ORIGINAL

# T-12768

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-12768

*Classification No.* *Edition No.* 1

Field Edited

### LOCALITY

*State* Alaska

*General Locality* Glacier Bay

*Locality* Blue Mouse Cove

1964 TO 1970

### REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-775

T-12768

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 TP 12768

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 |
|---|---|
| November 16, 1964<br>December 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 | G. Ball and D. Brant | 8/65 & 1/68 |
| | LANDMARKS AND AIDS BY | N.A. | |
| 2. CONTROL AND BRIDGE POINTS METHOD: | PLOTTED BY | C. Blood | 4/27/70 |
| | CHECKED BY | R. White | 4/28/70 |
| 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:15,000 | PLANIMETRY BY | R. White | 7/22/70 |
| | CHECKED BY | | |
| | CONTOURS BY | N.A. | |
| | CHECKED BY | | |
| 4. MANUSCRIPT DELINEATION METHOD: Smooth ink drafting SCALE: 1:10,000 | PLANIMETRY BY | R. White | 7/28/70 |
| | CHECKED BY | A. Shands (partial) | |
| | CONTOURS BY | N.A. | |
| | CHECKED BY | | |
| | HYDRO SUPPORT DATA BY | R. White | 7/29/70 |
| | CHECKED BY | | |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT | BY | A. Shands (partial) | |
| 6. APPLICATION OF FIELD EDIT DATA | BY | A.L. Shands | 10/5/70 |
| | CHECKED BY | B.L. Barge | 11/3/71 |
| 7. COMPILATION SECTION REVIEW | BY | B. L. Barge | 11/3/71 |
| 8. FINAL REVIEW | BY | C.H. Bishop | 6/1/75 |
| 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-12768

# COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S)

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

TIME REFERENCE
ZONE: Pacific — X STANDARD
MERIDIAN: 120 W — DAYLIGHT

TIDE STAGE REFERENCE: JUNEAU Willoughby Id.
☒ PREDICTED TIDES
☐ REFERENCE STATION RECORDS
☐ TIDE CONTROLLED PHOTOGRAPHY

| NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE |
|---|---|---|---|---|
| 64 M(P) 3669 | 6/12/64 | 10:06 | 1:40,000 | 4.0 ft. below MLLW |

REMARKS

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

Field inspection and office interpretation of photography listed under 1. above.

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

Office interpretation of photography listed under 1. 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-12759 | T-12769 | T-12775 | T-12767 |

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-12768

# HISTORY OF FIELD OPERATIONS

I. [X] FIELD INSPECTION OPERATION [ ] FIELD EDIT OPERATION

| OPERATION | | NAME | DATE |
|---|---|---|---|
| 1. CHIEF OF FIELD PARTY | | R.H. Houlder<br>J.B. Watkins, Jr. | 1964<br>1966 |
| 2. HORIZONTAL CONTROL | RECOVERED BY | | |
| | ESTABLISHED BY | J.B. Watkins, Jr. | Sept. 1966 |
| | PRE-MARKED OR IDENTIFIED BY | W. Shearouse/L. Riggers | 8/64 & 9/66 |
| 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<br>[ ] COMPLETE<br>[ ] SPECIFIC NAMES ONLY<br>[X] NO INVESTIGATION | BY | |
| 6. PHOTO INSPECTION | CLARIFICATION OF DETAILS BY | None | |
| 7. BOUNDARIES AND LIMITS | SURVEYED OR IDENTIFIED BY | N.A. | |

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

| PHOTO NUMBER | STATION NAME |
|---|---|
| 64 M 3800 | CINCO 1966 |
| 64 M 3669 | RANA 1964 |

2. VERTICAL CONTROL IDENTIFIED

| PHOTO NUMBER | STATION DESIGNATION |
|---|---|
| | |

3. PHOTO NUMBERS (*Clarification of details*)

64 M 3668 thru 3670

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

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

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

5. GEOGRAPHIC NAMES: [ ] REPORT [X] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] 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, CSI cards.

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-12768

# HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION ☒ FIELD EDIT OPERATION

| OPERATION | | NAME | DATE |
|---|---|---|---|
| 1. CHIEF OF FIELD PARTY | | J.B. Watkins, Jr. | Summer 1970 |
| 2. HORIZONTAL CONTROL | None — RECOVERED BY | | |
| | ESTABLISHED BY | | |
| | PRE-MARKED OR IDENTIFIED BY | | |
| 3. VERTICAL CONTROL | None — RECOVERED BY | | |
| | ESTABLISHED BY | | |
| | PRE-MARKED OR IDENTIFIED BY | | |
| 4. LANDMARKS AND AIDS TO NAVIGATION | None — RECOVERED (*Triangulation Stations*) BY | | |
| | 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

| PHOTO NUMBER | STATION NAME |
|---|---|
| | |

2. VERTICAL CONTROL IDENTIFIED

| PHOTO NUMBER | STATION DESIGNATION |
|---|---|
| | |

3. PHOTO NUMBERS (*Clarification of details*)

64 M 3669 and 3670

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

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

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

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE

6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

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

Field Edit Report and Field Edit Ozalid



* 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

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

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

DESCRIPTION REPORT T-12768

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 was done in August 1964 by an experienced photogrammetrist. One additional horizontal control station was established and identified in September 1966.

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 plotter, 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. The photographs were taken near low tide.

Field edit was done in conjunction with hydrography in August 1970.

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

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

A stable base positive 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 interesting 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 | no | |
| 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
Project 21511
Alaska
August 1965

21. Area Covered

This report covers an area of Alaska in a portion of Glacier Bay from 136° 05' 00" W to 136° 36' 00" W, including Geikie Inlet.

22. Method

Analytic aerotriangulation methods were used: to bridge six strips of "M" photography at the scale of 1:40,000. The attached sketches of strips bridged shows the triangulation used in the adjustments. Closures to control and tie points have been tabulated.

23. Adequacy of Control

Horizontal control identified and required to adjust these strips was very fine. Control identification, with the exception of RANA, 1964 and CASE, 1939 which could not be positively identify by the instrument operators, was of superior quality. The field party is to be complimented on their excellent work. For the most part, triangulation sub points were clearly visible on the cross flights, this was accomplished in an area of extremely rough terrain. All stations were used in this adjustment except RANA, 1964 and CASE 1939, the results of the six bridges should comply to the National Standards of Map Accuracy for the twenty shoreline sheets to be compiled.

24. Supplemental Data

Numerous USGS quads were used to obtain elevations required for the final horizontal and vertical adjustments.

25. Photography

Photography was adequate with regard to coverage, overlap and image definition.

Respectfully submitted:

George M. Ball

Approved and Forwarded:

Henry P. Eichert
Acting Chief, Aerotriangulation Section

## Closure to control and tie points

STRIP #1

DRAKE, 1939

| | | |
|---|---|---|
| SS#1 | (-0.7 | +0.3) |
| SS#2 | (-3.1 | +3.7) |

OPEN, 1939

| | | |
|---|---|---|
| SS#1 | (+4.7 | +2.0) |
| SS#2 | (+0.4 | -1.1) |

ELSE, 1939

| | | |
|---|---|---|
| SS#1 | (-0.5 | +5.5) |
| SS#2 | (+9.8 | +5.1) |

EVER, 1939

| | | |
|---|---|---|
| SS#1 | (-3.0 | -3.0) |
| SS#2 | (-1.7 | -0.8) |

TAR, 1939

| | | |
|---|---|---|
| SS#1 | (+0.3 | +0.8) |
| SS#2 | (+3.6 | +12.7) |

Ties to Strip #2

| | | |
|---|---|---|
| 13501 | (-6.5 | -3.4) |
| 13504 | (+2.6 | -3.4) |
| 13505 | (-4.3 | -3.5) |

STRIP #2

JILL, 1938

| | | |
|---|---|---|
| SS#1 | (0.0 | 0.0) |
| SS#2 | (+4.9 | -1.9) |

EVER, 1939

| | | |
|---|---|---|
| SS#1 | (+0.8 | +1.6) |
| SS#2 | (0.0 | 0.0) |

STRIP #3

LSE, 1939

| | |
|---|---|
| SS#1 | (-0.1 -0.5) |
| SS#2 | (This pt. could not be seen on this strip) |

EVER, 1939

SS#1 (+3.8 -3.2)
SS#2 (+1.8 -1.3)

OPEN, 1939

SS#1 (-0.3 +1.3)
SS#2 (-1.1 +4.4)

DESERT, 1944

SS#1 (0.0 -4.3)
SS#2 (+2.2 -2.5)

FLAT, 1939

SS#1 (-0.8 +3.1)
SS#2 (-0.3 +3.6)

ARCH, 1944

SS#1 (+0.9 +0.3)
SS#2 (-0.4 -2.5)

HUGH MILLER E. BASE, 1907

SS#1 (-0.1 -0.1)
SS#2 (+4.5 +0.1)

RANA, 1964

(Neither of these points could be clearly seen)

Home Sta. (+8.2 -11.7)
SS#1 (+7.9 16.9)

Ties to Strip #2

13501 (+6.8 -8.9)
15502 (+4.6 -9.6)
15504 (+1.2 -7.6)
15505 (-1.5 -7.7)

Ties to Strip #1

15504 (+3.9 -10.5)
15505 (+1.0 -4.4)
19501 (-0.9 +1.3)
19502 (-6.7 -0.9)
19503 (-12.8 -4.2)

STRIP #4

STRIP #4 (continued from page 2)

CUBE, 1944

| | | |
|---|---|---|
| SS#1 | +0.6 | -1.0 |
| SS#2 | -1.8 | -1.2 |

KNOB, 1944

| | | |
|---|---|---|
| SS#1 | +1.2 | -5.8 |
| SS#2 | -1.9 | +1.1 |

ARCH, 1944

| | | |
|---|---|---|
| SS#1 | +0.8 | +1.2 |
| SS#2 | +3.8 | +0.3 |

DESERT, 1944

| | | |
|---|---|---|
| SS#1 | +2.7 | +0.9 |
| SS#2 | +2.8 | +2.7 |

FLAT, 1939

| | | |
|---|---|---|
| SS#1 | +0.5 | -0.7 |
| SS#2 | -2.3 | -2.4 |

STRIP #5

DESERT, 1944

| | | |
|---|---|---|
| SS#1 | +0.6 | -1.0 |
| SS#2 | +2.3 | -0.5 |

FLAT, 1939

| | |
|---|---|
| SS#1 | +3.5 +2.0 |
| SS#2 | (Point not visible on this strip) |

ARCH, 1944

| | | |
|---|---|---|
| SS#1 | -1.8 | +1.3 |
| SS#2 | +1.5 | +1.5 |

KNOB, 1944

| | | |
|---|---|---|
| SS#1 | +2.5 | -8.4 |
| SS#2 | +1.6 | -0.9 |

CUBE, 1944

| | | |
|---|---|---|
| SS#1 | -0.5 | +0.3 |
| SS#2 | -2.8 | +1.0 |

Tie points to Strip #3

| | | |
|---|---|---|
| 35503 | +4.9 | -1.3 |
| 35504 | +5.4 | -1.2 |

Tie points to Strip #4

| | | |
|---|---|---|
| 56501 | +1.8 | +1.0 |
| 56502 | -4.7 | -4.9 |
| 56503 | -1.7 | -1.0 |
| 54501 | -2.3 | +0.7 |

STRIP #6

TLINGIT, 1939

| | | |
|---|---|---|
| SS#1 | 0.0 | 0.0 |
| SS#2 | +3.5 | -3.5 |

DONE, 1939

| | | |
|---|---|---|
| SS#1 | +1.3 | +0.1 |
| SS#2 | 0.0 | -0.1 |

CASE, 1939 (Neither of these points were clearly seen)

| | | |
|---|---|---|
| SS#1 | -3.4 | -25.2 |
| SS#2 | -1.5 | -8.3 |

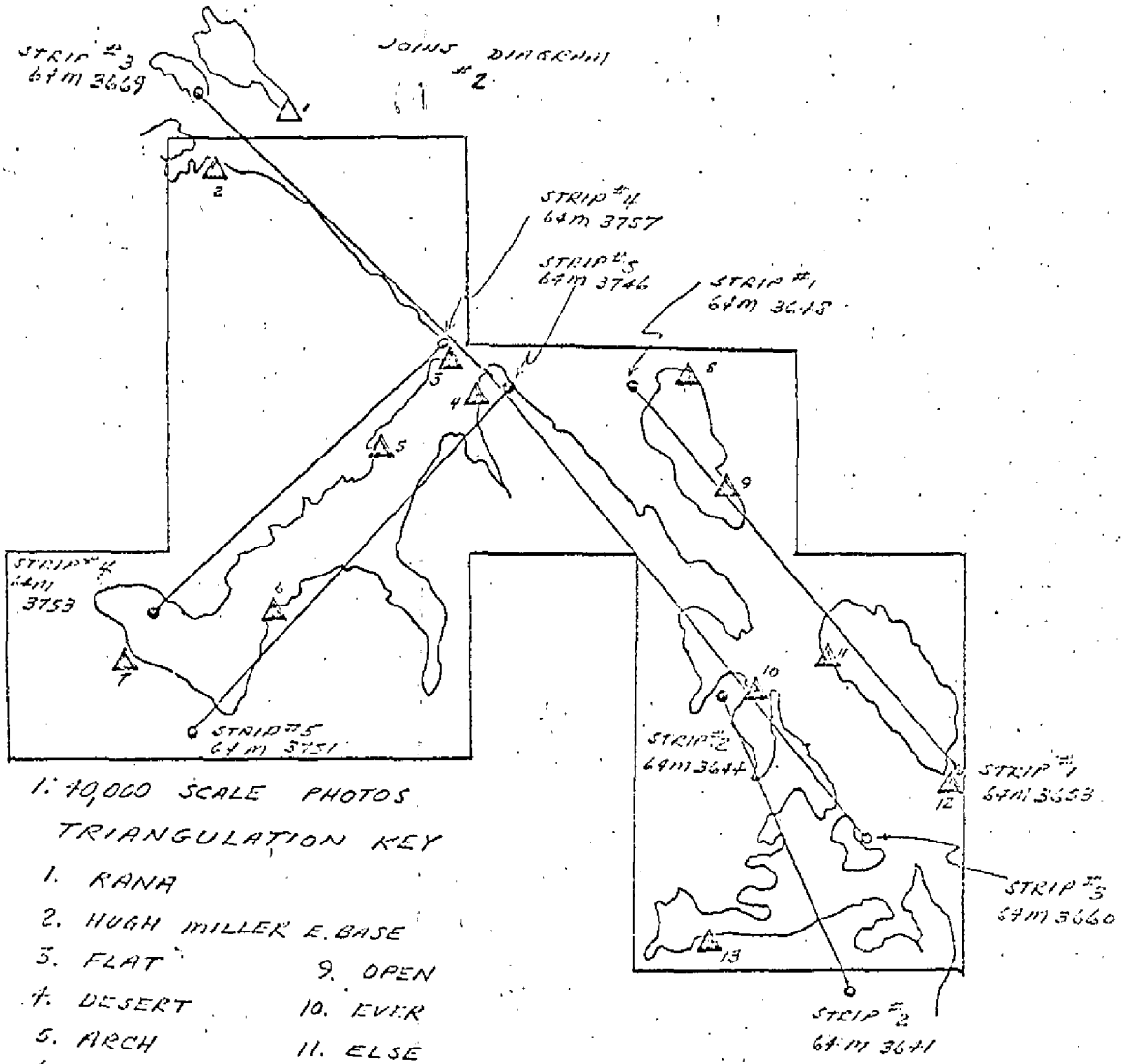
ACE, 1964

| | | |
|---|---|---|
| SS#1 | 0.0 | 0.0 |
| SS#2 | +0.1 | +1.7 |

GLOOMY, 1907

| | | |
|---|---|---|
| SS#1 | +0.1 | +2.7 |
| SS#2 | -0.1 | 0.0 |

# GLACIER BAY
## DIAGRAM
1 of 2



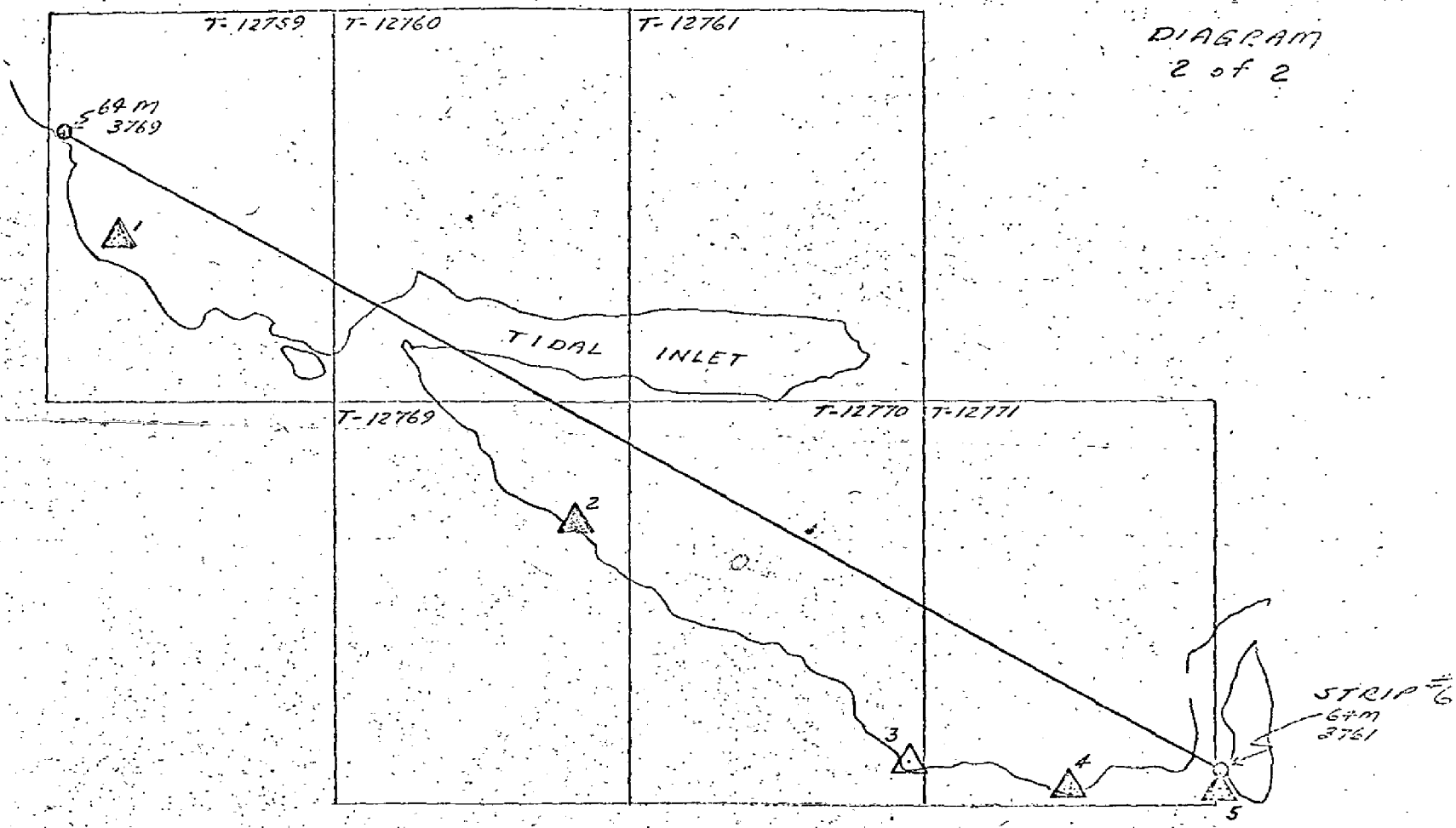

1:40,000 SCALE PHOTOS

TRIANGULATION KEY

1. RANA
2. HUGH MILLER E. BASE
3. FLAT
4. DESERT
5. ARCH
6. KNOB
7. CUBE
8. DRAKE
9. OPEN
10. EVER
11. ELSE
12. STAR
13. JILL

△ USED IN ADJUSTMENTS

△ NOT USED IN ADJUSTMENTS




1:40,000 SCALE PHOTOS

TRIANGULATION KEY

1 GLOOMY (I.B.C.)
2 ACE
3 CASE
4 DONE
5 TLINGIT

▲ USED IN ADJUSTMENT

△ NOT USED IN ADJUSTMENT

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

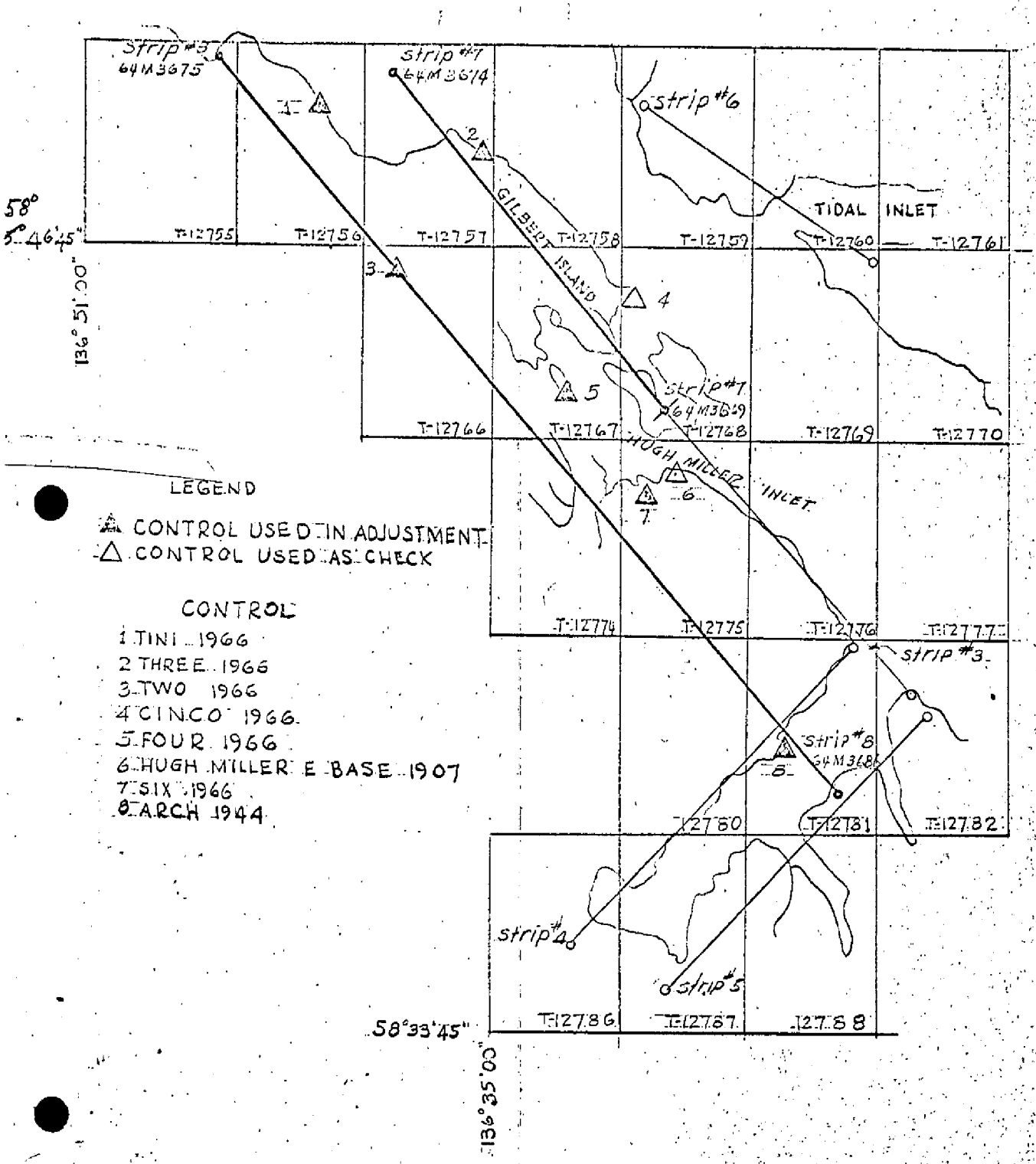
42

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




LEGEND

▲ CONTROL USED IN ADJUSTMENT
△ CONTROL USED AS CHECK

CONTROL

1 TINI 1966
2 THREE 1966
3 TWO 1966
4 CINCO 1966
5 FOUR 1966
6 HUGH MILLER E BASE 1907
7 SIX 1966
8 ARCH 1944

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- 12768 PROJECT NO. PH-6502 SCALE OF MAP 1:10,000 SCALE FACTOR None

| STATION | SOURCE OF INFORMATION (INDEX) | DATUM | LATITUDE OR Y COORDINATE<br>LONGITUDE OR X COORDINATE | N.A. 1927 - DATUM<br>DISTANCE FROM GRID OR PROJECTION LINE IN METERS *(1 Ft. = 3048006 meter)*<br>FORWARD | (BACK) |
|---|---|---|---|---|---|
| | G.P. Vol. 3 | N.A. | 58° 45' 40.03382" | 1238.7 | (617.9) |
| RANA, 1964 | Pg. 1038 | 1927 | 136° 26' 14.10215" | 226.7 | (737.8) |
| | G.P. Vol. 3 | N.A. | 58° 47' 53.45345" | 1654.0 | (202.6) |
| CINCO, 1966 | Pg. 1039 | 1927 | 136° 29' 25.81707" | 414.6 | (549.0) |
| | G.P. Vol. 9 | N.A. | 58° 46' 29.917" | 925.7 | (930.9) |
| ISLAND ALASKA, 1907 | Pg. 66 | 1927 | 136° 27' 27.110" | 435.7 | (528.5) |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

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

COMPILATION REPORT

T-12768

31. DELINEATION

This sheet was compiled using the Wild B-8 stereoplotter.

The field inspection was satisfactory.

32. CONTROL

See "Photogrammetric Plot Reports", dated August 1965 and January 1968.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline and alongshore details were compiled using field inspection data and from office interpretation of the photographs. The low water line and shoal lines were compiled mainly from office interpretation.

36. OFFSHORE DETAILS

None

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Junctions have been made with sheets T-12775 to the south and T-12767 to the west. There is no shoreline to the north or east to effect a Junction.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41. FIELD EDIT

Field edit was adequate.

46. COMPARISON WITH EXISTING MAPS

A 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

A comparison has been made with Chart 8202, STEPHENS PASSAGE TO CROSS SOUND, scale 1:209,978, 15th edition, dated 21 October 1968.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted:
Richard R. White
Richard R. White
Cartographic Technician
July 20, 1970

Approved:

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

28 March 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12768

Blue Mouse Cove

Gilbert Peninsula

Glacier Bay

Glacier Bay National Monument

Hugh Miller Inlet

Approved by:

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-12768

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

**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 |
|---|---|---|
| RW | | |

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

| 40. REVIEWER | SUPERVISOR, REVIEW SECTION, OR UNIT |
|---|---|
| Richard R. White<br>Richard R. White | Albert C. Rauck Jr.<br>Albert C. Rauck, 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.

| COMPILER | Date | SUPERVISOR |
|---|---|---|
| A.L. Shands | 11/2/71 | Albert C. Rauck Jr.<br>Albert C. Rauck, Jr. |
| Reviewer: B.L. Barge | 11/3/71 | |

43. REMARKS

Field Edit Applied From: Field edit ozalid and field ratios
64 M-3669 and 3670



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

# FIELD EDIT REPORT

MAP T-12768

Glacier Bay

Field edit of map T-12768 was accomplished during July and August, 1970. Inspection was done from both a skiff and from a launch during and 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. Station CINCO, 1966 was located by a substitute method and a separate Form 152 submitted. 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 and 64M3670.

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, Jr.
CAPTAIN, USESSA
Commanding Officer
USC&GSS FAIRWEATHER

REVIEW REPORT T-12768

SHORELINE

June 3, 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 the smooth sheets for the following surveys:

| Survey | Scale | Date |
|---|---|---|
| H-9139 (FA-20-4-70) | 1:20,000 | 1970 |
| H-9142 (FA-10-7-70) | 1:10,000 | 1970 |
| H-9143 (FA-10-8-70) | 1:10,000 | 1970 |

Shoreline compared well. Where there was doubt about the mean lower low water line, it was removed from T-12768. Significant differences were shown in purple on the comparison print.

65. COMPARISON WITH NAUTICAL CHARTS:

A visual comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated Nov. 23, 1973. Significant differences were shown in red on the comparison print.

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. The existence of a rock at Lat. 58° 47.5', Long. 136° 29.7' should be proved during the next survey of this area.

Reviewed by:

Charles H. Bishop

Charles H. Bishop
Cartographer
June 3, 1975

Approved for forwarding:

Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Div.

9768

136° 30' 00"  x=2,150,000 FT.  29'30"  29' 00"  28' 30"

58°48'45"

y=2,560,000 FT.

COMPARISON PRINT

48'30"

Object visible on photos, apparently a rock, added to map during Final Review.
Not field inspected, not field edited, not charted, not on hydrographic survey.
See Review Report Par. 66.

58° 48'00"

Sub Pt B

CINCO 1966

y=2,555,000 FT.

GILBERT PENINSULA

(15)

(15)

47'30"

T-12768

1:10,000

1

Cove

28' 30"

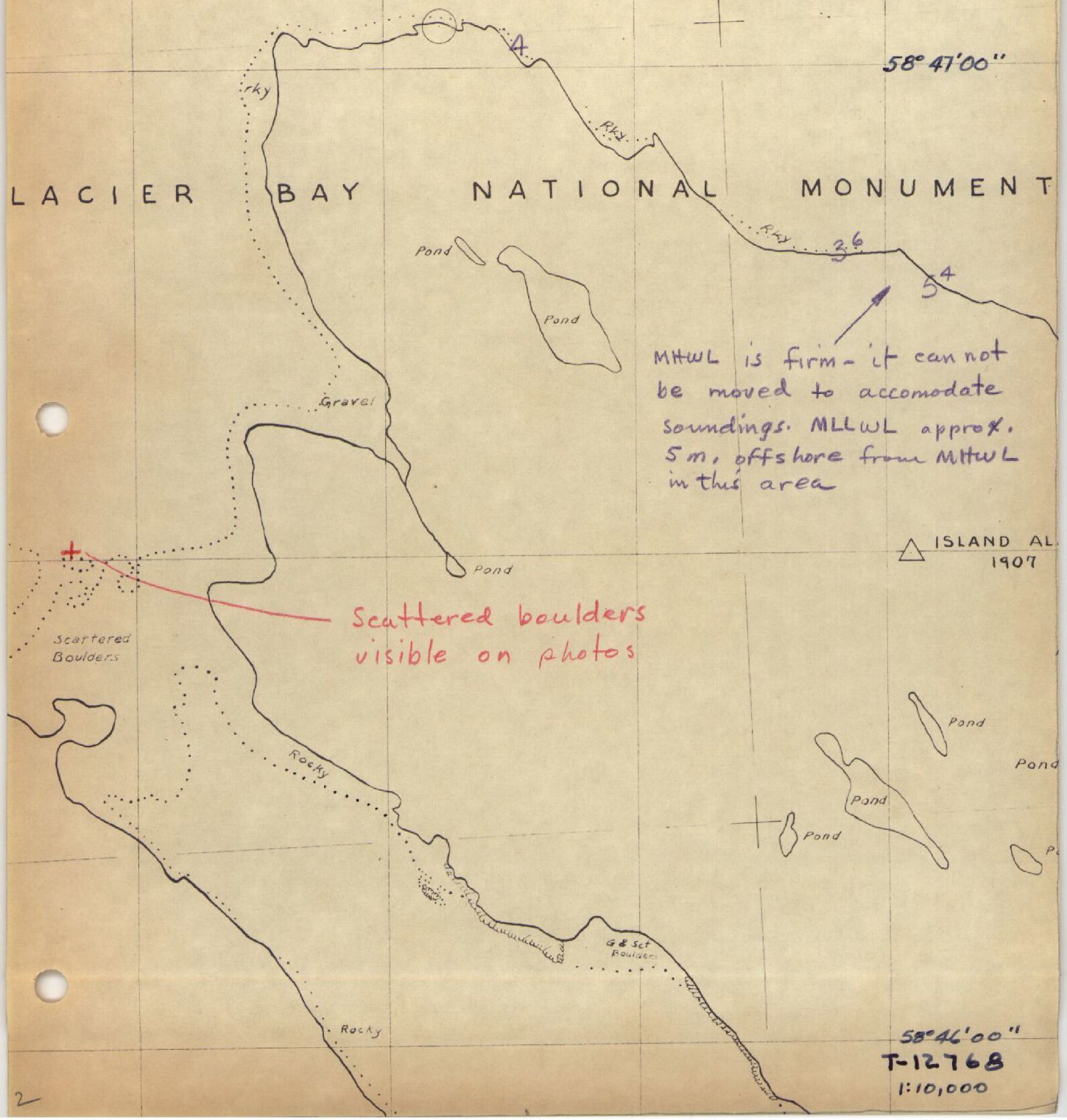
136° 28'00"

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

COMPARISON PRINT

Purple = H-9139
Red = Chart 8202

58° 47'00"




MHWL is firm - it can not be moved to accomodate soundings. MLLWL approx. 5 m. offshore from MHWL in this area

Scattered boulders visible on photos

58° 46'00"

T-12768

1:10,000

2

HUGH MILLER INLET

64 M 3669

Pond

Pond

Pond

Pond

Rocky

Rocky

(1) Reef covered 1 ft at MLLW

(4) Reef covered 6 ft at MLLW

Hand ledd measurement by field editor

Insignificant rock removed

G & B (12)

45'30"

y=2,540,000FT.

58°45'00"

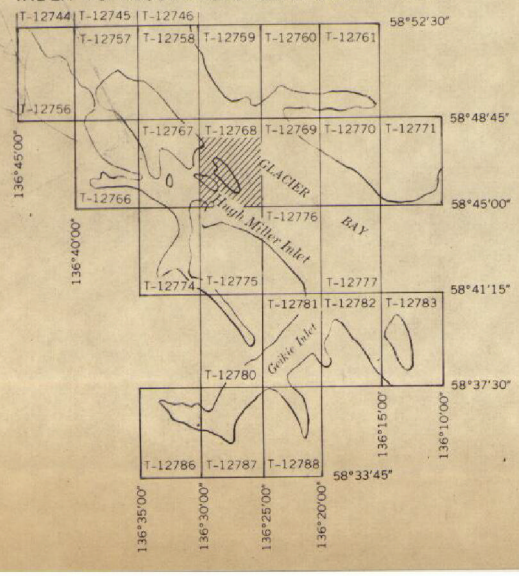
136° 30' 00"

29'30" x=2,150,000 FT.

29' 00"

28' 30"

INDEX TO ADJOINING SHEETS JOB PH 6502




COMPARISON PRINT

Purple = H-9143

T-12768

1:10,000

3