# T-12775

**NOAA FORM 76-35**

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

## DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Shoreline</th>
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<tbody>
<tr>
<td>Job No.</td>
<td>PH-6502</td>
</tr>
<tr>
<td>Map No.</td>
<td>T-12775</td>
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<tr>
<td>Classification No.</td>
<td>1</td>
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<tr>
<td>Edition No.</td>
<td>1</td>
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<tr>
<td>Field Edited</td>
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### LOCALITY

<table>
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<tr>
<th>State</th>
<th>Alaska</th>
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<tbody>
<tr>
<td>General Locality</td>
<td>Glacier Bay</td>
</tr>
<tr>
<td>Locality</td>
<td>Hugh Miller Inlet</td>
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</table>

1964 TO 1970

### REGISTRY IN ARCHIVES

<table>
<thead>
<tr>
<th>DATE</th>
<th></th>
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</table>
MAP NOT INSPECTED IN QUALITY CONTROL PRIOR TO REGISTRATION
**Descriptive Report - Data Record**

**Photogrammetric Office**
Coastal Mapping Division, Norfolk

**Officer-in-Charge**
Jeffrey G. Carlen

**I. Instructions Dated**

<table>
<thead>
<tr>
<th>Office</th>
<th>Field</th>
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<tbody>
<tr>
<td>November 16, 1964</td>
<td>December 18, 1969</td>
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**II. Datums**

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<tr>
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<th>Vertical:</th>
<th>Other (Specify)</th>
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<tbody>
<tr>
<td>1927 North American</td>
<td>Mean High-Water</td>
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**3. Map Projection**
Polyconic

**5. Scale**
1:10,000

**III. History of Office Operations**

<table>
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<tr>
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<th>Name</th>
<th>Date</th>
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<tr>
<td>Aerotriangulation</td>
<td>G. Ball; D. Brant</td>
<td>8/65; 1/68</td>
</tr>
<tr>
<td>Control and Bridge Points</td>
<td>C. Blood</td>
<td>Apr., 1970</td>
</tr>
<tr>
<td></td>
<td>R. White</td>
<td>Apr., 1970</td>
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<tr>
<td>Stereoscopic Instrument Compilation</td>
<td>A.L. Shands</td>
<td>May, 1970</td>
</tr>
<tr>
<td></td>
<td>L.O. Neterer</td>
<td>May, 1970</td>
</tr>
<tr>
<td>Manuscript Delineation</td>
<td>B. Wilson</td>
<td>May, 1970</td>
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<tr>
<td></td>
<td>R. Pate</td>
<td>May, 1970</td>
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<tr>
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<td>B. Wilson</td>
<td>May, 1970</td>
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<tr>
<td></td>
<td>R. Pate</td>
<td>May, 1970</td>
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<tr>
<td></td>
<td>R. Pate</td>
<td>May, 1970</td>
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<tr>
<td></td>
<td>E. Barge</td>
<td>Nov., 1971</td>
</tr>
<tr>
<td></td>
<td>A. Shands</td>
<td>Nov., 1971</td>
</tr>
<tr>
<td></td>
<td>C. Bishop</td>
<td>June, 1975</td>
</tr>
</tbody>
</table>

**Job:** PH. 6502
1. COMPILATION PHOTOGRAPHY

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

TIDE STAGE REFERENCE: JUNEAU

PREDICTED TIDES (Willoughby Island)

REFERENCE STATION RECORDS

TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND

(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE

ZONE: Pacific
STANDARD

MERIDIAN: 120 W

NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE
-----------------|------|------|-------|---------------------
64 M(P) 3668 & 3669 | 6/12/64 | 10:06 | 1:40,000 | 4.0 ft. below MLLW
64 M(P) 3683 | 6/12/64 | 10:25 | 1:40,000 | 3.9 ft. below MLLW

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Field inspection (August 1964), Field edit (July - August 1970), and office interpretation of above listed photos.

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

Office interpretation of photos listed above.

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

<table>
<thead>
<tr>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
<th>SURVEY COPY USED</th>
<th>SURVEY NUMBER</th>
<th>DATE(S)</th>
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5. FINAL JUNCTIONS

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<th>EAST</th>
<th>SOUTH</th>
<th>WEST</th>
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<tr>
<td>T-12768</td>
<td>T-12776</td>
<td>T-12790</td>
<td>T-12774</td>
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REMARKS
### HISTORY OF FIELD OPERATIONS

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>NAME</th>
<th>DATE</th>
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<tbody>
<tr>
<td>1. CHIEF OF FIELD PARTY</td>
<td>R.H. Houlder</td>
<td>Summer 1964</td>
</tr>
<tr>
<td>2. HORIZONTAL CONTROL</td>
<td>R.H. Houlder</td>
<td>Aug., 1964</td>
</tr>
<tr>
<td></td>
<td>W.H. Shearouse</td>
<td>Aug., 1964</td>
</tr>
<tr>
<td>3. VERTICAL CONTROL</td>
<td>N.A.</td>
<td></td>
</tr>
<tr>
<td>4. LANDMARKS AND AIDS TO NAVIGATION</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>5. GEOGRAPHIC NAMES</td>
<td>Type of Investigation</td>
<td>Complete</td>
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<tr>
<td>6. PHOTO INSPECTION</td>
<td>W.H. Shearouse</td>
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<td>7. BOUNDARIES AND LIMITS</td>
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### SOURCE DATA

<table>
<thead>
<tr>
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<tr>
<td>64 M 3668</td>
<td>HUGH MILLER INLET EAST</td>
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<td>BASE 1907</td>
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<th>OBJECT NAME</th>
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<td>64 M 3668, 3669, 3683</td>
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<table>
<thead>
<tr>
<th>PHOTO NUMBER</th>
<th>OBJECT NAME</th>
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### OTHER FIELD RECORDS

- **Field Inspection Report, CSI card.**
## HISTORY OF FIELD OPERATIONS

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1. CHIEF OF FIELD PARTY</td>
<td>J.B. Watkins, Jr.</td>
<td>Summer 1966</td>
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<td>2. HORIZONTAL CONTROL</td>
<td>J.B. Watkins, Jr.</td>
<td>Sept. 1966</td>
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<tr>
<td>3. VERTICAL CONTROL</td>
<td>L.B. Riggers</td>
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<th>STATION DESIGNATION</th>
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<tr>
<td>64 M 3682</td>
<td>SIX 1966</td>
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CSI card
## HISTORY OF FIELD OPERATIONS

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<tr>
<td>Field / Edit Operation</td>
<td>John B. Watkins, Jr.</td>
<td>Summer 1970</td>
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<tr>
<td>1. CHIEF OF FIELD PARTY</td>
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<tr>
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<td>established by</td>
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<td>pre-marked or identified by</td>
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<tr>
<td>3. VERTICAL CONTROL</td>
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<tr>
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<td>pre-marked or identified by</td>
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<td>4. LANDMARKS AND AIDS TO NAVIGATION</td>
<td>Recovered (Triangulation Stations) by</td>
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<tr>
<td></td>
<td>located (Field Methods) by</td>
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<td>specific names only</td>
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<td>6. PHOTO INSPECTION</td>
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<td>7. BOUNDARIES AND LIMITS</td>
<td>Surveyed or identified by</td>
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<td>8. OTHER FIELD RECORDS</td>
<td>Field Edit Report, Field Edit Ozalid</td>
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### II. SOURCE DATA

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<th>PHOTO NUMBER</th>
<th>STATION DESIGNATION</th>
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3. PHOTO NUMBERS (Clarification of details)

   64 M 3668 and 3669

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

   None

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<tr>
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<th>OBJECT NAME</th>
<th>PHOTO NUMBER</th>
<th>OBJECT NAME</th>
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5. GEOGRAPHIC NAMES:

   □ report
   □ none

6. BOUNDARY AND LIMITS:

   □ report
   □ none

7. SUPPLEMENTAL MAPS AND PLANS

   None

B. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list date submitted to the Geodesy Division)
**NOAA FORM 76-36D**

**U.S. DEPARTMENT OF COMMERCE**

**RECORD OF SURVEY USE**

### 1. MANUSCRIPT COPIES

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<th>DATA COMPILED</th>
<th>Compilation complete pending field edit</th>
<th>May, 1970</th>
<th>Advance Superseded</th>
<th>Marine Charts</th>
<th>Hydro Support</th>
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<td>Class I Superseded</td>
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<td>Final Review</td>
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### II. LANDMARKS AND AIDS TO NAVIGATION

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

<table>
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<th>CHART LETTER NUMBER</th>
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<th>REMARKS</th>
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#### III. FEDERAL RECORDS CENTER DATA

1. Bridging photographs; Duplicate bridging report; Computer readouts.
2. Control station identification cards; Form Nos. 607 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

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<tbody>
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<td>TP - (2)</td>
<td>PH -</td>
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<td>II, III, IV, V, FINAL</td>
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<td>DATE OF FIELD EDIT</td>
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<td>PH -</td>
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<td>DATE OF PHOTOGRAPH</td>
<td>DATE OF FIELD EDIT</td>
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<td>DATE OF PHOTOGRAPH</td>
<td>DATE OF FIELD EDIT</td>
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</table>
JOB PH-6502
GLACIER BAY
ALASKA

Shoreline Mapping
SCALE 1:100,000
SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT T-12775

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. Horizontal control required for bridging was identified at this time. One additional required station was established and identified in the summer of 1966.

Bridging was done by analytic aerotriangulation methods in the Rockville Office in August 1964 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. Because of the lack or stereoscopic coverage of shoreline north of Lat. 58° 44' and west of Long. 136° 29', compilation in this area was accomplished by means of a graphic extension to the B-8 model. The time of photography was near low tide.

Field edit was done in conjunction with hydrography in July and 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 copy and a negative of the final reviewed manuscript were forwarded for record and registry.
USCGGS 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 outcroppings and narrow gravel and boulder-strewn beaches.

There are two major inlets on the southeast shore, (Geikie and Hugh Miller - Carpentier) 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 - 64H 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" N, Long. 136° 17' 35.614" W 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: ST, ESE, OPEW and DRAE 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 M5OB was identified.
A ll stations recovered and identified are Coast and Geodetic Survey stations except HUGH MILLER EAST BASE 1907 and CLOOBY 1907, which were established by the International Boundary Commission.

Note: The U. S. Geological Survey is in process of publishing new quadrantal 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 shore 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 GIAIE and should consist of a combination of triangulation and electronic traverse.

William H. Shearouse
Cartographer

Approved and Forwarded

Richard H. Houlder, LCDR, USCGS
Stations which were recovered, or searched for, or established, and/or identified are tabulated below.

<table>
<thead>
<tr>
<th>STATION NAME</th>
<th>RECOVERED</th>
<th>IDENTIFIED</th>
<th>PHOTO NO.</th>
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<tbody>
<tr>
<td>JILL 1938</td>
<td>yes</td>
<td>yes</td>
<td>64 M 3692 (enlarg)</td>
</tr>
<tr>
<td>NONE 1938</td>
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<td>ALIN 1938</td>
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<td>STAR 1938</td>
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<td>EVER 1939</td>
<td>yes</td>
<td>yes</td>
<td>64 M 3661 (enlarg)</td>
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<tr>
<td>ELSE 1939</td>
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<td>yes</td>
<td>64 M 3649 (enlarg)</td>
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<tr>
<td>VENT 1939</td>
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<td>no</td>
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<td>SINK 1939</td>
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<td>SNOW 1944</td>
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<td>POINT 1944</td>
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<td>FOX 1944</td>
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<td>MILK 1944</td>
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<td>GLOOMY 1907</td>
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<td>yes</td>
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<tr>
<td>CASE 1939</td>
<td>yes</td>
<td>yes</td>
<td>64 M 3762 (enlarg)</td>
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<td>yes</td>
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<td>yes</td>
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<td>64 M 3761 (enlarg)</td>
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<td>yes</td>
<td>no</td>
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<td>yes</td>
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<td>yes</td>
<td>yes</td>
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<tr>
<td>QUICK 1939</td>
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</tbody>
</table>
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

ELSE, 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 (+3.6 +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)

STRI#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. RANK
2. HIGH MILLER BASE
3. FLAT 9. OPEN
4. DESERT 10. EVER
5. ARCH 11. ELSE
6. KNOB 12. STAR
7. CUBE 13. JILL
8. DRINK

△ USED IN ADJUSTMENTS

△ NOT USED IN ADJUSTMENTS.
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 aero-triangulation 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

H. P. Elthert, 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

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 & BASE 1907
7. SIX 1966
8. ARCH 1944
### DESCRIPTIVE REPORT CONTROL RECORD

**MAP T.** 12775  
**PROJECT NO.** PH-6502  
**SCALE OF MAP** 1:10,000  
**SCALE FACTOR** None

<table>
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<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR Y COORDINATE</th>
<th>LONGITUDE OR X COORDINATE</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 304.8000 meter)</th>
<th>N.A. 1927 - DATUM</th>
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<td>SIX, 1966</td>
<td>G.P. Vol. 3</td>
<td>N.A.</td>
<td>58° 44' 20.44260&quot;</td>
<td>136° 29' 17.96212&quot;</td>
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<td></td>
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<td>136° 26' 56.416&quot;</td>
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**COMPUTED BY**  
C. Blood  
**DATE** 4/24/70

**CHECKED BY**  
R. White  
**DATE** 4/24/70
COMPILATION REPORT
T-12775

31. Delineation

The Wild B-8 plotter was used. Photography was satisfactory. Field inspection was adequate.

32. Control


33. Supplemental Data

None

34. Contours and Drainage

Contours are inapplicable. Drainage has been delineated from office interpretation of the photos.

35. Shoreline and Alongshore Details

The shoreline, all foreshore details and the mean lower low water line were delineated as inspected.

36. Offshore Details

None

37. Landmarks and Aids

None
38. **CONTROL FOR FUTURE SURVEYS**

None

39. **JUNCTIONS**

Satisfactory junctions have been made with:

- T-12774 to the west
- T-12776 to the east
- T-12768 to the north
- T-12780 to the south

40. **HORIZONTAL AND VERTICAL ACCURACY**

No statement.

41. **FIELD EDIT**

Field edit was adequate.

46. **COMPARISON WITH EXISTING MAPS**

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

47. **COMPARISON WITH NAUTICAL CHARTS**

Comparison has been made with Chart 8202, scale 1:209,978, 15th edition, dated Oct. 21, 1968.

**ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:**

None

**ITEMS TO BE CARRIED FORWARD:**

None

Respectfully submitted:

Charles A. Bishop

For B. Wilson, 15 May 1970
Cartographic Technician

Approved:

Albert C. Rauck, Jr.
Chief, Coastal Mapping Section, AMC
28 March 1975

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay, Alaska)

T-12775

Charpentier Inlet

Glacier Bay National Monument

Hugh Miller Inlet

Approved by:

Chas. E. Harrington
Staff Geographer-C51x2
PHOTOGRAMMETRIC OFFICE REVIEW
T-12775

1. PROJECTION AND GRIDS
   RJP

2. TITLE
   RJP

3. MANUSCRIPT NUMBERS
   RJP

4. MANUSCRIPT SIZE
   RJP

CONTROL STATIONS

5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY
   RJP

6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)
   RJP

7. PHOTO HYDRO STATIONS
   X X

8. BENCH MARKS
   X X

9. PLOTTING OF SEYANT FIXES
   X X

10. PHOTOGRAMMETRIC PLOT REPORT
    RJP

11. DETAIL POINTS
    RJP

ALONGSHORE AREAS (Nautical Chart Date)

12. SHORELINE
    RJP

13. LOW-WATER LINE
    RJP

14. ROCKS, SHOALS, ETC.
    RJP

15. BRIDGES
    X X

16. AIDS TO NAVIGATION
    X X

17. LANDMARKS
    RJP

18. OTHER ALONGSHORE PHYSICAL FEATURES
    RJP

19. OTHER ALONGSHORE CULTURAL FEATURES
    X X

PHYSICAL FEATURES

20. WATER FEATURES
    RJP

21. NATURAL GROUND COVER
    X X

22. PLANETARY CONTOURS
    X X

23. STEREOSCOPIC INSTRUMENT CONTOURS
    X X

24. CONTOURS IN GENERAL
    X X

25. SPOT ELEVATIONS
    X X

26. OTHER PHYSICAL FEATURES
    X X

CULTURAL FEATURES

27. ROADS
    X X

28. BUILDINGS
    X X

29. RAILROADS
    X X

30. OTHER CULTURAL FEATURES
    X X

BOUNDARIES

31. BOUNDARY LINES
    X X

32. PUBLIC LAND LINES
    X X

MISCELLANEOUS

33. GEOGRAPHIC NAMES
    RJP

34. JUNCTIONS
    RJP

35. LEGIBILITY OF THE MANUSCRIPT
    RJP

36. DISCREPANCY OVERLAY
    RJP

37. DESCRIPTIVE REPORT
    RJP

38. FIELD INSPECTION PHOTOGRAPHS
    RJP

39. FORMS
    RJP

40. REVIEWER
    Charles H. Bischof
    Date: 5/19/70
    R.J. Pate
    Albert 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.

43. REMARKS
Field Edit Applied From: Field photographs 64 M 3668 and 3669 and the field edit ozalid T-12775.

Compiler: Charles H. Bischof
Date: 11/3/71
Reviewer: A.L. Shands
Date: 11/4/71
Supervisor: Albert C. Rauch, Jr.
FIELD EDIT REPORT

MAP T-12775

Glacier Bay

Field edit of map T-12775 was accomplished during July and August, 1970. Inspection was done from a skiff after the hydrography.

METHOD

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

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.

Features identified as ledges in Charpentier Inlet are talus areas.

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

LTJG, USESSA
TRANSMITTAL SHEET

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

[Signature]
John B. Watkins, Jr.
CAPTAIN, USESSA
Commanding Officer
USCG&GSS FAIRWEATHER
REVIEW REPORT T-12775

SHORELINE

June 24, 1975

61. **GENERAL STATEMENT:**

See Summary, which is page 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:**

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 (C-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 Surveys H-9139 (FA-20-4-70), scale 1:20,000, dated 1970 and H-9143 (FA-10-8-70), scale 1:10,000, dated 1970. Significant differences were shown on the comparison print in purple.

65. **COMPARISON WITH NAUTICAL CHARTS:**

A visual comparison was made with Chart 8202, scale 1:209,978, 18th edition, dated Nov. 23, 1973. No significant differences were noted. The chart scale is too small for an adequate comparison.

66. **ADEQUACY OF RESULTS AND FUTURE SURVEYS:**

This survey complies with job instructions and meets Bureau Standards and the requirements for National Standards of Map Accuracy.
Reviewed by:

Charles H. Bishop
Cartographer
June 24, 1975

Approved for Forwarding:

Victor E. Serena
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch    Chief, Coastal Mapping Div.
T-12775

136° 30' 00"
58° 45' 00"

29° 30"
29° 00"

x = 2,150,000 ft.

(3) and (2) on H-9143
Field inspected as bare
Verified by Field Edit as bare

y = 2,535,000 ft.

44° 30"

44° 00"

Awash MLLW

Six 1966 Sub 1 A

Au MLLW

5 5 Bld

Gravel

Comparison Print
Purple = H-9143

T-12775
1:10,000
This sounding (H-9139) is on a hillside. The photogrammetric location of the MHWL is firm; it cannot be moved to accommodate the sounding.