## DESCRIMENT REPORT

**Type of Survey:** Shoreline Photogrammetric  
**Field No.:** Ph-88  
**Office No.:** T11097

### LOCALITY

**State:** Alaska  
**General locality:** Taku Inlet  
**Locality:** Taku Point and Taku Glacier

1948-52

**CHIEF OF PARTY**  
R.A. Gilmore, Chief of Field Party  
J.C. Sammons, Balto. Photo. Office

**LIBRARY & ARCHIVES**

**DATE:** May 23, 1953
DATA RECORD

T-11097

Project No. (II): Ph-88
Quadrangle Name (IV):

Field Office (II): SHIP LESTER JONES
Chief of Party: Ross A. Gilmore

Photogrammetric Office (III): Baltimore, Md.
Officer-in-Charge: Jack C. Sammons

Instructions dated (II) (III): 20 Mar. 1952 (CS-54)
24 Dec. 1952
19 May 1953
Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000
Stereoscopic Plotting Instrument Scale (III): inapplicable

Scale Factor (III): 1.000

Date received in Washington Office (IV): 4-15-53
Date reported to Nautical Chart Branch (IV): 6-13-53

Applied to Chart No. Date:

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW
Elevations shown as (25) refer to mean high water
Elevations shown as (25) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): TAKU, 1929

Lat.: 58° 24' 15.644 (484.0m)
Long.: 134° 00' 35.532 (577.1m)

Adjusted

Plane Coordinates (IV):
State: Alaska (UTM) Zone: No. 8

Y=
X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.
Areas contoured by various personnel
(Show name within area)
(II) (III)
DATA RECORD

Field Inspection by (II): R. A. Gilmore

Date: 21 May to 12 July 1952

Planetable contouring by (II): None

Date:

Completion Surveys by (II): None

Date:

Mean High Water Location (III) (State date and method of location):
12 June 1952. Planetable - see par. No. 33
13 August 1953, Photographs.

Date: 23 Jan. 1953

Projection and Grids ruled by (IV): J. Allen

Date: 27 Jan. 1953

Projection and Grids checked by (IV): H. D. Wolfe

Date: 26 March 1953

Control plotted by (III): J. Steinberg

Date: 13 April 1953

Control checked by (III): L. A. Senasack

Date: 1 May 1953

Radial Plot or Stereoscopic

Date:

Control extension by (III): L. A. Senasack

Date:

Stereoscopic instrument compilation (III):

Date:

Inapplicable

Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): J. C. Richter

Date: 1 June 1953

Photogrammetric Office Review by (III): H. R. Rudolph

Date: 11 June 1953

Elevations on Manuscript

checked by (II) (III): not applicable.

Date:

Form T-Page 3

N-2618-12 (4)
PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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</thead>
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<tr>
<td>134</td>
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</table>

*Field Photo's approximate 1:20,000

Tide (III)

Reference Station: JUNEAU
Subordinate Station: TAKU POINT, TAKU INLET

Ratio of Ranges

<table>
<thead>
<tr>
<th>Reference Station</th>
<th>Mean Range</th>
<th>SP overshoot</th>
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<tbody>
<tr>
<td>JUNEAU</td>
<td>15.7</td>
<td>14.1, 16.7</td>
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</tbody>
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Date: 3 Sept. 1956

Final Drafting by (IV): John H. Frazier

Drafting verified for reproduction by (IV): William O. Belcher

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 13 mile
Shoreline (More than 200 meters to opposite shore) (III): 17.0 m
Shoreline (Less than 200 meters to opposite shore) (III): 2.0 m
Control Leveling - Miles (II): none

Number of Triangulation Stations searched for (II): 10 Recovered: 5 Identified: 5
Number of BMs searched for (II): See Field report Recovered: Identified:
Number of Recoverable Photo Stations established (III): 3
Number of Temporary Photo Hydro Stations established (III):

Remarks:
* In addition 3 old Topo stations were recovered and identified.
SHORELINE MAPPING PROJECT PH-88

ALASKA, Taku Inlet

Compiled at 1:10,000 scale from U.S. Navy aerial photographs taken July 1948

OFFICIAL MILEAGE FOR COST ACCOUNTS

<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Sq. Miles</th>
<th>Lin. Miles</th>
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<tr>
<td>T-11097</td>
<td>18</td>
<td>18</td>
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<tr>
<td>T-11098</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>T-11099</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>46</strong></td>
<td><strong>46</strong></td>
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</table>
Summary to Accompany T-11097

Field instructions for shoreline project (Ph-88) were issued to Ross A. Gilmore, in command of USC&GS Ship LESTER JONES, for project CS-346 for the purpose of securing new basic hydrographic surveys of that portion of Taku Inlet greatly changed since 1937 because of the advance of Taku Glacier.

This was a combined operations project. Photographs were used for shoreline inspection and for recovery of control, supplemented by planetable surveys.
<table>
<thead>
<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 IN FEET, OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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<tbody>
<tr>
<td>JOYCE, 1937</td>
<td>G-7609 III 867</td>
<td>N.A. 1927</td>
<td>58 26 05.052</td>
<td>133 59 12.222</td>
<td>156.3 (1700.2)</td>
<td>198.3 (775.3)</td>
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<tr>
<td>Sub Pt.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>JOYCE, 1937</td>
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<td></td>
<td></td>
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<tr>
<td>MARY, 1937</td>
<td>G-7609 III 867</td>
<td>&quot;</td>
<td>58 25 07.842</td>
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<td>242.6 (1613.8)</td>
<td>583.7 (390.4)</td>
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<td>not held</td>
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<tr>
<td>TAKU, 1929</td>
<td>G-484 IV 493</td>
<td>&quot;</td>
<td>58 24 15.644</td>
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<td>482.0 (1374.4)</td>
<td>577.1 (327.4)</td>
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<tr>
<td>TAKU, 1929</td>
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<tr>
<td>Ooze, 1937</td>
<td>G-7609 III 867</td>
<td>&quot;</td>
<td>58 24 13.731</td>
<td>134 02 32.891</td>
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<td>534.2 (410.3)</td>
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<td>Ooze, 1937</td>
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<td></td>
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<tr>
<td>LIP</td>
<td>1893 G-484 IV 492</td>
<td>&quot;</td>
<td>58 23 38.541</td>
<td>134 00 54.163</td>
<td>1192.5 (664.6)</td>
<td>884.8 (89.9)</td>
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<td>not held</td>
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<td>Sub Pt.</td>
<td>1893 LIP &quot;A&quot; 1929</td>
<td>&quot;</td>
<td>58 23</td>
<td>134 00</td>
<td>1209.4 (647.1)</td>
<td>883.1 (91.6)</td>
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<tr>
<td>Sub Pt.</td>
<td>1893 LIP &quot;B&quot; 1929</td>
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<td>58 23</td>
<td>134 00</td>
<td>1177.4 (679.2)</td>
<td>870.9 (103.8)</td>
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</tbody>
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1 FT. = 304.8006 METER

COMPUTED BY: J. C. Cregan     DATE: 17 March 1953
CHECKED BY: J. Steinberg      DATE: 23 March 1953
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927-DATEUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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<tr>
<td>ROT, 1937</td>
<td>Form No. N.A. 524 1927</td>
<td>58 26</td>
<td>1675 (181)</td>
<td>611 (362)</td>
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<td>DYE, 1937</td>
<td>&quot;</td>
<td>58 24</td>
<td>A memorial monument</td>
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<td>STOW, 1937</td>
<td>&quot;</td>
<td>58 24</td>
<td>A memorial monument</td>
<td>130 (1726)</td>
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<td>NEWT, 1952</td>
<td>&quot;</td>
<td>58 23</td>
<td>Plane Table position</td>
<td>804 (171)</td>
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<td>BILL, 1952</td>
<td>&quot;</td>
<td>58 23</td>
<td>Plane Table position</td>
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<tr>
<td>DILL, 1952</td>
<td>&quot;</td>
<td>58 25</td>
<td>Plane Table position</td>
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<td>Sub. Pt. A NEWT, 1952</td>
<td>&quot;</td>
<td></td>
<td>Plot graphically</td>
<td></td>
<td></td>
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<tr>
<td>Sub. Pt. B NEWT, 1952</td>
<td>&quot;</td>
<td></td>
<td>Plot graphically</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub. Pt. STOW, 1937</td>
<td>&quot;</td>
<td></td>
<td>Plot graphically</td>
<td></td>
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</table>

1 FT. = 0.0254006 METER

COMPUTED BY: J. C. Oregan  DATE: 18 March 1953  CHECKED BY: J. Steinberg  DATE: 23 March 1953
FIELD REPORT:
The field report is part of the Descriptive Report for T-11098.

PHOTOGRAHMETRIC PLOT REPORT:
The Radial Plot Report is part of the Descriptive Report for T-11098.

31. **DELINEATION**

Graphic methods were used for delineation.

Shoreline in the vicinity of control stations was traced from Graphic Control sheets.

32. **CONTROL**

Refer to Radial Plot Report.

33. **SUPPLEMENTAL DATA**

Graphic control sheets No. LJ-A-52, LJ-B-52, were used for tracing shoreline and offshore detail at Taku Glacier and all control stations. For complete discussion refer to Para. No. 31, of Descriptive Report for T-11098.

34. **CONTOURS AND DRAINAGE**

Contours: Inapplicable.

Drainage: No comment

35. **SHORELINE AND ALONGSHORE DETAILS**

The shoreline inspection was adequate. Refer to Para. 35 of the report for T-11098 regarding the foreshore areas, the low water line and discussion of bluffs and the quality of the photographs.

The shoreline at Taku Glacier and at the moraine of Norris Glacier seems to be subject to continuous change.

The MHWL east of station MARY, 1937 was delineated without field inspection. The tides on the photographs could not be computed; so the MHWL was delineated at the base of the bluff. It is possible that it extends out on the Flats beyond the bluff.

36. **OFFSHORE DETAILS**

Information was available from the Graphic control sheets and the field photographs.
37. LANDMARKS AND AIDS

None: Refer to Para. 9, of Field Report regarding the buildings in this area.

38. CONTROL FOR FUTURE SURVEYS

Form 524 for three new recoverable Topographic Stations and three previously established stations are submitted with this report. Refer to Para. 11 of the Field Report. Bll, 1952; Dll, 1952; New, 1952.

Note
Hydrographic stations exist in this area and are located on the graphic control sheets. They were omitted from this manuscript in accordance with project instructions.

39. JUNCTIONS

There are no contemporary surveys to the north, east and west. Junction to the south with T-11098 is in agreement.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to Radial Plot Report.

41 through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

There were no existing maps in this area available at the compilation office.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with USC&GS Chart No. 8235, scale 1:40,000 published 8/18/52, corrected to 16 March 1953, and found to be in good agreement, except for Taku Glacier which has moved southeastward.

Items to be applied to Nautical Charts Immediately:

The MHWL of Taku Glacier has moved eastward approximately 2 miles.
47. COMPARISON WITH NAUTICAL CHARTS (cont'd)

Items to be carried forward:

None

Respectfully submitted
2 June 1953

John C. Richter,
Carto. Photo. Aid

Approved and forwarded:

Jack C. Sammons,
Capt. USC&GS
Officer in Charge
Baltimore Photo. Office
48. GEOPHASIC NAMES LIST

Swede Point
Taku Glacier
Taku Inlet
Taku Point
Taku River

Names approved
9-3-54
A.J.U.
PHOTOGRAMMETRIC OFFICE REVIEW

T- 11097


CONTROL STATIONS


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES

26. Other physical features H.R.R.

CULTURAL FEATURES


BOUNDARIES

31. Boundary lines
32. Public land lines

MISCELLANEOUS


40. Harry R. Ridges

Reviewer

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

Supervisor

43. Remarks:
REVIEW REPORT T-11097
Shoreline Map
3 September 1954

62. Comparison with Registered Surveys:

<table>
<thead>
<tr>
<th>Control No.</th>
<th>Scale</th>
<th>Date</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>T-6576</td>
<td>1:10,000</td>
<td>1937</td>
<td>Taku Inlet (west shore)</td>
</tr>
<tr>
<td>T-6577</td>
<td>1:10,000</td>
<td>1937</td>
<td>Taku Point, Swede Point (East shore of Taku Inlet)</td>
</tr>
<tr>
<td>T-6578</td>
<td>1:10,000</td>
<td>1937</td>
<td>Davidson Creek to Taku Point</td>
</tr>
<tr>
<td>T-7088</td>
<td>1:10,000</td>
<td>1952</td>
<td>Taku Inlet, Taku Glacier</td>
</tr>
</tbody>
</table>

T-11097 shoreline supersedes that of both T-6576 and T-6577 and of T-6578 north of parallel 58°23'. Offshore features supplement those of the older surveys.

T-7088 (planetable LJ-A-52) is contemporary with T-11097 and was used to establish in part the shoreline and offshore features on T-11097.

63. Comparison with Maps of Other Agencies

USGS Juneau (B-1) 1:63,360 1952 (adv. print)
USGS Taku River (B-6) 1:63,360 1951

The shoreline of these maps is from 1948 photographs delineated by multiplex and Kelsh plotter methods without benefit of field inspection. The scale of the quadrangles discloses a general agreement of shoreline except in the Swede Point area where planetable work for T-11097 advances the shoreline to include the two islands on the quadrangle, and at Taku Glacier where the front has advanced to practically cover the northern outlet of Norris Glacier.

64. Comparison with Contemporary Hydrographic Surveys

H-8032 1:10,000 1952 (LJ-1152)

The shoreline and offshore features on this survey are from T-11097, T-11098.

Changes during review:

Shoreline in vicinity of station BILL, both mainland and sand bar islands which cover at HW.

Shoreline east of station MARY (see 66).

65. Comparison with Nautical Charts

8235 1:40,000 ed Feb. 1941, cor. Nov. 1953

The changes in the area of T-11097 have been applied to the chart.
66. **Accuracy** (see headings 23 and 24 of the Radial Plot Report, bound with T-11098)

Because practically all of the shoreline was delineated by benefit of either field inspection or of planetable location, this map complies with the National Standards of Map Accuracy. Though control in the southern portion of the project area did not hold in the radial plot, the shoreline in the neighborhood of each station was located by planetable so that all the shoreline in that area may be considered accurate. The approximate shoreline east of station MARY was drawn during review by analogy with field notes at an area to the N.E.

Reviewed by:

[Signature]

Lena T. Stevens

Approved by:

[Signature]  
Chief, Review Section

[Signature]  
Chief, Nautical Charts Division

[Signature]  
Chief, Div. of Photogrammetry

[Signature]  
Chief, Division of Coastal Surveys