be completed each time a new map edition is registered)*

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY / MAP CLASS
SECOND EDITION	TP - _____ (2)	PH - _____	☐ REVISED ☐ RESURVEY ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	TP - _____ (3)	PH- _____	☐ REVISED ☐ RESURVEY ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	TP - _____ (4)	PH - _____	☐ REVISED ☐ RESURVEY ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

NOAA FORM 76-36D

* U.S. G.P.O. 1972-769380/548 REG.#6



REVISED 9-5-72 RWH

JOB PH-6502
GLACIER BAY
ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-12767

This 1:10,000 scale shoreline manuscript is one of 80 maps that comprise Project PH-6502 which covers Glacier Bay, Alaska and its numerous tributaries. For convenience of compilation, the project was divided into five parts, according to aerotriangulation bridges. This map is one of 21 maps that comprise Part I which covers Glacier Bay from Geikie Inlet to Composite Island.

Field inspection of the area was done in August, 1964.

Bridging was done by analytic aerotriangulation methods in the Rockville Office in January 1968, using 1:40,000 scale panchromatic wide angle photography taken in June, 1964.

Compilation was done at the Atlantic Marine Center, Norfolk, using the Wild B-8 stereoplotter, with 1:40,000 scale photography taken in June, 1964. Photographs were ratioed to 1:10,000 scale for photo-hydro support and field edit use. Photography of the area was taken near low tide.

Field edit was done in conjunction with hydrography in July and August, 1970. This work was adequate; no problems were encountered when it was applied to the manuscript.

Final review was done at the Atlantic Marine Center in May, 1975.

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

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

USC&GSS LESTER JONES 11 September 1964

FIELD INSPECTION REPORT

Project 21423 - Glacier Bay

2. AREAL FIELD INSPECTION

No map numbers appear on the Project Diagram for this part of Glacier Bay which includes inspection of the islands and bays on the west side from the south end of Willoughby Island northward to Tlingit Point, then both shores northwestward to Tidal Inlet on the north, Gilbert Island and Hugh Miller Inlet on the south.

There are no populated places. All the area lies within the Glacier Bay National Monument and is managed by the National Park Service. A pamphlet regarding the Monument is enclosed, herewith.

The shoreline varies from that at the base of rock bluffs or steep slopes, where there is no beach, to the irregular type where there are numerous indentations, ledge out-croppings and narrow gravel and boulder-strewn beaches.

There are two major inlets on the southeast shore, (Geikie and Hugh Miller -CHarpentier) and one on the north (Tidal). At the heads of these inlets and the principal coves off them are tidal flats probably caused by streams flowing from the receding glaciers. These are gravel and silt. The one at the head of Geikie Inlet is near the base of a glacier partly visible on the photographs - 64M 3752 and 3753. It is intersting to note the large "mountains" of loose gravel on the north side evidently left by the receding glacier.

Field inspection was of necessity rather hurriedly done due to a bad weather period and completion deadline. However, practically the entire shoreline was covered and inspection is believed to be adequate.

Field inspection notes will be found on the following 1:40,000 scale photographs: 64M 3646, 3651, 3652, 3661, 3662, 3663, 3665 thru 3670, 3682, 3684, 64M 3748 thru 3750, 3755 thru 3757, 3761 thru 3764, 3766 thru 3768.

The photography is of excellent quality with no significant problems as to definition or interpretation. Coverage is complete except for Lone Island, a small island approximately midway between north and south shores in Glacier Bay. Triangulation Station Lone 1939 at Lat. 58° 43' 20.492", Long. 136°17' 35.614", is on the island. About half of the island is visible on photo 64M 3757.

3. HORIZONTAL CONTROL

Photogrammetric plot requirements are believed to be satisfied by (1) recovery and identification of existing stations as called for on the project diagram and (2) establishment and identification of two new stations by triangulation methods.

Enlargements of sections of the 1:40,000 scale contact photographs were furnished for identification of several of the required control stations. These proved very useful. However, enlargements were not received for Stations: STAR, ELSE, OPEN and DRAKE on flight strip No. 3. These were identified on the contact photos.

The two stations established are RANA and ACE. Positions are furnished with project data. These stations marks were set in 1944 by S.B.G., but the season apparently ended before positions were determined.

3. Cont.

One required station could not be found. In place of it, (DINGO), nearby station KNOB was identified.

A 11 stations recovered and identified are Coast and Geodetic Survey stations except HUGH MILLER EAST BASE 1907 and GLOOMY 1907, which were established by the International Boundary Commission.

Note: The U. S. Geological Survey is in process of publishing new quadrangal maps of the northwest part of Glacier Bay, the field work having been done in the early 1960's. It is believed that they established additional horizontal control that may prove useful to future surveys northwestward of our 1964 work. It is suggested that this be investigated before the next seasons work is begun.

4. VERTICAL CONTROL

Inapplicable.

5. CONTOURS AND DRAINAGE

Contours are inapplicable.

The photographs show many small streams flowing down the mountains from the melting snow and ice. Many were labelled but thorough check was not attempted. The photographs were taken in June when the runoff was building to its height and the streams are readily seen. It is felt that they should be delineated "Perennial", as the snow and ice melts all summer, never entirely dissipating in most areas.

6. WOODLAND COVER

Except where covered by snow, the wooded areas are obvious on the photographs. Usually where there is a beach, it is fringed with dense alder. The alder seems to be gaining in its northward growth as the glaciers recede. It is thick and tall and is worthy of being mapped as trees or woods and has been so labelled numerous times. Other trees are mostly conifers with some deciduous here and there.

7. SHORELINE AND ALONGSHORE FEATURES

These were visually inspected from a skiff running close to shore.

Mean high-water line has been indicated by dashes in red ink on the photographs. An attempt was made to place the ink line in its true position as viewed from the skiff. In some instances the compiler, working under more favorable conditions can delineate the line more accurately, particularly with regards small indentures and added character that will readily be seen on large scale photos or plates. At times, notes were made indicating that the mean high-water line was obvious, such as at the base of a bare rock mountain where high-water and low-water lines are synonymous, or practically so. Along numerous stretches of shoreline where there is a narrow beach, the mean high-water line lies against the vegetation; other stretches find the line offshore 3 to 5 meters from the vegetation. Notes cover most of these cases.

The photographs were taken at or near low-water. The low-water line is obvious and has been indicated as approximate with green dots at many places.

7. Cont.

A large part of the inspection was done at low tide and the foreshore classified at that time. It is reasonably thorough and accurate.

There are no man-made shoreline structures. Many protruding ledges are visible, a large number being labelled.

There is no "apparent" shoreline.

Mean high-water lines crossing the tidal flats have been labelled "approximate". The line as shown was arrived at by observing (1) slight change of photographic tone, (2) crossing the flat from a snow line which comes down to high water, (3) detecting a tiny streak of debris deposited at high-water, or (4) accomplishing the inspection at or near high water.

8. OFFSHORE FEATURES

Rocks and a few shoals constitute the offshore features. These were visited and labelled. Height of rocks above mean high-water was obtained by carefully estimating the amount (in feet) that is above the high-water markings on the rock, or the height bare at hour and date of inspection. Time did not permit accurately measuring these features but it is believed they are labelled within a foot or two of true heights.

Refer to item 7 for a discussion of low-water line and foreshore.

9. LANDMARKS

None

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

None established.

12. OTHER INTERIOR FEATURES

None.

13. GEOGRAPHIC NAMES

No systematic investigation was made. No conflicts or new names came to light during the course of the work. It is suggested that comparison of charted names be made with the latest U. S. Geological Survey quadrangals.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

None.

15. SUMMARY

The recovery and identification of horizontal control was completed for the central section of Glacier Bay between Willoughby Island and Gilbert Island. Field inspection of this area was also completed.

It appears that it will be necessary to establish an extensive sea level control scheme northwest of Gilbert Island and in Tarr Inlet in order to meet photogrammetric and hydrographic requirements. The only stations in this area are 1909 IBC stations on mountains peaks normally covered with snow thus difficult to recover and impossible to identify on the photography. In order to comply with 2nd order specifications, this scheme should start in central Glacier Bay at stations CASE and GEIKIE and should consist of a combination of triangulation and electronic traverse.

William H. Shearouse

William H. Shearouse
Cartographer

Approved and Forwarded

Richard H. Houlder

Richard H. Houlder, LCDR, USC&GS

Stations which were recovered, or searched for, or established, and/or identified are tabulated below.

STATION NAME	RECOVERED	IDENTIFIED	PHOTO NO.
JILL 1938	yes	yes	64 M 3692 (enlarg)
NONE 1938	yes	no	
ALUM 1938	yes	no	
TREE 1938	yes	no	
SPIT, 1938	yes	no	
STAR 1938	yes	yes	64 M 3653 (contact)
EVER 1939	yes	yes	64 M 3661 (enlarg)
ELSE 1939	yes	yes	64 M 3649 (enlarg)
VENT 1939	yes	no	
SINK 1939	yes	no	
FRANK 1939	yes	no	
OPEN 1939	yes	yes	64 M 3649 (contact)
GOLD 1939	yes	no	
JUST 1939	yes	no	
DUCE 1939	yes	no	
ENTER 1939	yes	no	
KILL 1939	yes	ne	
DRAKE 1939	yes	yes	64 M 3648 (contact)
RIDGE 1939	yes	no	
DESERT 1944	yes	yes	64 M 3746 (enlarg)
KELP 1944	yes	no	
JUMBO 1944	yes	no	
MID 1944	yes	no	
BUTE 1944	yes	no	

STATION NAME	RECOVERED	IDENTIFIED	PHOTO NO.
VEIN 1944	yes	no	
ROUND ?	yes	no	
SNOW 1944	yes	no	
BALD 1944	yes	no	
KNOB 1944	yes	yes	64 M 3749 (contact)
DINGO 1944	no		
CUBE 1944	yes	yes	64 M 3750 (enlarg)
POINT 1944	yes	no	
FOX 1944	yes	no	
MINK 1944	yes	no	
ARCH 1944	yes	yes	64 M 3685 (enlarg)
RAMPART 1944	yes	~~yes~~ NO	
FLAT 1939	yes	yes	64 M 3666 (enlarg)
HUGH MILLER W BASE 1907	no		
HUGH MILLER E BASE 1907/1944	yes	yes	64 M 3668 (enlarg)
GLOOMY 1907	yes	yes	64 M 3768 (enlarg)
CASE 1939	yes	yes	64 M 3762 (enlarg)
DONE 1939	yes	yes	64 M 3761 (enlarg)
TLINGIT 1939	yes	yes	64 M 3761 (enlarg)
GEIKIE 1939	yes	no	
LONE 1939	yes	no	
RANA 1964	yes	yes	64 M 3669 (contact ~~enlarg~~)
ACE 1964	yes	yes	64 M 3765 (contact)
FLAG 1944	yes	no	
NORTE 1939	yes	no	
QUICK 1939	yes	no	

PHOTOGRAMMETRIC PLOT REPORT
Job PH-6502
Glacier Bay, Alaska

January 8, 1968

21. Area Covered

The area covered in this report is in the vicinity of Glacier Bay, Alaska, and is a continuation of Project 21511 dated August 1965. The registry numbers of the 1:10,000 scale maps are T-12756 thru T-12758, T-12766 and T-12767 and T-12774. Maps T-12768 and T-12775 were partially completed from a previous bridge. The purpose of this bridging is to furnish positions of points to control models for the compilation of shoreline mapping. The attached sketch of strips bridged shows the triangulation used in the adjustment.

22. Method

Two strips of photography were bridged using analytic aerotriangulation methods. Strips 7 and 8 (1:40,000 scale, RC-9 panchromatic photography) were adjusted to ground positions with field identified points. Satisfactory ties were made between strips. The photographic plates used in bridging are printed emulsion to emulsion.

23. Adequacy of Control

Horizontal control was adequate and complied with the project instructions. All field identified control points were natural objects. Closures to control are indicated on the listing of the aerotriangulation adjustments.

24. Supplemental Data

USGS quadrangles were used to obtain vertical control needed for the strip adjustments.

25. Photography

Photography was adequate and diapositives were of good quality.

Submitted by:
Donald M. Brant

Donald M. Brant

Approved and forwarded:

H. P. Eichert, Chief
Aerotriangulation Section

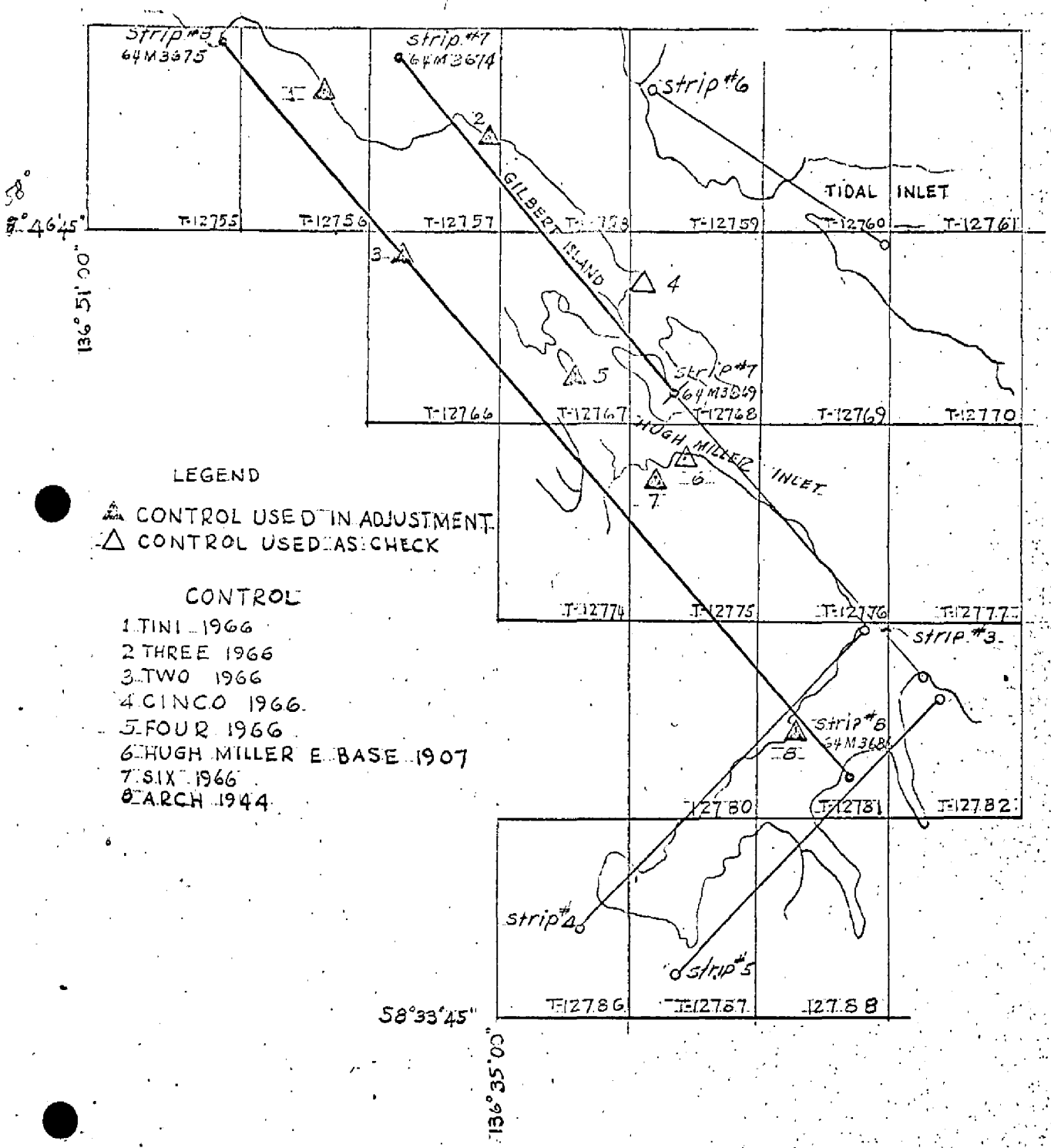
42

NOTES TO COMPILER
Job PH-6502
Glacier Bay, Alaska

Common pass points on photo 64-M-3669 were used for Strip 3 (old bridge) and Strip 7 (new bridge). A discrepancy exists between common pass point positions from both bridges. However, it is believed that Strip 7 is the stronger bridge, as the pass points from the above mentioned photo on Strip 3 went beyond control.

In order to get a satisfactory junction between Strips 3 and 7 it may be advisable to mean positions of these common pass points.

AEROTRIANGULATION SKETCH
GLACIER BAY, ALASKA
JOB PH-6502



NOAA FORM 76-41
(2-71)
USCOMM-DC
34168-P71
(FORMERLY FORM C&GS-164)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 12767 PROJECT NO. PH-6502 SCALE OF MAP 1:10,000 SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS *(1 Ft. = 3048006 meter)* FORWARD (BACK)
FOUR, 1966	G.P. Vol. 3 Pg. 1038	N.A. 1927	58° 45' 26.24389" 136° 31' 46.95978"	812.0 (1044.6) 755.0 (209.7)
PAUL ALASKA, 1907	G.P. Vol. 9 Pg. 65	N.A. 1927	58° 47' 50.000" 136° 30' 58.703"	1547.2 (309.4) 942.7 (20.9)

COMPUTED BY	DATE	CHECKED BY	DATE
C. Blood	4/24/70	R. White	4/24/70

COMPILATION REPORT

T-12767

PH-6502

31. DELINEATION

The Wild B-8 Stereoplotter was used. Photograph coverage was adequate.

There was field inspection prior to compilation and it was used to great advantage during compilation.

32. CONTROL

See "Photogrammetric Plot Report", dated January 8, 1968.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage was delineated from office interpretation of the photographs. One pond was identified by the field inspector.

35. SHORELINE AND ALONGSHORE DETAILS

The MHWL and all alongshore details were delineated on the wild B-8 stereoplotter using the data supplied by the field inspector as a guide.

36. OFFSHORE DETAILS

Several Islands, rocks, shoals, and kelp areas were delineated by B-8 method in accordance with the field inspection.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Junctions were made with T-12774 to the south, T-12768 to the east, T-12766 to the west and T-12758 to the north.

40. HORIZONTAL AND VERTICAL ACCURACY

Common pass points for bridge stripss #3 and stript #7 were positioned on photo 64-M-3669. A discrepancy was noticed in the positions of these common points. As suggested in the "Notes to Compiler" submitted with the "Photogrammetric Plot Report", dated January 8, 1968 the positions of these common points were meaned for the final solution.

41. FIELD EDIT

Field edit was adequate. The reference made in the Field Edit Report and on the ozalid to photograph 64M-3676 is an error. The manuscript is not covered by 64M-3676. The reference should have been made to 64M-3670.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S. Quadrangle, MT. FAIRWEATHER (D-2), ALASKA, scale 1:63,360, dated 1950.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with U.S.C. & G.S. chart #8202, STEPHENS PASSAGE TO CROSS SOUND scale, 1:209,978, 15th edition, dated October 21, 1968.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:

Arnold L. Shands

Arnold L. Shands
Cartographer
August 3, 1970

Approved:

Albert C. Rauck, Jr.

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

28 March 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12767

Blue Mouse Cove

Charpentier Inlet

Gilbert Peninsula

Glacier Bay

Glacier Bay National Monument

Hugh Miller Inlet

Scidmore Bay

Approved by:

Chas. E. Harrington

Chas. E. Harrington
Staff Geographer-C51x2

NOAA FORM 75-74 (2-74)

U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEAN SURVEY

PHOTOGRAMMETRIC OFFICE REVIEW

T-12767

1. PROJECTION AND GRIDS	2. TITLE	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE

CONTROL STATIONS

5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY *(Topographic stations)*	7. PHOTO HYDRO STATIONS
		X X

8. BENCH MARKS	9. PLOTTING OF SEXTANT FIXES	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS

ALONGSHORE AREAS *(Nautical Chart Data)*

12. SHORELINE	13. LOW-WATER LINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES

16. AIDS TO NAVIGATION	17. LANDMARKS	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES

PHYSICAL FEATURES

20. WATER FEATURES	21. NATURAL GROUND COVER	22. PLANETABLE CONTOURS
	X X	X X

23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
X X	X X	X X	

CULTURAL FEATURES

27. ROADS	28. BUILDINGS	29. RAILROADS	30. OTHER CULTURAL FEATURES

BOUNDARIES

31. BOUNDARY LINES	32. PUBLIC LAND LINES
X X	X X

MISCELLANEOUS

33. GEOGRAPHIC NAMES	34. JUNCTIONS	35. LEGIBILITY OF THE MANUSCRIPT

36. DISCREPANCY OVERLAY	37. DESCRIPTIVE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS

40. REVIEWER	SUPERVISOR, REVIEW SECTION OR UNIT

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	Date	SUPERVISOR
A.L. Shands	Nov. 2, 1971	Albert C. Rauck, Jr.
Reviewer: B.L. Barge	Nov. 3, 1971	

43. REMARKS

Field Edit Applied From:
Field edit ozalid and field ratio prints 64 M-3669, 3670 and 3681

NOAA FORM 75-74 (2-74)

SUPERSEDES C&GS FORM 1002 WHICH MAY BE USED UNTIL EXISTING STOCK IS DEPLETED.

FIELD EDIT REPORT

MAP T-12767

Glacier Bay

Field edit of map T-12767 was accomplished during July and August, 1970. Inspection was done from a skiff after the hydrography.

METHOD

Field photographs and a copy of the Field Edit Ozalid were examined in the field. The mean high water line was verified by visual comparison of the shore area to field photographs and ozalid. Notes on the heights of rocks, location of the MHWL, and other data pertaining to photo identifiable features have been made in violet on the Field Edit Ozalid and cross referenced where necessary, to field matte ratio prints. Unless otherwise indicated all shoreline features have been verified correct as interpreted. All notes are in violet ink on the following 1:10,000 field photos: 64M3669, 64M3670, 64M3676, and 64M3681.

All times are based on meridian 105° W.

ADEQUACY OF COMPILATION

Compilation of the map is good. Hydrographic location of features compares well to photogrammetric location. Corrections and additional identifiable features have been indicated on the field edit ozalid and photographs.

Field inspection of the map is complete.

RECOMMENDATIONS

It is recommended that the map be revised in accordance with Field Edit data provided and be accepted as an advance manuscript.

Respectfully submitted,

William D. Neff

William D. Neff
LTJG, USESSA

TRANSMITTAL SHEET

Preparation of these reports was done under the supervision of this Command and was found to be accurate and complete.

John B. Watkins

John B. Watkins, Jr.
CAPTAIN, USESSA
Commanding Officer
USC&GSS FAIRWEATHER

REVIEW REPORT T-12767

SHORELINE

May 28, 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.

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 MT. FAIRWEATHER (D-2), ALASKA, scale 1:63,360, dated 1950. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with verified copies of Surveys H-9142 (FA-10-7-70) and H-9143 (FA-10-8-70), scale 1:10,000, dated 1970. Comparison was good, except for mean lower low water line. This line was not indicated on H-9143. It was indicated on H-9142 with short stretches of solid line connected by dotted line. The final reviewer assumed, after consultation with the hydrographic processing section of the Pacific Marine Center, that the dotted line represented "approximate MLLWL". The dotted line on H-9142 does not follow the MLLWL indicated on the T-sheet at the original compilation stage or after field edit was applied. The MLLWL was removed from T-12767 where soundings proved it to be incorrect.

65. COMPARISON WITH NAUTICAL CHARTS

A visual comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated Nov. 23, 1973. A rock charted at Lat. 58° 46.7', Long. 136° 32.6' was not observed by the field inspector in 1964 or by the field editor or hydrographer in 1970. It was not noticed by the compiler and not compiled on the original map. At the time of final review, the photographs of the area were searched for a rock at this position. The predicted stage of tide on the photos was minus 4 feet. No rock could be found, however, a small dark area was noticed at the charted position. It was office interpreted as kelp and added to the manuscript.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer
May 28, 1975

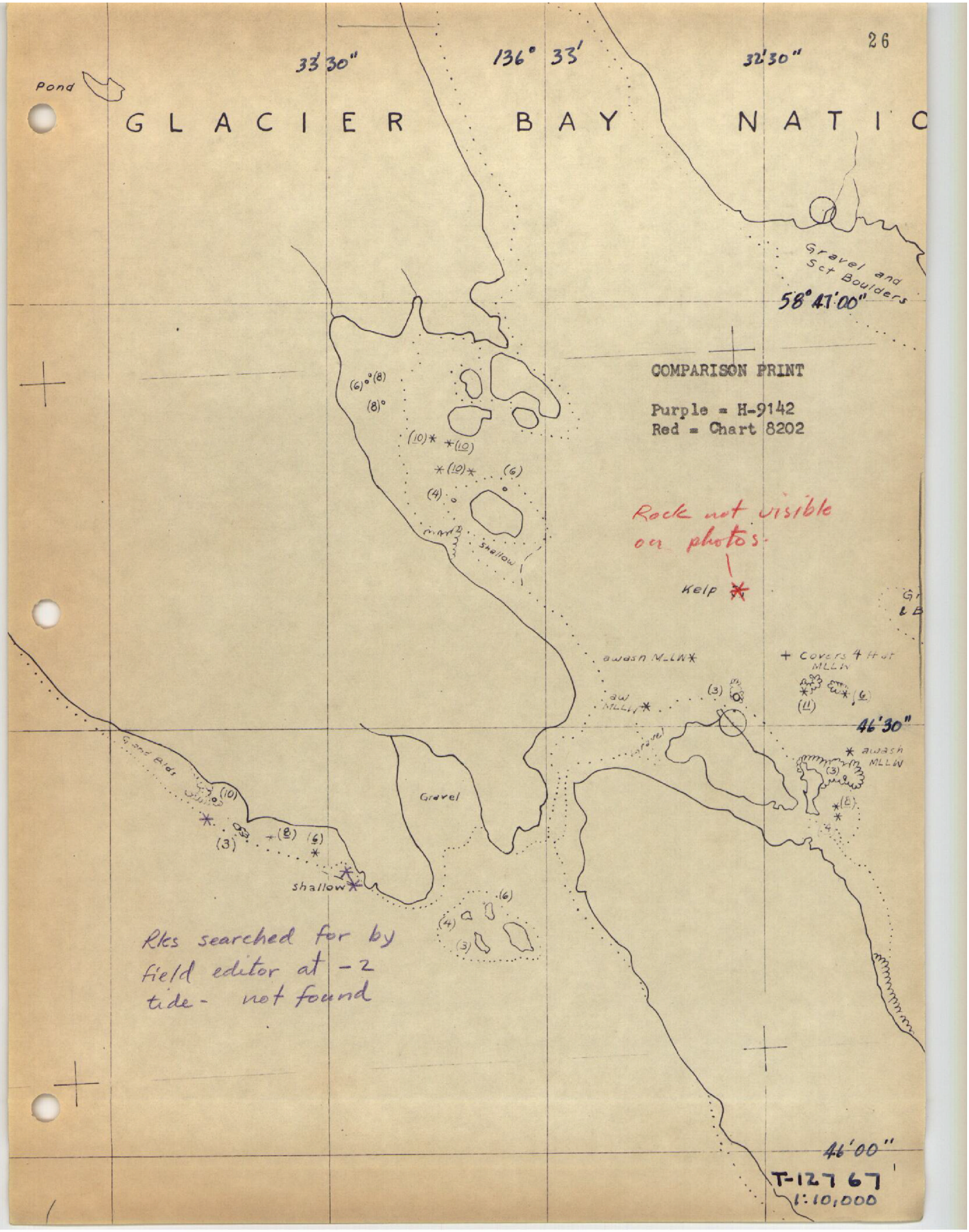
Approved for forwarding:

Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Div.


33'30"
136° 33'
32'30"
Pond
GLACIER BAY NATIC
Gravel and Sct Boulders
58°47'00"
COMPARISON PRINT
Purple = H-9142
Red = Chart 8202
Rock not visible on photos.
Kelp
awash MLLW
+ Covers 4 ft at MLLW
46'30"
Gravel
Shallow
Rks searched for by field editor at -2 tide - not found
46'00"
T-12767
1:10,000

64 M(P)-3670

31'00"

30'30"

136°30'00"

MONUMENT

Bld

47'00"

y=2,550,000

Gravel & Scattered Boulders

Blue Mouse Cove

S&G

Awash MHW

foul

awash MHW

(3)

(2)

awash MLLW

awash MLLW

awash MHW

(1)

Deleted by Field editor

G & Sct Bld

(7)

shallows

46'30"

Gravel & Sct Boulders

foul

COMPARISON PRINT

Purple = H-9142

HUGH MILLER INLET

y=2,545,000 F

G & Sct Bld

MHW

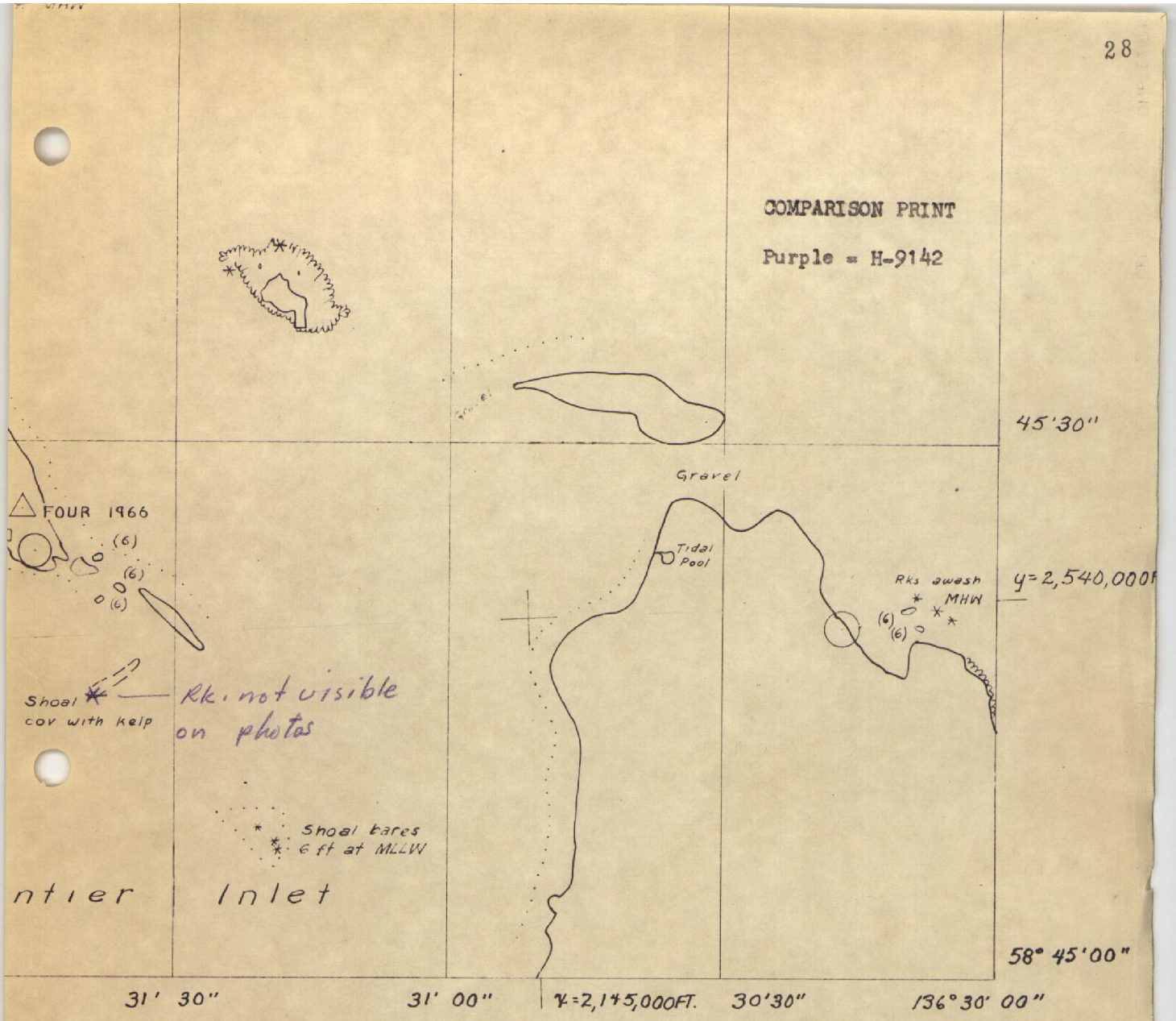
46'00"

T-12767

1:10,000

COMPARISON PRINT

Purple = H-9142



ontal control station of third-order or higher accuracy
low water line
e defines the approximate mean high water.
ogrammetric methods, from aerial photographs

hy	June	1964
ection	Aug.	1964
	Aug	1970
pilation	Nov.	1971
ew	May	1975

3

NATIONAL OCEAN SURVEY

SHORELINE MANUSCRIPT

T-12767

ALASKA

GLACIER BAY

HUGH MILLER INLET, MOUTH OF

SCALE 1:10,000

(1 inch=833.33 ft)

CONTROL DATA

Polyconic projection. 1927 North American Datum

5,000 foot grid based on Alaska (Zone 1) plane coordinate system

Datum plane: Mean High Water

T-12767

1:10,000