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-12763
Classification No.: Field Edited
Edition No.: 1

LOCALITY
State: Alaska
General Locality: Glacier Bay-Muir Inlet
Locality: Point George

1970 TO 1972

REGISTRY IN ARCHIVES

U.S. GOVERNMENT PRINTING OFFICE: 1973-781-775
MAP NOT INSPECTED IN QUALITY CONTROL PRIOR TO REGISTRATION
NOAA FORM 76-36A
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

PHOTOGRAMMETRIC OFFICE
Coastal Mapping Division (Rockville)
Coastal Mapping Division (Norfolk)

OFFICER-IN-CHARGE
Jack E. Guth
Jeffrey G. Carlen

I. INSTRUCTIONS DATED
May 17, 1972

II. DATUMS
1. HORIZONTAL: 1927 NORTH AMERICAN
2. VERTICAL: MEAN HIGH-WATER
3. MAP PROJECTION: Polyconic
4. SCALE: 1:10,000

III. HISTORY OF OFFICE OPERATIONS

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION</td>
<td>R. Kelly</td>
<td></td>
</tr>
<tr>
<td>METHOD: Analytical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LANDMARKS AND AIDS BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. CONTROL AND BRIDGE POINTS</td>
<td>D. Phillips</td>
<td></td>
</tr>
<tr>
<td>METHOD: Coradamat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLOTTED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. STEREOSCOPIC INSTRUMENT</td>
<td>R. Rich</td>
<td>June, 1972</td>
</tr>
<tr>
<td>COMPILATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INSTRUMENT: B-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLANIMETRY BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTOURS BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCALE: 1:110,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. MANUSCRIPT DELINEATION</td>
<td>M.C. Webber</td>
<td>June, 1972</td>
</tr>
<tr>
<td>GRAPHIC WORKSHEETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLANIMETRY BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTOURS BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCALE: 1:10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</td>
<td>H. Lucas</td>
<td>May, 1974</td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. APPLICATION OF FIELD EDIT DATA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHECKED BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. COMPILATION SECTION REVIEW</td>
<td>C.H. Bishop</td>
<td>Feb., 1975</td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. FINAL REVIEW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. MAP REGISTERED - COASTAL SURVEY SECTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BY</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
T-12763

1. COMPILATION PHOTOGRAPHY

<table>
<thead>
<tr>
<th>NUMBER AND TYPE</th>
<th>DATE</th>
<th>TIME</th>
<th>SCALE</th>
<th>STAGE OF TIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>70E67723 - 7725</td>
<td>7/27/70</td>
<td>12:07</td>
<td>1:40,000</td>
<td>10.2 ft. above MLLW</td>
</tr>
<tr>
<td>71E04492 - 4494</td>
<td>6/5/71</td>
<td>8:33</td>
<td>1:20,000</td>
<td>4.6 ft. above MLLW</td>
</tr>
<tr>
<td>71E04513 - 4515</td>
<td>6/5/71</td>
<td>8:50</td>
<td>1:20,000</td>
<td>5.4 ft. above MLLW</td>
</tr>
<tr>
<td>71E&amp;4578 - 4580</td>
<td>6/5/71</td>
<td>9:40</td>
<td>1:20,000</td>
<td>7.6 ft. above MLLW</td>
</tr>
</tbody>
</table>

REMARKS
1:20,000 scale photographs ratioed to 1:10,000 for hydro support.

2. SOURCE OF MEAN HIGH-WATER LINE:
Office interpretation from 1:40,000 scale color photography dated July 27, 1970.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:
Not mapped

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>
<th>SURVEY COPY USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-12749</td>
<td></td>
<td></td>
<td>T-12764</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-12773</td>
<td></td>
<td></td>
<td>T-12773</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-12762</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. FINAL JUNCTIONS

<table>
<thead>
<tr>
<th>NORTH</th>
<th>EAST</th>
<th>SOUTH</th>
<th>WEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-12749</td>
<td>T-12764</td>
<td>T-12773</td>
<td>T-12762</td>
</tr>
</tbody>
</table>

REMARKS
T-12763

HISTORY OF FIELD OPERATIONS

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHIEF OF FIELD PARTY</td>
<td>George M. Poor</td>
<td>June - Sept. 1972</td>
</tr>
<tr>
<td>2. HORIZONTAL CONTROL</td>
<td>RECOVERED BY</td>
<td>NA</td>
</tr>
<tr>
<td>3. VERTICAL CONTROL</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>4. LANDMARKS AND AIDS TO NAVIGATION</td>
<td>NONE</td>
<td>NA</td>
</tr>
<tr>
<td>5. GEOGRAPHIC NAMES INVESTIGATION</td>
<td>TYPE OF INVESTIGATION</td>
<td>NA</td>
</tr>
<tr>
<td>6. PHOTO INSPECTION</td>
<td>CLARIFICATION OF DETAILS</td>
<td>NA</td>
</tr>
<tr>
<td>7. BOUNDARIES AND LIMITS</td>
<td>SURVEYED OR IDENTIFIED</td>
<td>NA</td>
</tr>
</tbody>
</table>

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED | None
2. VERTICAL CONTROL IDENTIFIED | NA

3. PHOTO NUMBERS (Clarification of details)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

5. GEOGRAPHIC NAMES:
   □ REPORT
   □ NONE

6. BOUNDARY AND LIMITS:
   □ REPORT
   □ NONE

7. SUPPLEMENTAL MAPS AND PLANS

   None

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

   Field Edit Czalid and Report
**NOAA FORM 76-36D**

**T-12763**

**RECORD OF SURVEY USE**

### I. MANUSCRIPT COPIES

<table>
<thead>
<tr>
<th>DATA COMPILED</th>
<th>DATE</th>
<th>REMARKS</th>
<th>MARINE CHARTS</th>
<th>HYDO SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoreline, rocks alongshore and inshore detail</td>
<td>June, 1972</td>
<td>Class III Map Manuscript</td>
<td>June, 1972</td>
<td></td>
</tr>
<tr>
<td>Field Edit Applied</td>
<td>May, 1974</td>
<td>Class III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgraded to Class I by additional application of field edit, Final</td>
<td>Feb., 1975</td>
<td></td>
<td></td>
<td>3/11/75</td>
</tr>
<tr>
<td>Reviewed as Class I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### II. LANDMARKS AND AIDS TO NAVIGATION

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>CHART LETTER NUMBER ASSIGNED</th>
<th>DATE FORWARDED</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

#### 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
2. Control Station Identification Cards
3. Source Data (except for Geographic Names Report) as listed in Section II, NOAA Form 76-36C.

### IV. SURVEY EDITIONS

#### SECOND EDITION

<table>
<thead>
<tr>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### THIRD EDITION

<table>
<thead>
<tr>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### FOURTH EDITION

<table>
<thead>
<tr>
<th>SURVEY NUMBER</th>
<th>JOB NUMBER</th>
<th>TYPE OF SURVEY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

NOAA FORM 76-36D

* U.S. G.P.O. 1972-769380/548 REG.66*
JOB PH-6502
GLACIER BAY
ALASKA

Shoreline Mapping

SCALE 1:10,000
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12763

This 1:10,000 scale shoreline manuscript is one of 80 maps that comprise Project PH-6502 which covers Glacier Bay and its numerous tributaries. For convenience of compilation, the project is divided into five parts, according to aerotriangulation bridges. This map is one of 10 maps that comprise Part III, Muir Inlet. The job diagram shows its location in the project.

No field work was done before compilation except premarking of horizontal control for bridging.

Aerotriangulation was done in the Rockville Office in May, 1972. The report could not be located at the time of final review and is not bound with this Descriptive Report.

Compilation was done in Rockville, using the B-8 stereoplotter and 1:40,000 scale color photography taken in July, 1970 and June, 1971. Photo-hydro support photographs ratioed from 1:20,000 to 1:10,000 scale were furnished for the hydrographer's and field editor's use.

Field edit was done in conjunction with hydrography in September, 1972. Control for field edit fixes was located by theodolite or sextant; photographs were not used to locate control. Field edit was applied in the Rockville Office. The maps were forwarded to the Atlantic Marine Center for final review as Class III Manuscripts. Comments on this application follow the Compilation Report.

Final review was done at the Atlantic Marine Center in February, 1975. The map was upgraded and should be registered as a Class I Manuscript. See Final Review Report which is bound with this Descriptive Report, Item 61: GENERAL STATEMENT.
The original manuscript was a stabilene sheet 3 minutes 45 seconds in latitude by 5 minutes in longitude.

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

GLACIER BAY - PART III

Maps T-12738, T-12748 thru T-12752, T-12762 thru T-12765

No aerotriangulation report for this part of Project PH-6502 was available to the final reviewer at the time of final review, nor could one be located at the Atlantic Marine Center or in the Rockville Office.
<table>
<thead>
<tr>
<th>PROJECT NO.</th>
<th>MAP T-12763</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION</th>
<th>XMAS, 1939</th>
<th>P.793</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DATUM</td>
<td>580h 51', 27.660m</td>
<td>1360 00', 32.555''</td>
</tr>
<tr>
<td></td>
<td>LATTITUDE OR X COOR.</td>
<td>855.9</td>
<td>521.9</td>
</tr>
<tr>
<td></td>
<td>LONGITUDE OR Y COOR.</td>
<td>(1000.7)</td>
<td>(440.0)</td>
</tr>
<tr>
<td></td>
<td>DISTANCE FROM P.793</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN M.1927</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(236.02 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2,763.98 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2,244.53 yr.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION</th>
<th>SNEBLY, 1970</th>
<th>164 P.3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DATUM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LATTITUDE OR X COOR.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LONGITUDE OR Y COOR.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DISTANCE FROM P.793</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN M.1927</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(236.02 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2,763.98 ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2,244.53 yr.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
31. **DELINEATION**

1:40,000 scale color bridging photography was set on the B-8 stereoplotter to delineate shoreline, foreshore and offshore features.

The photography was hazy which made the identification of many rocks along the shoreline difficult.

1:20,000 scale photography ratioed to 1:10,000 scale was used to try to locate rocks but chunks of ice along the shoreline made it difficult to see, so many rocks may have been missed and will have to be located by the hydrographer. Common points were pricked on 1:40,000 scale and transferred to 1:10,000 scale ratioed photographs for hydro support.

32. **CONTROL**

Control was adequate for density and placement.

33. **SUPPLEMENTAL DATA**

None

34. **CONTOURS AND DRAINAGE**

Inapplicable.

35. **SHORELINE AND ALONGSHORE DETAILS**

Shoreline was delineated by office interpretation of 1:40,000 color photographs dated June 5, 1971. An approximate low water line was shown but no shallow or shoal areas were shown.

36. **OFFSHORE DETAILS**

The compilation photography was hazy and the difference in
the tide level between the 1:40,000 scale and the 1:10,000 scale along with chunks of ice along the shoreline made it difficult to locate rocks.

37. **LANDMARKS AND AIDS**
   None

38. **CONTROL FOR FUTURE SURVEYS**
   None

39. **JUNCTIONS**
   To the North with T-12749
   To the South with T-12773
   To the East with T-12764
   To the West with T-12762

40. **HORIZONTAL AND VERTICAL ACCURACY**
   Refer to "Photogrammetric Plot Report."

41. - 45.
   Inapplicable.

46. **COMPARISON WITH EXISTING MAPS**

47. **COMPARISON WITH NAUTICAL CHARTS**

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

   None

**ITEMS TO BE CARRIED FORWARD**

   None

Respectfully submitted:

Martha C. Webber
GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6502 (Glacier Bay-Muir Inlet, Alaska)

T-12763

Adams Inlet
Dirt Glacier
Glacier Bay National Monument
Maquinna Cove
Muir Inlet
Muir Point
Point George

Approved by: C. E. Harrington
Staff Geographer-C51x2
Notes on application of field edit:

A review of Field Edit Report, (OPR-460) was made to determine the extent of field edit application required. The following conclusions were made:

After compiling the manuscripts at 1:10,000 scale, the hydrographic survey was conducted at 1:20,000 scale.

The ratio prints prepared for photo-hydro support and field edit were not utilized.

All hydro signals were located by traverse methods, positions computed and plotted on the boat sheet.

Sextant and T-2 fixes to foreshore rocks, the NMWL and other shoreline features were taken from these signals, plotted on the 1:20,000 scale boat sheets & transferred by proportional dividers to the 1:10,000 scale ozalid copy of the manuscripts.

The "spot" points transferred from the 1:20,000 scale boatsheets to the 1:10,000 scale manuscripts for the NMWL were inadequate to do revisions to the shoreline as compiled.

This project thus became a field hydrographic survey only.

All rocks and other foreshore features not visible on the photography that were plotted directly on the boat sheets from field fixes were not duplicated on the shoreline manuscripts as these were applied by hydrographic processing to the smooth sheet.

These conclusions were discussed with the Marine Chart Division and agreement was reached on the method of completing this project as far as the Coastal Mapping Division is concerned.

The ten manuscripts will be reprocessed as a "Class III" map and is to be used as a source for shoreline compilation only.

Limited use was made of the field edit data. Corrections that could be applied on the 1:10,000 scale manuscripts were the removal of erronius rocks that were incorrect, the labeling of "rocky beach" and the addition of a few visual area.
A comparison was made between H-9317 and H-9318 (1:20,000) and the ten shoreline manuscripts. There was no conflict between the shoreline as compiled on the manuscripts and the hydrographic data.

Submitted by,

J. P. Battley, Jr.
Chief, Coastal Mapping
Section
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 NHWL (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 boatsheets (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 USCGS 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°17'45"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 ice-
bergs. Rendez 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 Noorah Glacier have been inked on photo 4605. 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

<table>
<thead>
<tr>
<th>No.</th>
<th>Angles</th>
<th>Signal Nos.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9744</td>
<td>41°56'</td>
<td>100</td>
<td>Rock bares 10'; 15'</td>
</tr>
<tr>
<td></td>
<td>53°56'</td>
<td>59</td>
<td>diameter. 0900 PDT</td>
</tr>
<tr>
<td></td>
<td>*70°28'</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*114/59</td>
<td></td>
</tr>
<tr>
<td>9745</td>
<td>31°48'</td>
<td>same</td>
<td>Rock bares 2'; 4'</td>
</tr>
<tr>
<td></td>
<td>67°12'</td>
<td></td>
<td>diameter. 0909 PDT</td>
</tr>
<tr>
<td></td>
<td>*58°56'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The field editor's inspection for rocks at 58°50.75'N, 136°38.8'W and 58°50.8'N, 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°50.0'N 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.

Two isolated rocks at 58°54.85'N, 136°06.3'W are an especially noteworthy hazard to navigation. Both are below the MHWS and lie near favorable anchorage sites for large vessels.

A reef lies inside the mouth of Wachusett Inlet at 58°56.2'N, 136°10.0'W 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, N-9317).

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.

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.

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 gray 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.

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 eb and flood, the tidal velocity is greatly increased in the vicinity of this rock because of the constriction in the channel. Whitehorse dance madly about the rock as large whirlpools are shed from its sides.

Prepared by:
Steve R. Bixey
LT(jg), NOAA

Approved by:
George H. Pool
CDR, NOAA
Commanding Officer
NOAA Ship McArthur
61. **GENERAL STATEMENT:**

   See Summary which is page 6 of this Descriptive Report.

   No comparison print is bound with this report.

   An overlay sheet was made in the electronic plotting section at AMC, showing field edit fix and signal positions. This enabled the final reviewer to have plotted positions of field edit sextant fixes taken on rocks and the mean high water line. Fixes taken on the MHWL, along with measurements taken to this line from signals, verified that the line was correctly positioned. One small change was made. Fixes on rocks enabled the final reviewer to find the rocks on the photographs and add them to the map.

   In most of the map area, the foreshore is steep. Therefore, since the hydrographer located only short segments of the mean lower low water line, this line was left on T-12763, except at the delta in front of Dirt Glacier where it conflicted with soundings. The MLLW line was also revised on the south side of Adams Inlet at the east edge of the map.

   Tree lines were removed. See Memorandums dated October 18, 1965 and October 27, 1965. Bluff lines were removed because the field editor's report intimated that they were so numerous that they were of no landmark value.

   Predicted tide tables were used to refer field edit elevations to MLLW. The greatest difference with the hydrographer's elevations was 2 feet.

62. **COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:**

   A comparison was made with copies of Surveys T-6756 and T-6757, both at 1:20,000 scale. T-6756 is dated May–June, 1940
and T-6757 is dated July-August, 1940. Shoreline compared well except in the delta area at Dirt Glacier. This is a run-off area where shoreline change is to be expected.

In the area compared, T-12763 supersedes T-6756 and T-6757 for nautical chart construction purposes. T-6756 and T-6757 are the latest registered prior surveys of the area.

63. **COMPARISON WITH MAPS OF OTHER AGENCIES:**

A visual comparison was made with U.S.G.S. Quadrangle MT. FAIRWEATHER (D-1), ALASKA, scale 1:63,360, dated 1954. No significant differences were noted.

64. **COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:**

A comparison was made with a verified copy of the smooth sheet for Survey H-9318, scale 1:20,000, dated 1972. 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 Nov. 3, 1973. No significant differences were noted. The chart scale is too small for adequate comparison.

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

Although there is no Aerotriangulation Report with this section of PH-6502, this reviewer was assured by Mr. John Perrow, Chief of Bridging Section, by telephone conversation on January 21, 1975, that this job complies with Bureau standards and meets requirements for National Standards of Map Accuracy.

Reviewed by:

[Signature]

Charles H. Bishop
Cartographer
Approved for forwarding:

Victor E. Serena  
Chief, Photogrammetric Branch, AMC

Approved:

Chief, Photogrammetric Branch  Chief, Coastal Mapping Div.