

12745

12745

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-12745...

Classification No. .... Edition No. ....  
Field Edited(partial) and Class III  
(partial).

## LOCALITY

State .....ALASKA.....

General Locality ..GLACIER BAY.....

Locality ..RENDU INLET, SOUTH END.....

---

1970 TO 1972

---

## REGISTRY IN ARCHIVES

DATE .....

|   |  |   |  |   |  |   |  |
|---|--|---|--|---|--|---|--|
| NOAA FORM 76-36A<br>(3-72)  |  | U. S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMIN. |  | TYPE OF SURVEY<br><input checked="" type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED |  | SURVEY TP. <u>12745</u><br>MAP EDITION NO. <u>(1)</u><br>MAP CLASS<br>JOB PH. <u>6502</u> |  |
| <b>DESCRIPTIVE REPORT - DATA RECORD</b>   |  |   |  | <b>LAST PRECEDING MAP EDITION</b>   |  |   |  |
| PHOTOGRAMMETRIC OFFICE<br>Atlantic Marine Center  |  |   |  | 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__                         |  |
| OFFICER-IN-CHARGE<br>Alfred C. Holmes, RADM - Director  |  |   |  |   |  |   |  |
| <b>I. INSTRUCTIONS DATED</b>  |  |   |  |   |  |   |  |
| 1. OFFICE   |  |   |  | 2. FIELD  |  |   |  |
| Aerotriangulation 1/20/72<br>Compilation-Supp. I 4/5/72<br>Compilation-Amend. 4/17/72   |  |   |  |   |  |   |  |
| <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 type="checkbox"/> MEAN LOWER LOW-WATER<br><input type="checkbox"/> MEAN SEA LEVEL |  |   |  | OTHER (Specify)   |  |   |  |
| 3. MAP PROJECTION<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 BY<br>METHOD: Analytical LANDMARKS AND AIDS BY   |  |   |  | R. Kelly  |  | Mar. 1972   |  |
| 2. CONTROL AND BRIDGE POINTS PLOTTED BY<br>METHOD: Coradomat CHECKED BY   |  |   |  | D. Phillips   |  | 3/27/72   |  |
| 3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY<br>COMPILATION CHECKED BY  |  |   |  | L.O. Neterer, Jr.   |  | 4/12/72   |  |
| INSTRUMENT: Wild B-8<br>SCALE: 1:20,000   |  |   |  | A.L. Shands: R.J. Pate  |  | 4/12/72   |  |
| 4. MANUSCRIPT DELINEATION PLANIMETRY BY<br>CHECKED BY   |  |   |  | B. Wilson   |  | 4/27/72   |  |
| METHOD:   |  |   |  | R.J. Pate   |  | 4/28/72   |  |
| SCALE: 1:10,000   |  |   |  | N.A.  |  | 4/27/72   |  |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY   |  |   |  | R.J. Pate   |  | 4/28/72   |  |
| 6. APPLICATION OF FIELD EDIT DATA BY  |  |   |  | F. Margiotta  |  | 3/29/74   |  |
| 7. COMPILATION SECTION REVIEW BY  |  |   |  | R.R. White  |  | Apr. 1974   |  |
| 8. FINAL REVIEW BY  |  |   |  | C.H. Bishop   |  | June 1974   |  |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY  |  |   |  | "   |  | NOV 1974  |  |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY  |  |   |  | S. Blonkenbaker   |  | Feb. 1975   |  |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION BY  |  |   |  | R. CATOR  |  | MAR. 1975   |  |

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-12745  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

|   |         |   |          |                          |  |
|---|---------|---|----------|--------------------------|--|
| CAMERA(S)<br><b>Wild RC-8 "E"</b>   |         | TYPES OF PHOTOGRAPHY<br>LEGEND  |          | TIME REFERENCE           |  |
| TIDE STAGE REFERENCE<br><input checked="" type="checkbox"/> PREDICTED TIDES<br><input type="checkbox"/> REFERENCE STATION RECORDS<br><input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY |         | (C) COLOR <input checked="" type="checkbox"/><br>(P) PANCHROMATIC<br>(I) INFRARED |          | ZONE<br><b>Pacific</b>   | <input checked="" type="checkbox"/> STANDARD |
|   |         |   |          | MERIDIAN<br><b>120th</b> | <input type="checkbox"/> DAYLIGHT            |
| NUMBER AND TYPE   | DATE    | TIME  | SCALE    | STAGE OF TIDE            |  |
| B-8:<br>70E(C) 7695 thru<br>7697  | 7/27/70 | 11:35   | 1:40,000 | 10.7 ft above MLLW       |  |
| Hydro Support:<br>71E(C) 4761 thru<br>4763  | 6/5/71  | 11:40   | 1:20,000 | 12.4 ft. abov MLLW       |  |

## REMARKS

All photo time has been converted from ZULU time and daylight time to Pacific Standard Time.

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

Office Interpretation of color photography taken July 27, 1970 and June 5, 1971:

A short section of MHWL at Lat.  $58^{\circ} 53.6'$ , Long.  $136^{\circ} 39.9'$  was corrected by sextant fixes taken by the field editor.

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

None compiled.

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

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

## 5. FINAL JUNCTIONS

| NORTH   | EAST    | SOUTH   | WEST    |
|---------|---------|---------|---------|
| T-12736 | T-12746 | T-12757 | T-12744 |

## REMARKS

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

T-12745

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

| OPERATION                           | NAME   | DATE   |
|-------------------------------------|--|--------|
| 1. CHIEF OF FIELD PARTY             | J.B. Watkins, Jr. CAPT   | 6/6/70 |
| 2. HORIZONTAL CONTROL               | RECOVERED BY J.C.B.<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY J.C.B.  |        |
| 3. VERTICAL CONTROL                 | RECOVERED BY N.A.<br>ESTABLISHED BY N.A.<br>PRE-MARKED OR IDENTIFIED BY N.A.   |        |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY<br>LOCATED (Field Methods) BY<br>IDENTIFIED BY   |        |
| 5. GEOGRAPHIC NAMES INVESTIGATION   | 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                 | CLARIFICATION OF DETAILS BY  | None   |
| 7. BOUNDARIES AND LIMITS            | SURVEYED OR IDENTIFIED BY  | None   |

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

N.A.

| PHOTO NUMBER | STATION NAME | PHOTO NUMBER | STATION DESIGNATION |
|--------------|--------------|--------------|---------------------|
| 70E(C)7717   | HOPE 1970    |              |                     |

3. PHOTO NUMBERS (Clarification of details)

NONE

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

NONE

| PHOTO NUMBER | OBJECT NAME | PHOTO NUMBER | OBJECT NAME |
|--------------|-------------|--------------|-------------|
|              |             |              |             |

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-12745  
HISTORY OF FIELD OPERATIONSI. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

| OPERATION  | NAME   | DATE            |
|--|--|-----------------|
| 1. CHIEF OF FIELD PARTY                          | George M. Poor                                       | June-Sept. 1972 |
| 2. HORIZONTAL CONTROL <b>None</b>                | RECOVERED BY   |                 |
|  | ESTABLISHED BY                                       |                 |
|  | PRE-MARKED OR IDENTIFIED BY                          |                 |
| 3. VERTICAL CONTROL <b>None</b>                  | RECOVERED BY   |                 |
|  | ESTABLISHED BY                                       |                 |
|  | PRE-MARKED OR IDENTIFIED BY                          |                 |
| 4. LANDMARKS AND AIDS TO NAVIGATION. <b>None</b> | RECOVERED (Triangulation Stations) BY                |                 |
|  | LOCATED (Field Methods) BY                           |                 |
|  | IDENTIFIED BY  |                 |
| 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                          | <b>None</b>     |
| 7. BOUNDARIES AND LIMITS                         | SURVEYED OR IDENTIFIED BY                            | <b>None</b>     |

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

**None**

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER

STATION NAME

PHOTO NUMBER

STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

**None**

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

**None**

PHOTO NUMBER

OBJECT NAME

PHOTO NUMBER

OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

**None**

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

Field Edit Ozalid, Field Edit Report.

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

## RECORD OF SURVEY USE

T-12745

## I. MANUSCRIPT COPIES

| COMPILATION STAGES   |            |                                    | DATE MANUSCRIPT FORWARDED          |               |
|--|------------|------------------------------------|------------------------------------|---------------|
| DATA COMPILED  | DATE       | REMARKS                            | MARINE CHARTS                      | HYDRO SUPPORT |
| Compilation Complete<br>Pending Field Edit   | Apr. 27/72 | Class III manuscript<br>Superseded | 5/19/72                            | 5/19/72       |
| All field edit, except<br>that which has been plot-<br>ted by hydro, has been<br>applied - Compilation<br>Complete | Mar. 29/72 | Class I (partial)<br>Superseded    |                                    |               |
| Final Review   | June, 1974 |                                    | CHART MAINT.<br>PRINT<br>NOV. 1974 |               |

## II. LANDMARKS AND AIDS TO NAVIGATION

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

| NUMBER | CHART LETTER<br>NUMBER ASSIGNED | DATE<br>FORWARDED | REMARKS |
|--------|---------------------------------|-------------------|---------|
|        |                                 |                   |         |
|        |                                 |                   |         |
|        |                                 |                   |         |
|        |                                 |                   |         |
|        |                                 |                   |         |
|        |                                 |                   |         |
|        |                                 |                   |         |

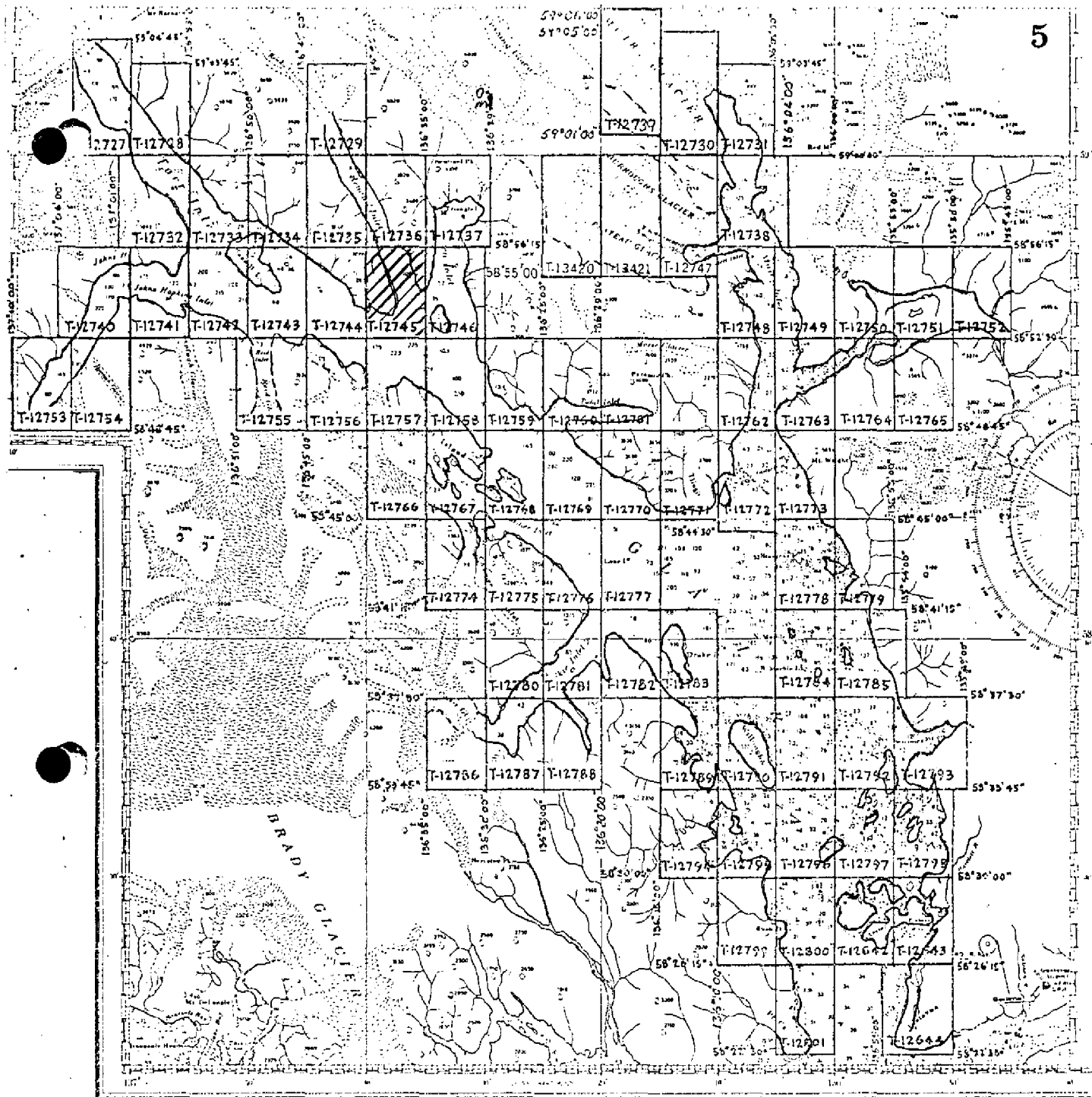
2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

## 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<br>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<br>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<br>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       |   |



REVISED 9-5-72 RWH

# JOB PH-6502 GLACIER BAY ALASKA

Shoreline Mapping

SCALE 1:10,000

SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12745

This 1:10,000 scale shoreline project is comprised of 80 maps which cover Glacier Bay and its numerous tributaries. For convenience of compiling, it was divided into five parts, according to aerotriangulation bridges. This map is one of fourteen maps that comprise Part II. The job diagram shows its location in the project.

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

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

Field edit was partially completed. Only the shoreline from Long.  $136^{\circ} 37' 30''$  westward to the neat limit of the map was edited in conjunction with hydrography in July, 1972. The Rendu Inlet shoreline remains unedited. Classification of this map is Class III.

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

PH-6502  
T-12745

There was no field inspection prior to compilation.

PHOTOGRAMMETRIC PLOT REPORT  
Job PH-6502  
Glacier Bay, Alaska  
March 1972

21. Area Covered

This report covers T-sheets T-12727, T-12728, T-12732, T-12733, T-12734, T-12735, T-12740, T-12741, T-12742, T-12743, T-12744, T-12745 and T-12755 in Glacier Bay, Alaska.

22. Method

Three strips of 1:40,000 scale color photography were bridged by analytical methods to provide horizontal control points for compilation and shoreline points for ordering 1:10,000 scale ratio prints. All strips were adjusted on Alaska State Plane coordinates zone 1. The attached sketch of the strips bridged shows the placement of horizontal control points used in the strip adjustments. A list of closures to control is part of this report. Data for plotting manuscripts for compilation were assembled for ruling and plotting by the Coradomat.

23. Adequacy of Control

All targets that were visible on the 1970 photography could be seen on the 1971 photography with exception of Tini 1966 which was covered by snow. Photographs 70-E-7700 and 7701 on which Tini 1966 was visible were substituted in the bridging of strip 31 in place of photographs 71-E-4801 and 4802. Common pass points were used between the 1970 and 1971 photography. The horizontal control used was adequate and held well within the accuracy required by National Standards of Map Accuracy at 1:10,000 scale. Tie points were used to augment datum tie between the three strips.

24. Supplemental Data

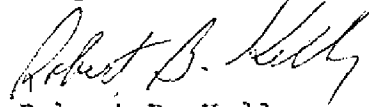
U. S. Geological Survey quadrangles were used to provide elevations for vertical adjustments of bridges.

2

25. Photography

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

Respectfully submitted:



Robert B. Kelly  
Carto Tech

Approved and forwarded:



Henry P. Eichert, Chief  
Aerotriangulation Section

## Notes to Compiler

Additional sheets (T-12735, T-12736W and T-12746W) have been plotted on the Coradomat to aid in compilation.

## LEGEND

- ▲ CONTROL USED IN ADJUSTMENT  
 ( ) CLOSURES OF BRIDGE TO CONTROL SHOWN  
 IN PARENTHESIS  
 △ CONTROL USED AS CHECK

## STRIP 31

|   |              |              |
|---|--------------|--------------|
| ▲ | TINI, 1966   | (0.0, 0.0)   |
| ▲ | TERRY 1970   | (-1.1, 1.1)  |
| △ | TRACIE, 1970 | (-0.7, -2.5) |
| ▲ | MARTY, 1970  | (1.4, -1.6)  |
| ▲ | JIM, 1970    | (-0.6, 0.7)  |

## STRIP 32

|   |                       |              |
|---|-----------------------|--------------|
| ▲ | TRACIE, 1970          | (0.2, -0.2)  |
| △ | TERRY, 1970           | (-1.6, -0.2) |
| ▲ | SARAH, 1970           | (-0.3, 0.5)  |
| ▲ | TRAVERSE PT. B, PANEL | (0.2, -0.7)  |
| ▲ | TRAVERSE PT. C, PANEL | (-0.2, 0.3)  |

## STRIP 33

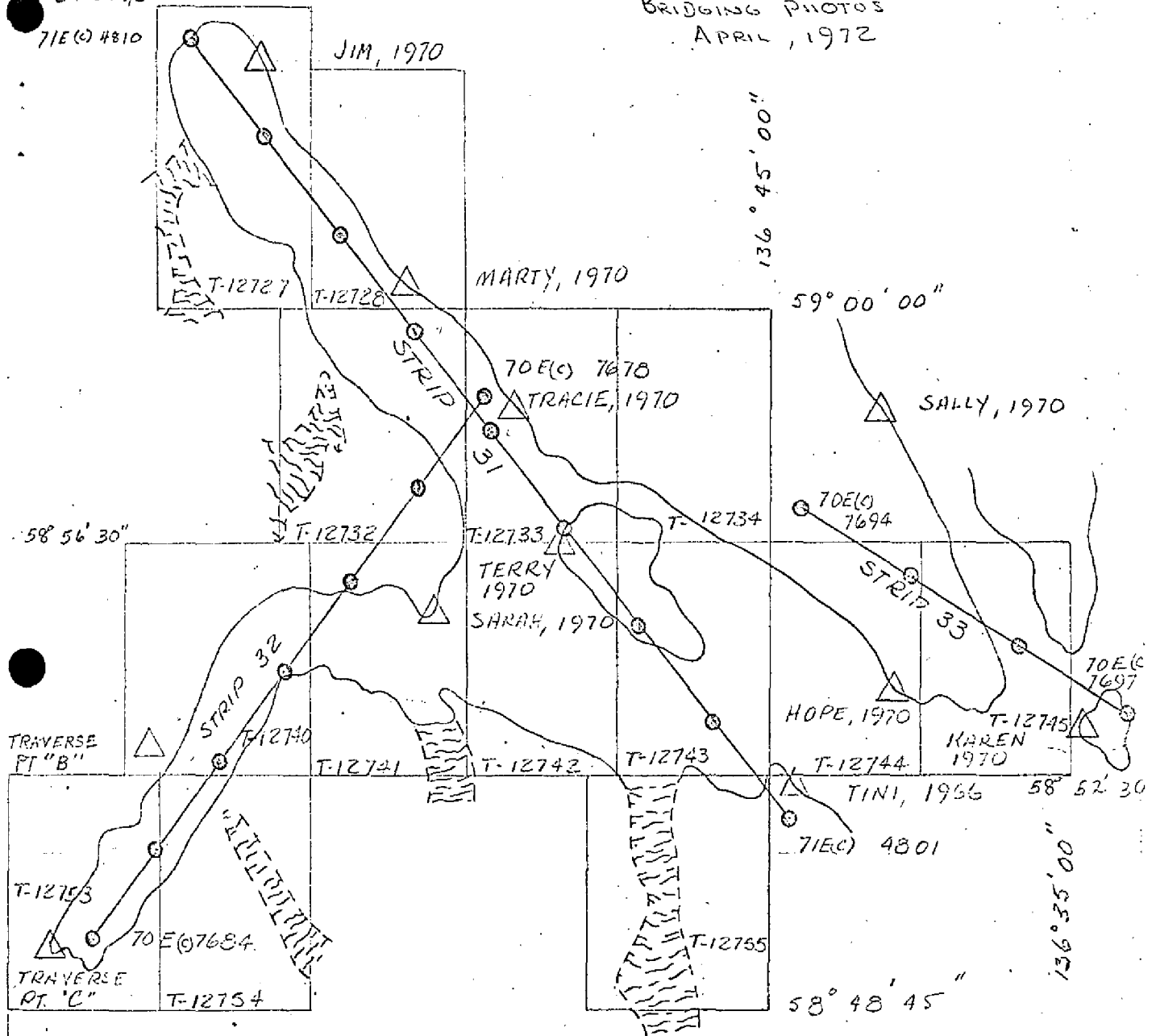
|   |             |            |
|---|-------------|------------|
| ▲ | SALLY, 1970 | (0.0, 0.0) |
| △ | HOPE, 1970  | (1.6, 0.0) |
| ▲ | KAREN, 1970 | (0.0, 0.0) |

GRACIER BAY ALASKA  
PH-6502

12

SCALE 1:40,000

BRIDGING PHOTOS  
APRIL, 1972



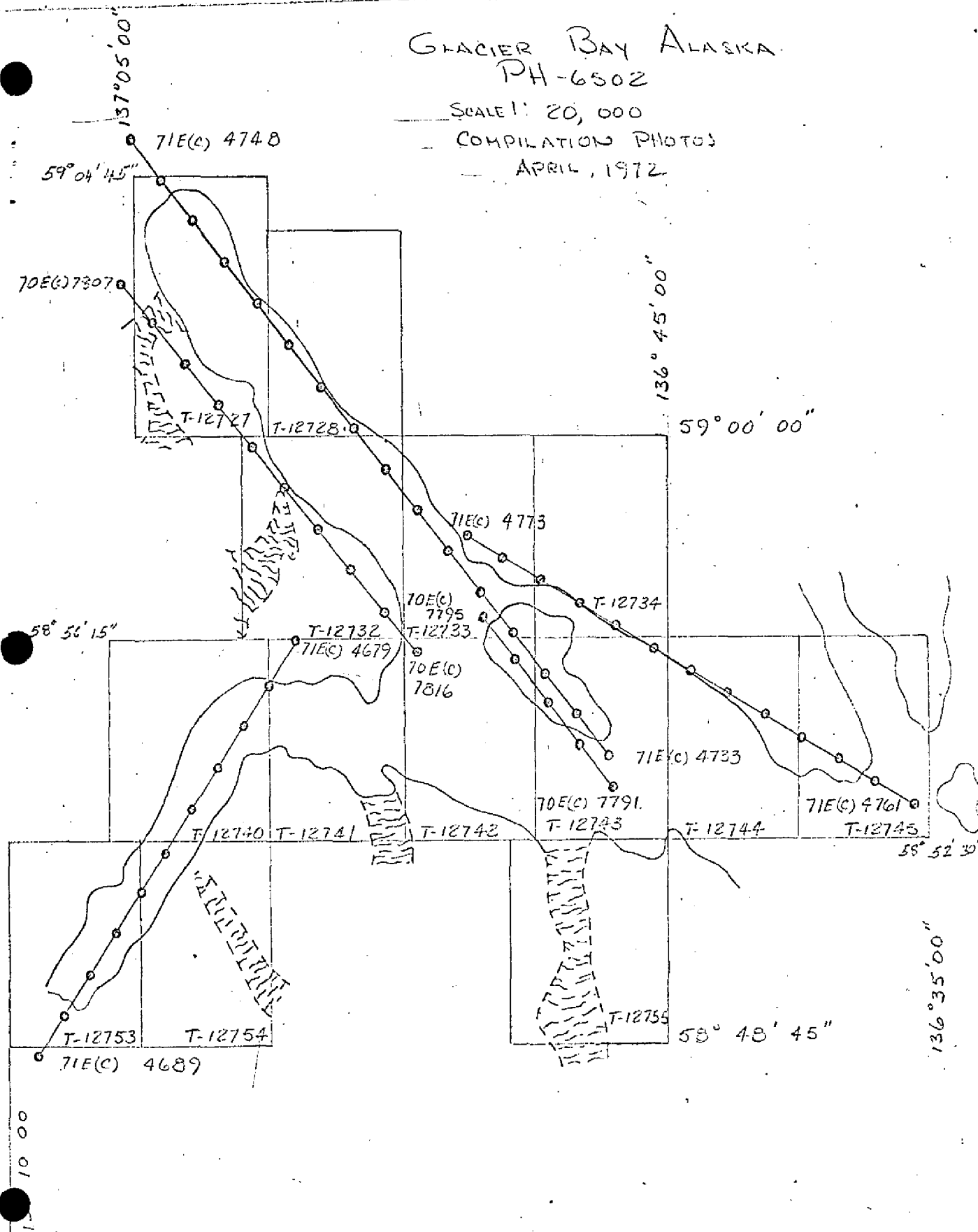
# GLACIER BAY ALASKA

## PH-6502

SCALE 1: 20,000

COMPILATION PHOTOS

APRIL, 1972







## COMPILATION REPORT

T-12745

31. DELINEATION

The Wild B-8 was used, without benefit of field inspection and without the ratios of the B-8 photos at hand. (The hydro-support ratios did not completely cover the area of the manuscript).

32. CONTROL

See PHOTOGRAMMETRIC PLOT REPORT, dated March, 1972.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage was compiled from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline was compiled from office interpretation of the photographs. No foreshore details were compiled, as there was no low-water photography.

36. OFFSHORE DETAILS

None

37. LANDMARKS AND AIDS

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

See 76-36b, item #5.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. quadrangle MT. FAIRWEATHER (D-2), ALASKA, scale 1:63,360, dated 1950.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with chart 8202, scale 1:209,978, 17th edition, dated September 11, 1971.

ITEMS TO BE APPLIED TO CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:

*Charles H. Bishop**for* B. Wilson

Carto. Tech., April 27, 1972

Approved: .

*Albert C. Rauck Jr.*

Albert C. Rauck, Jr.

Chief, Coastal Mapping Section

## ADDENDUM TO THE COMPILATION REPORT

T-12745

Only a small area of this map was edited - the shoreline from Long.  $136^{\circ} 37' 30''$  westward to the neat limit of the sheet. Two (2) sextant fixes to verify the mean high water line resulted in a slight change at Long.  $136^{\circ} 39.9'$ . Elevations were given for two rocks. The shoreline of Rendu Inlet was not edited.

Classification of Class III was retained for this map.

*Charles H. Bishop*

Charles H. Bishop  
Final Reviewer  
28 June 1974

16 May 1974

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

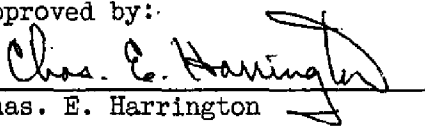
PH-6502 (Glacier Bay, Alaska)

T-12745

Glacier Bay

Rendu Inlet

Approved by:

  
Chas. E. Harrington  
Staff Geographer

| NOAA FORM 75-74<br>(2-74)   |  | T-12745<br>PHOTOGRAMMETRIC OFFICE REVIEW<br>T-10363  |  | U.S. DEPARTMENT OF COMMERCE<br>NOAA<br>NATIONAL OCEAN SURVEY      |  |
|---|--|--|--|---|--|
| 1. PROJECTION AND GRIDS<br>RJP  |  | 2. TITLE<br>RJP  |  | 3. MANUSCRIPT NUMBERS<br>RJP                                      |  |
| 4. MANUSCRIPT SIZE<br>RJP   |  |  |  |   |  |
| CONTROL STATIONS  |  |  |  |   |  |
| 5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY<br>RJP   |  | 6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY<br>(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>RJP                            |  |
| 11. DETAIL POINTS<br>RJP  |  |  |  |   |  |
| ALONGSHORE AREAS (Nautical Chart Data)  |  |  |  |   |  |
| 12. SHORELINE<br>RJP  |  | 13. LOW-WATER LINE<br>XX   |  | 14. ROCKS, SHOALS, ETC.<br>RJP                                    |  |
| 15. BRIDGES<br>XX   |  | 16. AIDS TO NAVIGATION<br>XX   |  | 17. LANDMARKS<br>XX   |  |
| 18. OTHER ALONGSHORE PHYSICAL FEATURES<br>RJP   |  | 19. OTHER ALONGSHORE CULTURAL FEATURES<br>XX   |  |   |  |
| PHYSICAL FEATURES   |  |  |  |   |  |
| 20. WATER FEATURES<br>RJP   |  | 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>RJP  |  |  |  |   |  |
| CULTURAL FEATURES   |  |  |  |   |  |
| 27. ROADS<br>XX   |  | 28. BUILDINGS<br>XX  |  | 29. RAILROADS<br>XX   |  |
| 30. OTHER CULTURAL FEATURES<br>XX   |  |  |  |   |  |
| BOUNDARIES  |  |  |  |   |  |
| 31. BOUNDARY LINES<br>XX  |  | 32. PUBLIC LAND LINES<br>XX  |  |   |  |
| MISCELLANEOUS   |  |  |  |   |  |
| 33. GEOGRAPHIC NAMES<br>RJP   |  | 34. JUNCTIONS<br>RJP*  |  | 35. LEGIBILITY OF THE MANUSCRIPT<br>RJP                           |  |
| 36. DISCREPANCY OVERLAY<br>RJP  |  | 37. DESCRIPTIVE REPORT<br>RJP  |  | 38. FIELD INSPECTION PHOTOGRAPHS<br>XX                            |  |
| 39. FORMS<br>RJP  |  |  |  |   |  |
| 40. REVIEWER<br><i>Albert C. Rauck, Jr.</i><br>R.J. Pate  |  | APR. 28, 1972  |  | SUPERVISOR, REVIEW SECTION OR UNIT<br><i>Albert C. Rauck, Jr.</i> |  |
| 41. REMARKS (See attached sheet)  |  |  |  |   |  |
| FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT  |  |  |  |   |  |
| 42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.                                 |  |  |  |   |  |
| COMPILER<br>F. Margiotta  |  | Mar 1974   |  | SUPERVISOR<br><i>Albert C. Rauck, Jr.</i>                         |  |
| checked by:<br>R.R. White   |  | Apr 1974   |  | Albert C. Rauck, Jr.  |  |
| 43. REMARKS<br>Field edit applied from field edit ozalid and overlay. There was no field edit in Rendu Inlet.<br><br>* Made with 12744 only. T-12746 and T-12736 not in office. Glacier Bay to the south. |  |  |  |   |  |

## 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'<br>62°12'<br>*28°59'   | 114<br>59<br>60<br>*100/59 |
| 9884 | 47°30'<br>68°21'<br>*21°58'   | same                       |
| 9885 | 40°55'<br>52°41'<br>*72°00'   | 59<br>60<br>62<br>*60/64   |
| 9886 | 27°42'<br>89°36'              | 59<br>60<br>64             |
| 9887 | 36°19'<br>99°36'<br>*17°46'   | 72<br>60<br>64<br>*59/60   |
| 9888 | 26°46'<br>51°46'<br>*34°06'   | 60<br>62<br>64<br>*62/59   |
| 9889 | 41°24'<br>63°05'<br>*86°47'   | 66<br>68<br>72<br>*68/60   |
| 9890 | 18°56'<br>94°00'<br>*46°54'   | same<br>*64/68             |
| 9891 | 104°59'<br>27°28'<br>*114°47' | 68<br>72<br>114<br>*66/72  |
| 9892 | 66°46'<br>75°42'<br>*70°57'   | 68<br>72<br>114<br>*66/72  |
| 9893 | 40°35'<br>60°28'<br>*42°33'   | 68<br>72<br>76<br>*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



U.S. DEPARTMENT OF COMMERCE  
Environmental Science Services Administration  
COAST AND GEODETIC SURVEY

Date: June 16, 1974

Reply to NGS Party G-52 Gen. Del.  
Attn of: Twentynine Palms, Ca. 92277

Subject: Field Edit, Glacier Bay, Alaska

To: CAM 52x1, Mr. Charles Bishop

In regard to field edit work done by the MCARTHUR during the 1972 field season in Glacier Bay, rock fixes were listed on the field edit ozalids and also in two or three sounding volumes for "Detached Positions". To the best of my recollection, these rock fixes were also taped.

*Steven R. Birkey*  
Steven R. Birkey  
Lt., NOAA

## REVIEW REPORT T-12745

## SHORELINE

JUNE 28, 1974

61. GENERAL STATEMENT:

See Summary which is page six (6) of this Descriptive Report.

A comparison print showing differences noted in Par. 64 is bound with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

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

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

A visual comparison was made with U.S.G.S. Quadrangle MT. FAIR-WEATHER (D-2), ALASKA, scale 1:63,360, dated 1961. No significant differences were noted.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

South of Lat.  $58^{\circ} 54'$  a comparison was made with a copy of the boat sheet for Survey H-9138, scale 1:20,000, dated 1970. There was no shoreline on the boat sheet in the compared area. Between Long.  $136^{\circ} 38' 30''$  and  $136^{\circ} 39' 15''$  the positions of several soundings fall inshore from the mean high water line - one of them as much as 50 meters. The photogrammetric location of the mean high water line was reviewed; the accuracy is unquestionable. This discrepancy in sounding positions could not be resolved photogrammetrically. See Comparison Print bound with the original of this report.

North of Lat.  $58^{\circ} 54'$  a comparison was made with an unverified copy of the smooth sheet for Survey H-9141, scale 1:20,000, dated 1970. No significant differences were noted.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated 3 Nov. 1973. No significant differences were noted.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with Project Instructions and meets the requirements for the National Standards of Map Accuracy, except Rendu Inlet, which was not field edited. See Page 17, Addendum to Compilation Report.

Reviewed by:

*Charles H. Bishop*

Charles H. Bishop  
Cartographer

Approved for forwarding:

*Victor E. Serena*

Victor E. Serena  
Chief, Photogrammetric Branch, AMC

Approved:

*W. H. [Signature]*  
Chief, Photogrammetric Branch

*Charles [Signature]*  
Chief, Coastal Mapping Division



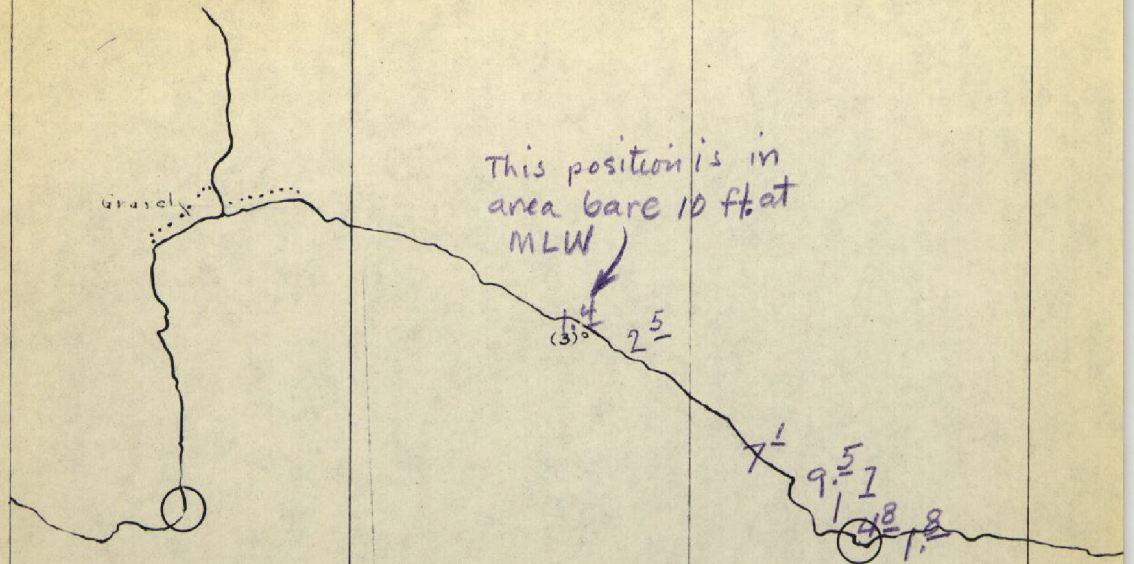
y=2,595,000 FT.

30

71-E(c)-4763



54'



53'30"

y=2,590,000 FT.

COMPARISON PRINT

Purple = H-9138

53'

T-12745

1:10,000

Compilation completed by  
R. L. G. H.

COMPLETION DATE

COMPLETION DATE