

T- 12757

T-12757

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-12757 .....

Classification No. .... Edition No. .... 1 .....

Field Edited .....

## LOCALITY

State ..... Alaska .....

General Locality ..... Glacier Bay .....

Locality ..... Scidmore Bay .....

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 19 64 TO 19 72
 

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## REGISTRY IN ARCHIVES

DATE .....

MAP NOT INSPECTED IN QUALITY CONTROL PRIOR  
TO REGISTRATION

|  |  |  |  |
|--|--|--|--|
| NOAA FORM 76-36A<br>(3-72)   |  | U. S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.  |  |
| <b>DESCRIPTIVE REPORT - DATA RECORD</b>  |  | TYPE OF SURVEY<br><input checked="" type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED                        |  |
| PHOTOGRAMMETRIC OFFICE<br><br>Coastal Mapping Division(Norfolk)  |  | SURVEY <u>TR 12757</u><br><br>MAP EDITION NO. (1)<br><br>MAP CLASS 1<br><br>JOB PH. <u>6502</u>  |  |
| OFFICER-IN-CHARGE<br><br>Jeffrey G. Carlen   |  | LAST PRECEDING MAP EDITION<br><br>TYPE OF SURVEY<br><input type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED |  |
| JOB PH. _____<br>MAP CLASS _____<br>SURVEY DATES:<br>19__ TO 19__  |  |  |  |
| <b>I. INSTRUCTIONS DATED</b>   |  |  |  |
| 1. OFFICE  |  | 2. FIELD   |  |
| November 16, 1964<br>December 18, 1969   |  |  |  |
| <b>II. DATUMS</b>  |  |  |  |
| 1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN   |  | OTHER (Specify)  |  |
| 2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER<br><input type="checkbox"/> MEAN LOW-WATER<br><input checked="" type="checkbox"/> MEAN LOWER LOW-WATER<br><input type="checkbox"/> MEAN SEA LEVEL |  | OTHER (Specify)  |  |
| 3. MAP PROJECTION<br><br>Polyconic   |  | 4. GRID(S)<br>STATE Alaska ZONE 1  |  |
| 5. SCALE<br>1:10,000   |  | STATE ZONE   |  |
| <b>III. HISTORY OF OFFICE OPERATIONS</b>   |  |  |  |
| OPERATIONS   |  | NAME   |  |
| DATE   |  |  |  |
| 1. AEROTRIANGULATION<br>METHOD: Analytic   |  | G. Ball & D. Brant   |  |
| LANDMARKS AND AIDS BY  |  | 8/65 & 1/68  |  |
| 2. CONTROL AND BRIDGE POINTS<br>METHOD: Coordinatograph  |  | A. Shands & C. Blood   |  |
| PLOTTED BY   |  | Jul & Apr/70   |  |
| CHECKED BY   |  | R.R. White   |  |
| 3. STEREOSCOPIC INSTRUMENT<br>COMPILATION  |  | R.R. White   |  |
| INSTRUMENT: Wild B-8   |  | July 1970  |  |
| SCALE: 1:15,000  |  | L.O. Neterer   |  |
| PLANIMETRY BY  |  | July 1970  |  |
| CHECKED BY   |  | 4. MANUSCRIPT DELINEATION  |  |
| CONTOURS BY  |  | R.R. White   |  |
| CHECKED BY   |  | Aug. 1970  |  |
| METHOD: Smooth ink drafting  |  | 5. OFFICE INSPECTION PRIOR TO FIELD EDIT   |  |
| HYDRO SUPPORT DATA BY  |  | B. Wilson  |  |
| SCALE: 1:10,000  |  | Aug. 1970  |  |
| CHECKED BY   |  | 6. APPLICATION OF FIELD EDIT DATA  |  |
| 7. COMPILATION SECTION REVIEW  |  | BY   |  |
| 8. FINAL REVIEW  |  | BY   |  |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH  |  | C.H. Bishop  |  |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH  |  | Apr., 1975   |  |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION  |  | BY   |  |
| N. J. Francis  |  | Aug 26, 1975   |  |

|  |         |   |               |                   |                    |  |  |
|--|---------|---|---------------|-------------------|--------------------|--|--|
| NOAA FORM 76-36B<br>(3-72)   |         | T-12757<br><b>COMPILATION SOURCES</b>   |               |                   |                    | U. S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION<br>NATIONAL OCEAN SURVEY |  |
| <b>1. COMPILATION PHOTOGRAPHY</b>  |         |   |               |                   |                    |  |  |
| CAMERA(S)<br>Wild RC-9 "M"   |         | TYPES OF PHOTOGRAPHY<br>LEGEND<br><br>(C) COLOR<br>X (P) PANCHROMATIC<br>(I) INFRARED |               | TIME REFERENCE    |                    |  |  |
| TIDE STAGE REFERENCE JUNEAU  |         |   |               | ZONE<br>Pacific   |                    | <input checked="" type="checkbox"/> STANDARD<br><br><input type="checkbox"/> DAYLIGHT                    |  |
| <input checked="" type="checkbox"/> PREDICTED TIDES (Willoughby Island)<br><input type="checkbox"/> REFERENCE STATION RECORDS<br><input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY  |         |   |               | MERIDIAN<br>120th |                    |  |  |
| NUMBER AND TYPE  |         | DATE  | TIME          | SCALE             | STAGE OF TIDE      |  |  |
| 64 M(P) 3672 & 3673  |         | 12 Jun 64   | 10:10         | 1:40,000          | 4.0 ft. below MLLW |  |  |
| REMARKS  |         |   |               |                   |                    |  |  |
| <b>2. SOURCE OF MEAN HIGH-WATER LINE:</b><br>Office interpretation of compilation photography dated 12 June 1964 and field survey methods (sextant fixes) between Long. 136° 37' 30" and Long. 136° 38' 30", on July 11, 1972. |         |   |               |                   |                    |  |  |
| <b>3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:</b><br>Office interpretation of compilation photography.  |         |   |               |                   |                    |  |  |
| <b>4. CONTEMPORARY HYDROGRAPHIC SURVEYS</b> <i>(List only those surveys that are sources for photogrammetric survey information.)</i>  |         |   |               |                   |                    |  |  |
| SURVEY NUMBER  | DATE(S) | SURVEY COPY USED  | SURVEY NUMBER | DATE(S)           | SURVEY COPY USED   |  |  |
|  |         |   |               |                   |                    |  |  |
| <b>5. FINAL JUNCTIONS</b>  |         |   |               |                   |                    |  |  |
| NORTH  | EAST    | SOUTH   | WEST          |                   |                    |  |  |
| T-12745  | T-12758 | T-12766   | T-12756       |                   |                    |  |  |
| REMARKS  |         |   |               |                   |                    |  |  |

T-12757

## HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

| OPERATION   | NAME                         | DATE                     |
|---|------------------------------|--------------------------|
| 1. CHIEF OF FIELD PARTY   | J.B. Watkins<br>G.M. Poor    | Aug. 1970<br>Jul. 1972   |
| 2. HORIZONTAL CONTROL<br>RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY  | J.B. Watkins<br>J.B. Watkins | Sept. 1966<br>Sept. 1966 |
| 3. VERTICAL CONTROL None<br>RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY   |                              |                          |
| 4. LANDMARKS AND AIDS TO NAVIGATION None<br>RECOVERED (Triangulation Stations) BY<br>LOCATED (Field Methods) BY<br>IDENTIFIED BY  |                              |                          |
| 5. GEOGRAPHIC NAMES INVESTIGATION<br>TYPE OF INVESTIGATION<br><input type="checkbox"/> COMPLETE<br><input type="checkbox"/> SPECIFIC NAMES ONLY<br><input checked="" type="checkbox"/> NO INVESTIGATION |                              |                          |
| 6. PHOTO INSPECTION<br>CLARIFICATION OF DETAILS BY  | J.B. Watkins                 | Aug. 1966                |
| 7. BOUNDARIES AND LIMITS<br>SURVEYED OR IDENTIFIED BY   | None                         |                          |

## II. SOURCE DATA

| 1. HORIZONTAL CONTROL IDENTIFIED  |              | 2. VERTICAL CONTROL IDENTIFIED   |                     |
|---|--------------|--|---------------------|
| PHOTO NUMBER  | STATION NAME | PHOTO NUMBER   | STATION DESIGNATION |
| 64 M 3802   | THREE 1966   |  |                     |
| 3. PHOTO NUMBERS (Clarification of details)<br>64 M 3679 (Field Edit)   |              |  |                     |
| 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED<br>None  |              |  |                     |
| PHOTO NUMBER  | OBJECT NAME  | PHOTO NUMBER   | OBJECT NAME         |
|   |              |  |                     |
| 5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE                       |              | 6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE |                     |
| 7. SUPPLEMENTAL MAPS AND PLANS<br>None  |              |  |                     |
| 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)<br>Field Edit Ozalid |              |  |                     |

NOAA FORM 76-36D  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONT-12757  
RECORD OF SURVEY USE

## I. MANUSCRIPT COPIES

| COMPILATION STAGES   |           |                                    | DATE MANUSCRIPT FORWARDED |               |
|--|-----------|------------------------------------|---------------------------|---------------|
| DATA COMPILED  | DATE      | REMARKS                            | MARINE CHARTS             | HYDRO SUPPORT |
| Compilation complete<br>pending field edit                           | Aug. 1970 | Class III Manuscript<br>Superseded |                           | 8/19/70       |
| Field edit applied N.<br>of Lat. 58° 50' 30"                         | Apr. 1974 | Class III Manuscript<br>Superseded |                           |               |
| Field edit applied S.<br>of Lat. 58° 50' 30"<br>Compilation complete | Apr. 1975 | Class I Manuscript                 |                           |               |
| Final Review   | Apr. 1975 |                                    |                           |               |

## II. LANDMARKS AND AIDS TO NAVIGATION None

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

| NUMBER | CHART LETTER<br>NUMBER ASSIGNED | DATE<br>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<br>TP - _____ (2) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br>MAP CLASS<br><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<br>TP - _____ (3) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br>MAP CLASS<br><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<br>TP - _____ (4) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br>MAP CLASS<br><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       |   |



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12757

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 21 maps that comprise Part I which covers Glacier Bay from Geikie Inlet to Composite Island.

No field work was done before bridging, except recovery, identification, and premarking of horizontal control stations required for bridging.

Bridging was done by analytic aerotriangulation methods in the Rockville Office in ~~August 1965~~ and 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 photohydro support and field edit use. Photography of the area was taken near low tide.

Field edit was done in conjunction with hydrography in August, 1970 (Scidmore Bay) and July, 1972 (Glacier Bay). In Glacier Bay sextant fixes were used to locate rocks and verify or correct the mean high water line. In Scidmore Bay rocks and mean high water line changes were noted on Photo 64 M(P) 3679.

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



## FIELD INSPECTION REPORT

Project PH-6206

T-12757

There was no field inspection prior to compilation.

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:

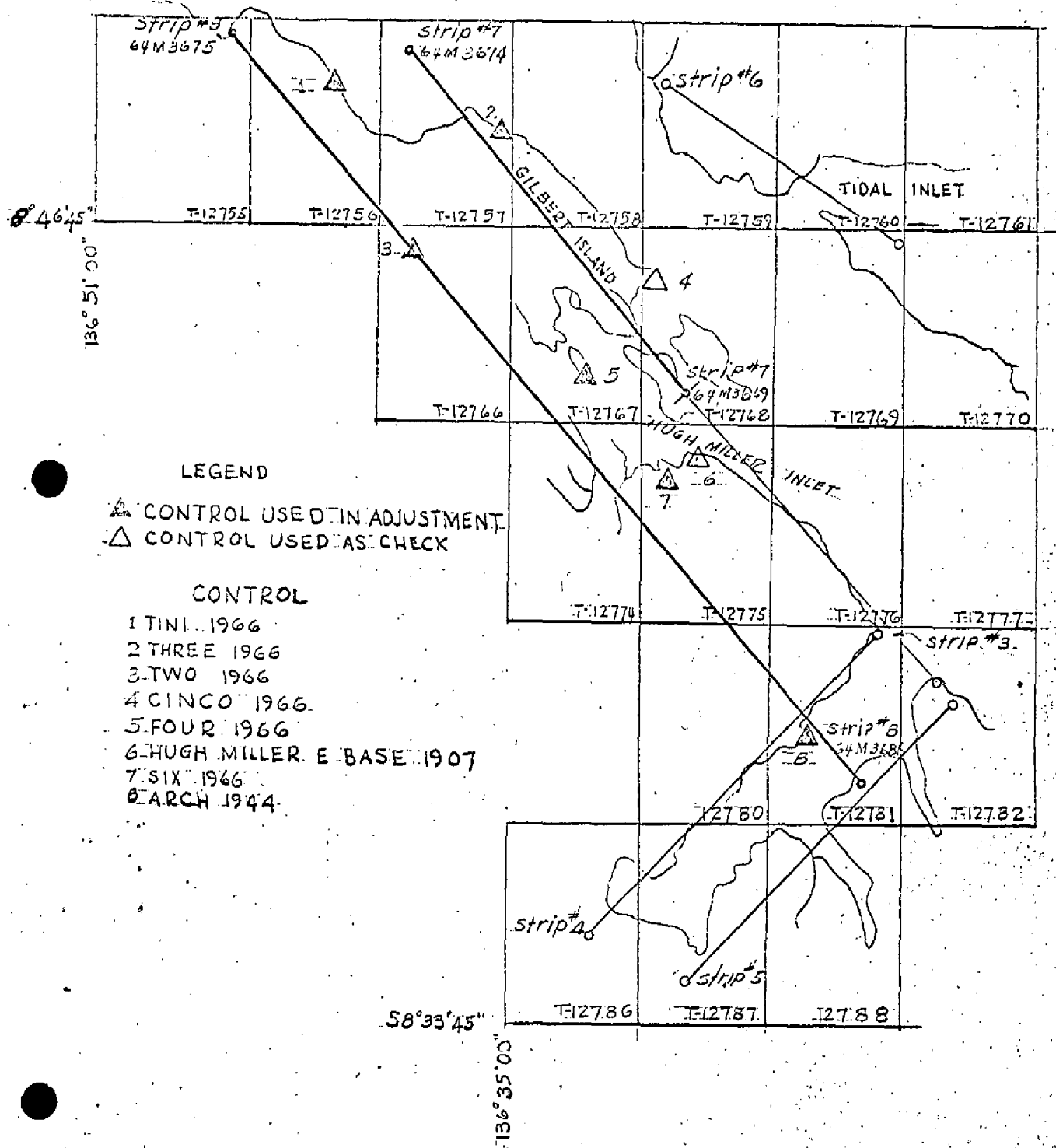
*H. P. Eichert*  
H. P. Eichert, Chief  
Aerotriangulation Section

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





## COMPILATION REPORT

T-12757

31. DELINEATION

The Wild B-8 stereoplotter was used. The photography was good.

32. CONTROL

See "Photogrammetric Plot Reports", ~~for Project 21511 dated August, 1965 and~~ Job PH-6502 dated January 8, 1968.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

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

35. SHORELINE AND ALONGSHORE DETAILS

The approximate mean lower low water line, the mean high water line, and all alongshore details were compiled from office interpretation of the photographs.

36. OFFSHORE DETAILS

No statement.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

No statement

39. JUNCTIONS

Junctions were made with T-12758 to the east, T-12766 to the south, T-12756 to the west, and T-12745 to the north.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement

41. FIELD EDIT

As of this date (August 12, 1970), no field edit was available for the area south of Lat.  $58^{\circ} 50.4'$ . North of this latitude, field edit was satisfactory.

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 Chart 8202, 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:

*Richard R. White*

Richard R. White  
Cartographic Technician  
August 12, 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-12757

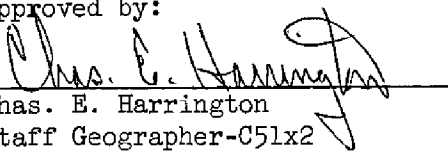
Gilbert Peninsula

Glacier Bay

Glacier Bay National Monument

Scidmore Bay

Approved by:

  
Chas. E. Harrington  
Staff Geographer-C51x2

49-NOTES FOR THE HYDROGRAPHER

The numerous objects seen offshore on the photographs are believed to be ice flows probably from HUGH MILLER GLACIER.

Caution should be used during hydro operations as some of the objects near shore may or could be rocks. These objects can be seen on photographs : 64 M-3671 thru 3677.

NOAA FORM 75-74  
(2-74)U.S. DEPARTMENT OF COMMERCE  
NOAA  
NATIONAL OCEAN SURVEY

## PHOTOGRAMMETRIC OFFICE REVIEW

T. 12757

|   |   |   |  |
|---|---|---|--|
| 1. PROJECTION AND GRIDS<br>BW   | 2. TITLE<br>BW  | 3. MANUSCRIPT NUMBERS<br>BW   | 4. MANUSCRIPT SIZE<br>BW                     |
| <b>CONTROL STATIONS</b>   |   |   |  |
| 5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY<br>BW  | 6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)<br>XX |   | 7. PHOTO HYDRO STATIONS<br>XX                |
| 8. BENCH MARKS<br>XX  | 9. PLOTTING OF SEXTANT FIXES<br>XX  | 10. PHOTOGRAMMETRIC PLOT REPORT<br>BW   | 11. DETAIL POINTS<br>BW                      |
| <b>ALONGSHORE AREAS (Nautical Chart Data)</b>   |   |   |  |
| 12. SHORELINE<br>BW   | 13. LOW-WATER LINE<br>BW  | 14. ROCKS, SHOALS, ETC.<br>BW   | 15. BRIDGES<br>XX                            |
| 16. AIDS TO NAVIGATION<br>XX  | 17. LANDMARKS<br>XX   | 18. OTHER ALONGSHORE PHYSICAL FEATURES<br>BW                                  | 19. OTHER ALONGSHORE CULTURAL FEATURES<br>XX |
| <b>PHYSICAL FEATURES</b>  |   |   |  |
| 20. WATER FEATURES<br>BW  | 21. NATURAL GROUND COVER<br>XX  |   | 22. PLANETABLE CONTOURS<br>XX                |
| 23. STEREOSCOPIC INSTRUMENT CONTOURS<br>XX  | 24. CONTOURS IN GENERAL<br>XX   | 25. SPOT ELEVATIONS<br>XX   | 26. OTHER PHYSICAL FEATURES<br>BW            |
| <b>CULTURAL FEATURES</b>  |   |   |  |
| 27. ROADS<br>XX   | 28. BUILDINGS<br>XX   | 29. RAILROADS<br>XX   | 30. OTHER CULTURAL FEATURES<br>XX            |
| <b>BOUNDARIES</b>   |   |   |  |
| 31. BOUNDARY LINES<br>XX  |   | 32. PUBLIC LAND LINES<br>XX   |  |
| <b>MISCELLANEOUS</b>  |   |   |  |
| 33. GEOGRAPHIC NAMES<br>BW  | 34. JUNCTIONS<br>BW   |   | 35. LEGIBILITY OF THE MANUSCRIPT<br>BW       |
| 36. DISCREPANCY OVERLAY<br>BW   | 37. DESCRIPTIVE REPORT<br>BW  | 38. FIELD INSPECTION PHOTOGRAPHS<br>XX  | 39. FORMS<br>BW                              |
| 40. REVIEWER<br>for Charles H. Bishop<br>B. Wilson  |   | SUPERVISOR, REVIEW SECTION OR UNIT<br>Albert C. Rauch, Jr.<br>A.C. Rauch, Jr. |  |
| 41. REMARKS (See attached sheet)  |   |   |  |
| FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT  |   |   |  |
| 42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43. |   |   |  |
| COMPILED<br>Edit applied: G.R. Vanderhaven  |   | Date   SUPERVISOR<br>4/5/74   Albert C. Rauch, Jr.                            |  |
| Reviewer: Frank P. Margiotta  |   | 5/13/74   |  |
| 43. REMARKS<br>Frank P. Margiotta<br>Field Edit Applied From: Field Edit Ozalid   |   |   |  |

## Field Edit Report, OPR-460

Glacier Bay, Alaska

NOAA Ship McARTHUR

June - September, 1972

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

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

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

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

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

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

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

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

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

T-12740

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

T-12741

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

T-12742

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

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

T-12743

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

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

T-12744

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

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

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

#### T-12745

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

#### T-12754

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

#### T-12755

(not in McARTHUR's inventory)

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

#### REID INLET ROCKS

August 10, 1972

\* denotes check angle

| No.  | Angles  | Signal Nos. | Description         |
|------|---------|-------------|---------------------|
| 9744 | 41°56'  | 100         | Rock bares 10'; 15' |
|      | 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'<br>70°43'<br>*52°01' | same                        | Rock bares 2 1/2'; 5' diameter. 0917 PDT |
| 9747       | 46°33'<br>75°07'<br>*52°08' | 114<br>59<br>60<br>*60/64   | Rock bares 3'; 5' diameter 0920 PDT      |
| 9748       | 43°08'<br>70°41'<br>*72°27' | same<br><br>*60/68          | Rock bares 4'; 6' diameter. 0925 PDT     |
| 9749       | 61°42'<br>67°02'<br>*82°22' | 59<br>60<br>64<br>*60/68    | Rock bares 12'; 20' diameter. 0930 PDT   |
| MHWL FIXES |                             |                             |  |
| 9750       | 40°17'<br>24°47'            | 72<br>74<br>76              |  |
| 9751       | 39°59'<br>23°53'            | same                        |  |
| 9752       | 39°40'<br>24°23'            | same                        |  |
| 9753       | 37°09'<br>24°45'            | same                        |  |
| 9754       | 37°05'<br>25°53'            | same                        |  |
| 9755       | 39°00'<br>22°05'            | same                        |  |
| 9756       | 43°26'<br>20°31'            | same                        |  |
| 9881       | 40°31'<br>79°33'<br>*29°56' | 90<br>114<br>59<br>*114/100 |  |
| 9882       | 64°19'<br>57°31'<br>*36°43' | 114, 59, 60<br><br>*100/59  |  |

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



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, H-9317).

T-12749 -

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

## ADAMS INLET

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

T-12750 -

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

T-12751 -

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

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

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

T-12764 —

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

Prepared by:

*Steven R. Birkey*

Steven R. Birkey  
LT(jg), NOAA

Approved by:

*George M. Poor*

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



## REVIEW REPORT T-12757

## SHORELINE

April 11, 1975

61. GENERAL STATEMENT:

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

A comparison print, showing differences noted in Par. 63, 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. Shoreline difference at the north end of the shallow pass between Gilbert Island and the mainland is shown on the comparison print with brown pencil.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A comparison was made with a copy of the boatsheet for Survey H-9138 (FA-20-3-70), Glacier Bay, scale 1:20,000, dated 1970 and a copy of the verified smooth sheet for Survey H-9142 (FA-10-7-70), Scidmore Bay, scale 1:10,000, dated 1970. Shoreline on H-9138 was apparently poorly transferred from the T-sheet. No shoreline was on H-9142 in the area compared. None of the rocks located by the field editor were on the hydrographic surveys. Significant differences between the hydrographic surveys and T-12757 are shown on the comparison print with purple pencil.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated Nov. 3, 1973. Two charted rocks at approx.

Lat.  $58^{\circ} 50.7'$ , Long.  $136^{\circ} 39'$  are not shown on T-12757. Two images on the photographs at this location were mapped as rocks on the Class III Manuscript. They were searched for by the field editor but not found; the editor suggested that they were icebergs. They were deleted from T-12757 when edit was applied. If the incomplete (Class III) Manuscript was the origin of these rocks on Chart 8202, it is the opinion of the final reviewer of T-12757 that the rocks should definitely be deleted from the chart. See Comparison Print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

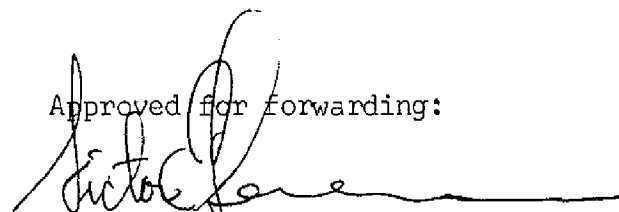
This map complies with Project Instructions and Bureau standards and meets the requirements for National Standards of Map Accuracy.

Reviewed by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer  
11 April 1975

Approved for forwarding:



Victor E. Serena  
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division



136°39'00"

39°30'

Rock located by F.E. plots  
on a depth of 39 fm (H-9138).  
Not visible on photos. No  
check on fix. Not mapped.

COMPARISON PRINT

Purple = H-9138  
Brown = U.S.G.S.  
Red = Chart 8202

Existence of these charted  
rocks very doubtful. Icebergs  
visible on photos taken on  
12 June 1964 at 10:12 hrs not in  
same position on photos taken  
three hours later.

58°51'00"

F.E. rock in  
this area not  
visible on photos,  
not mapped.

F.E. Rock visible on  
photos, added to map.

Awash MLN \* S & G

pond

58°30"  
N A T

F-12757  
1:10,000

S & G

00 FT

51'00"