Type of Survey: Shoreline Photogrammetric

Field No.: Ph-33       Office No.: T-11098

Locality:
State: Alaska
General locality: Taku Inlet
Locality: Flat Point and Davidson Point

1948 h3-52

CHIEF OF PARTY
R. A. Gilmore, Chief of Field Party
J. C. Sammonds, Bmore Photo. Office

LIBRARY & ARCHIVES

DATE: August 28, 1957

Note: See the "Descriptive Report Summary" concerning conflicts in rock information between this survey and hydro surveys of 1952 and 1960.
DATA RECORD
T-11058

Project No. (II): Ph-88

Quadrangle Name (IV):

Field Office (II): Ship LESTER JONES

Chief of Party: R. A. Gilmore

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: J. C. Sammons

Instructions dated (II) (III):

20 March 1952
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):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 6-15-53

Date reported to Nautical Chart Branch (IV): 6-25-53

Applied to Chart No.

Date: Date registered (IV): 20 June 1957

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 1927

Vertical Datum (III): MHW

Mean sea level except as follows:
Elevations shown as (26) refer to mean high water
Elevations shown as (6) refer to sounding datum
i.e. mean low water or mean lower low water

Reference Station (III): DUKE, 1929

Lat.: 58° 20' 36.827" (1139.4m) Long.: 134° 00' 10.213 (166.2m)

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 1952
12 July 1952

Planetable contouring by (II):
Date:

Completion Surveys by (II):
Date:

Mean High Water Location (III) (State date and method of location):
Photos 13 Aug. 1948
Planetable 12 June 1952 & 9 July 1952 - See par. 33.

Projection and Grids ruled by (IV): J. Allen
Date: 28 Jan. 1953

Projection and Grids checked by (IV): H. D. Wolfe
Date: 28 Jan. 1953

Control plotted by (III): J. Steinberg
Date: 26 Mar. 1953

Control checked by (III): L. A. Senasack
Date: 10 Apr. 1953

Radial Plot or Stereoscopic Control checked by (III):
L. A. Senasack
Date: 1 May 1953

Stereoscopic Instrument compilation (III):
Planimetry
Date:
Contours
Date:

Manuscript delineated by (III): J. Honick
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
H-2618-12(4)
Camera (kind or source) (III): U.S. Navy, Focal length 153.42 mm

PHOTOGRAPHS (III)

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#Field photos approximately 1:20,000

Tide (III)

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<th>M</th>
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<tbody>
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<td>1.0</td>
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Reference Station: JUNEAU
Subordinate Station: TAKU POINT, TAKU INLET
Subordinate Station:

Washington Office Review by (IV): J. T. Stevens
Final Drafting by (IV): John H. Frazier
Drafting verified for reproduction by (IV): Wm. C. Haller

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 5
Shoreline (More than 200 meters to opposite shore) (III): 11 statute mi.
Shoreline (Less than 200 meters to opposite shore) (III): 1.5 statute mi.
Control Leveling - Miles (II): none

Number of Triangulation Stations searched for (II): 7
Recovered: 7
Identified: 4

Number of BMs searched for (II); See Field Report
Recovered: 7
Identified: 4

Number of Recoverable Photo Stations established (III): 1
Number of Temporary Photo Hydro Stations established (III):

Remarks: In addition 5 old Topo stations were searched for and recovered, 4 identified by the field party and one office 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

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<th>No.</th>
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<td>T-11098</td>
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<td>14</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td><strong>46</strong></td>
<td><strong>46</strong></td>
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</tbody>
</table>
Field instructions for this shoreline project (Ph-88) were issued to Ross A. Gilmore, in command of USCGS Ship LESTER JONES, for project CS-346 for the purpose of securing new basic hydrographic surveys for 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.

Note: A group of rocks located immediately south of Flat Point were mapped on this map with the "rock awash" symbol and labeled "Awash MHW". The "Awash MHW" label was carried forward to RS-706 (photogrammetric revision survey of 1960).

Apparently, the rocks should have been labeled "Awash MLLW" —

1) H-8033 (1952) - The area was developed, sounding at 2 ft. to 3 ft. above MLLW. No rocks were found. The rocks were carried forward to the hydro survey as rocks awash.

2) H-8546 and H-8546 (1960) - The area was developed, sounding at 5 ft. above MLLW. No rocks were found. The rocks were carried forward to the hydro surveys as rocks awash.

S. Blankenship
Aug. 12, 1972
Form 504
U. S. COAST AND GEOETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
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<td>Office No.</td>
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<td>General locality</td>
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<tr>
<td>Locality</td>
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| 19452                    |
| CHIEF OF PARTY           |
| Ross A. Gilmore          |

LIBRARY & ARCHIVES

DATE
DATA RECORD

Project No. (II): CS-346       Quadrangle Name (IV):

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

Photogrammetric Office (III):

Instructions dated (II) (III): 20 March 1952       Officer-in-Charge:

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III):

Manuscript Scale (III): Stereoscopic Plotting instrument Scale (III):

Scale Factor (III):

Date received in Washington Office (IV): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III):

Vertical Datum (III):

Mean sea level except as follows:
Elevations shown as (2) refer to mean high water
Elevations shown as (3) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III):

Lat.: Long.: Adjusted

Unadjusted

Plane Coordinates (IV):

State: Zone:

Y= X=

Roman numerals indicate whether the item is to be entered by (I) 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)

(I) (III)
DATA RECORD

Field Inspection by (II): Ross A. Gilmore  
Date: 21 May 1952 to 12 July 1952

Planetary contouring by (II): None
Date:

Completion Surveys by (II): None
Date:

Mean High Water Location (III) (State date and method of location):

Projection and Grids ruled by (IV):
Date:

Projection and Grids checked by (IV):
Date:

Control plotted by (III):
Date:

Control checked by (III):
Date:

Radial Plot or Stereoscopic
Control extension by (III):

Planimetry
Date:

Stereoscopic Instrument compilation (III): Contours
Date:

Manuscript delineated by (III):
Date:

Photogrammetric Office Review by (III):
Date:

Elevations on Manuscript
checked by (III):
Date:
Camera (kind or source) (III):

PHOTOGRAPHS (III)

<table>
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<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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Tide (III)

Reference Station:
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III):
Shoreline (More than 200 meters to opposite shore) (III):
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II): 24 Recovered: 19 Identified: 16*
Number of BMs searched for (II): 6** Recovered: 6 Identified: None

Number of Recoverable Photo Stations established (III):
Number of Temporary Photo Hydro Stations established (III):

Remarks: * In addition, 10 Recoverable topographic stations were identified as supplemental control (see Item 3, Field Inspection Report).
** Searched for and recovered in line with portable tide gage installations only.
2. Areal field inspection.—Field inspection for Project CS-346, in general, consisted of recovery and identification of recovered triangulation stations, recovery and identification of previously located recoverable topographic stations, identification of recoverable 1952 graphic control topographic stations and shoreline inspection. All the above was in accordance with paragraphs 7, 9 and 10 of the project instructions for the compilation of shoreline maps. A copy of "SEASON'S PROGRESS SKETCH" showing the extent of this inspection is attached.

In general, the shoreline of Taku Inlet is irregular, rocky, and consists of rock ledges which extend out into the water varying distances from the tree line. The area is heavily wooded and the slopes back from the water's edge are steep and precipitous. The rocky ledges are often bold and steep-to at the water's edge. There is an extensive flat which forms the glacial moraine in front of Norris Glacier. This glacier is receding. There is a flat of limited extent on the east shore about 1.8 miles south of Taku Point and a similar flat off the mouth of Turner Creek. The mountain sides are generally covered with a thick growth of coniferous trees interspersed with patches of moss and grass and bushes or often just outcroppings of bare rock. Alder is found in the gulleys and old, grown over slide areas. The rock in the area is granite, often times polished smooth from glacial action.

At the head of the inlet is Taku Glacier. This glacier is advancing and is pushing an enormous amount of sand and mud ahead of it. This glacier has advanced about a mile since the last accurate survey was made in 1937. Sand and mud now extends out a considerable distance ahead of the northeast corner of the glacier. The basin formed between the glacier and the mouth of the Taku River has shrunk to about 1/2 of its size in 1937 and has shoaled over 100 feet at its former deepest depth.

Photographic coverage consisted of single lens aerial photography by the Navy in 1948 at a contact scale of 1:40,000. Ratio prints at a scale of 1:20,000 were used for all inspection. The definition of these ratio prints was rather poor making station identification rather trying. Coverage was ample. Due to the steep-to nature of the topography in some areas, particularly on the west shore of the inlet just south of the Norris Glacier moraine, very little inspection could be made due to the heavy shadows. Shoreline data here can be supplemented by reference to graphic control sheet LJ-B-52.

Field inspection was accomplished using a 14 foot aluminum skiff and outboard motor. The inspection party generally consisted of three men including the boat operator. All notes were made directly on the
photographs with a soft fine pointed lead pencil with leaders from the notes to the points pricked or detail noted. No inking was attempted in the field. All control data was inked on the photographs in the evening of the same day the field work was accomplished, leaving other data to be inked at a later date. Consequently, a maximum of field work could be accomplished in a day and certainty assured that control data was complete for a specific area. Photographs were clipped to a piece of light plywood to facilitate handling and making notes. In general, it is believed that sufficient notes have been made to aid the compiler in interpreting the photographs. Several references have been made on the photographs to the graphic control sheets used in the area of the project and these should be referred to during compilation.

3. Horizontal Control.—Alongshore triangulation and planable graphic control stations of previous years were recovered and identified. In addition, several 1952 recoverable graphic control stations were identified to supplement the above. Identification was in accordance with Photogrammetry Instructions No. 22 and it is believed that a sufficient number of stations have been positively identified to control the radial plot. No new triangulation stations were established for this project.

In most cases identification was made by the substitute station method. An alphabetical list of all control stations recovered and identified, showing station name, photograph identified on and method used, is attached to this report. All alongshore stations within the limits of the project were searched for and have been reported on Form 526, RECOVERY NOTE, TRIANGULATION STATION. The attached progress sketch shows all stations recovered and identified. Control stations were identified on the following photographs: SEA 81-203, 204 and 205; SEA 114-061, 062 and 063; SEA 116-120 to 125 inclusive and 132 to 134 inclusive.

4. Vertical control.—Inapplicable.

5. Contours and drainage.—Inapplicable.

6. Woodland cover.—Woodland cover exists in almost the entire area of the project except of course at Taku Glacier. There are a few dense stands of woods near the shoreline on the Norris Glacier moraine on the west side of the inlet; however, a great deal of the moraine is barren and consists of sand and gravel. Generally, along the shoreline of the inlet, woodland cover is almost at the waters edge or bluff line. See also paragraph 2. of this report for further information regarding this subject.
7. Shoreline and alongshore features.—Shoreline inspection was accomplished in the area indicated by cross hatching on the attached PROGRESS SKETCH. The mean high water line has been indicated on the photographs in a sufficient number of places to aid the compiler in its delineation. The mean high water line along the Norris Glacier moraine is difficult to determine due to its relative flatness. Here, considerable effort was taken to determine this line at or very near the time of MHW by taking fixes at several points or by identification on the photographs. It is believed that a good delineation can be made in this area from the notes on the photographs and by referring to graphic control sheet LJ-B-52. At the east edge of Taku Glacier a tremendous amount of sand and mud is being pushed up and ahead of the glacier. This mud and sand is rapidly filling the water area between the glacier and Swede Point. The present mean high waterline of the mud and sand has been located on photo SEA 116-132 and the remainder of it to the south and west is to be found on graphic control sheet LJ-A-52. Sand and mud is pushed up in mounds often as high as 20 feet in the aforementioned area.

No attempt was made to indicate the low water line on the photographs as hydrography was done concurrent with the inspection and a good determination of the MLW line was made on the hydrographic sheets for the project (LJ-1152 and LJ-1252).

All shoreline inspection was done from a 14 foot aluminum skiff powered by an outboard motor by skirting along the shore and also by actually going ashore at appropriate places. It is believed that sufficient notes have been made to give the compiler a good idea of shoreline and alongshore features. There is a small pier at the Annex Creek power station located on the west shore of the inlet near its southern end. This is a company pier used to bring in supplies to the power station. This pier almost dries at low water. There are several buildings in addition to the power station and these and other alongshore features have been identified. Some of the details here have been more clearly indicated on graphic control sheet LJ-C-52. There are a few buildings (mostly shacks or huts) in the vicinity of Taku Point. These are only used seasonally by fishermen. The most prominent ones were located on graphic control sheet LJ-A-52 as they were too obscured on the photographs to be identified.

Shoreline inspection was made on the following photographs: SEA 81-203, 204 and 205, SEA 114-061, 062 and 063; SEA 116-120 to 125 inclusive, 132, 133 and 134.

8. Offshore features.— Practically no offshore features as such exist in the area of this report. A few close-to offshore rocks or ledges exist and have been indicated on the photographs. The outer edges of sand bars and flats visible in the photographs are more
accurately determined by noting the MLLW line on the hydrographic sheets for the area.

9. Landmarks and aids.---There is only one landmark of note in the area of this project and that is the sheet metal covered power house at Annex Creek. Topographic station HOW 1937 is the cupola of the power station and has been reported on Form 567 as LANDMARK. There are several small buildings or shacks at Taku Point but they are not of sufficient size or importance to list as landmarks. There is a fair sized log cabin just south of the point, but this is too obscured by trees to be classified as a landmark. There are no aids to navigation (fixed or floating) within the limits of this project.

10. Boundaries, monuments and lines.---Generally speaking, this paragraph is not applicable. However, there are 3 monuments in the vicinity of Taku Point but they are memorial monuments in honor of fishermen who were drowned in the area. Topographic stations STOW 1937 and DYE 1937 are such monuments. These are limestone markers about 1 foot square and stand about 3 feet high and are cemented to bedrock.

11. Other control.---As mentioned in paragraphs 2. and 3., recoverable topographic stations located by graphic control in 1937 and 1952 were identified as a form of supplemental control. Graphic control sheet LJ-A-52, LJ-B-52 and LJ-C-52 were executed in the area of this report and should be referred to. A complete listing of identified recoverable topographic stations is attached to this report. All such stations are reported on Form 524, DESCRIPTION OF RECOVERABLE TOPOGRAPHIC STATION. In the case of the 1937 stations, Form 524 was used also as a recovery card.

No photohydro stations were selected or identified for this project. All hydrographic stations were located by graphic control methods.

12. Other interior features.---There are no bridges or cable areas in the area field inspected, nor are there any airports or landing fields. Air transportation is by float planes. The only habitations other than the few shacks at Taku Pt. are the few buildings at Annex Creek belonging to the power plant company for its personnel.

There has been considerable agitation of recent years to build a road from Juneau to Taku Inlet and continuing on up the shoreline of Taku River into Canada to certain mines there. A print of the proposed
route is forwarded with the data for this project.

13. Geographic names.—There is no special report on geographic names for this project. All names as shown on USC&GS Chart No. 8235 were corroborated and only one additional name is recommended. This is DAVIDSON POINT, the prominent point between Davidson Creek and Turner Creek on the east side of the inlet just opposite Flat Point. This name has been indicated on the progress sketch attached to this report and is in common use by the Bureau of Public Roads and the Forestry Service.

14. Special reports and supplemental data.—In addition to the data contained in this report, the following data obtained during the 1952 field season of the Ship LESTER JONES is pertinent to the photogrammetric work accomplished.

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<th>TITLE</th>
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<tr>
<td>SEASON'S REPORT</td>
<td>3 December 1952</td>
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<td>To be forwarded</td>
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<tr>
<td>HYDROGRAPHIC SHEETS LJ-1152 and LJ-1252 and REPORTS thereof</td>
<td>To be forward by processing office</td>
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<tr>
<td>Transmittal Letter on Taku Inlet FIELD DATA, PHOTOGRAMMETRIC</td>
<td>2 December 1952</td>
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<td>COAST PILOT NOTES, Taku Inlet</td>
<td>25 November 1952</td>
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Ross A. Gilmore, 
Commander, C&GS 
Comdg., Ship LESTER JONES
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<td>SEA 114-063</td>
<td>Sub. Pt. and Photo Pt. Ties</td>
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<td>DUKE 1929</td>
<td>SEA 116-122</td>
<td>Sub. Pts.</td>
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<td>FLAT 1929</td>
<td>SEA 114-063</td>
<td>Sub. Pt.</td>
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<td>JAW 1893-1929</td>
<td>SEA 81-203</td>
<td>Sub. Pt.</td>
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<tr>
<td>JOYCE 1937</td>
<td>SEA 116-133</td>
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<td>LAG 1893-1929</td>
<td>SEA 81-205</td>
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<td>HOW 1937</td>
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<td>POP 1937</td>
<td>SEA 116-122</td>
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<tr>
<td>STOW 1937</td>
<td>SEA 116-134</td>
<td>Sub.Pt.</td>
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21. AREA COVERED

This radial plot covers the area of Surveys T-11097, T-11096 and T-11095. These are shoreline manuscripts covering Taku Inlet, Alaska from Jaw Point north to Swede Point.

22. METHOD - RADIAL PLOT

Map Manuscripts and Base Grids:
Acetate sheets with polyconic projections in black and Universal Transverse Mercator, Alaska, Zone 5, grids in red at a scale of 1:10,000 and the base grids ruled on vinylite sheets, were furnished by the Washington Office.

All control was plotted using the meter bar and beam compass except the substitute points for Rec. Top. stations NEWT, 1952 and STW, 1952 which were plotted graphically.

Photographs:
All photographs are ratioed from 1:40,000 to 1:10,000, single lens prints on positive paper, taken by U. S. Navy in 1948. Twenty (20) photographs were used, numbered as follows:
SEA-81-203 thru 206
SEA-114-060 thru 065
SEA-114-120 thru 126
SEA-116-131 thru 134

Templets:
Unadjusted vinylite templets were made from all photographs.

Closure and Adjustment to Control:
All control was transferred from the map manuscript to the base grid sheets by holding common grids. This radial plot was constructed on vinylite sheets. After laying several templets it was apparent that all control could not be held. The control that was believed to be best was held in this plot and the templets were adjusted to obtain the most satisfactory intersections on the passpoints.

Transfer of Points:
The map manuscripts were oriented over the completed radial plot, holding common grids, and all centers, passpoints and radially plotted positions for control were pricked directly on the map manuscript.

23. ADEQUACY OF CONTROL

The amount of control, supplemented with the Rec. Topos (see item 24), for this project was adequate. The quality of control was poor, also see items 2, 24 and 25. Due to misidentification seven (7) of the twenty (20) stations could not be held. The following is a list of the stations with the distance and direction the radially plotted position falls from the geographic position:
23. ADEQUACY OF CONTROL

KEEP, 1893-1929, Sub. Pt. 1.1 mm to the N. W. 7-10-44
LIP, 1893-1929, Sub. Pt. "A" - 0.6 mm to the S. W. 7-10-44
    Sub. Pt. "B" - 0.6 mm to the S. W. 7-10-44
MART, 1937 - 0.6 mm to the E. 7-10-44
MUT, 1937, Sub. Pt. "A" - 0.3 mm to the N. E. 7-10-44
    Sub. Pt. "B" - 0.6 mm to the N. E. 7-10-44
TURNER, 1929 - 0.5 mm to the S. W. 7-10-44

It is believed that these discrepancies are due to errors in identification. The field party experienced much difficulty with them on poor photographs. No positions could be proved definitely to be in error.

24. SUPPLEMENTAL DATA

Ten (10) Recoverable Topographic Stations were identified by the field party and one (1), LAKE 1937, was office identified. It is believed that there was no cabin in the vicinity of where the field party identified HILL, 1952, when the photographs were taken. In the case of HILL, 1952, the field party was doubtful in identification. The following is a list of the Recoverable Topographic Stations with the distance and direction the radially plotted position falls from the geographic position:

BILL, 1952 0.6 mm to the S. S. E. 7-11-47
DILL, 1952 2.0 mm to the N. E. 7-11-47
HIGH, 1952 1.2 mm to the N. W. 7-11-47
LAD, 1937 1.6 mm to the S. 7-11-47
NEWT, 1952, Sub. Pt. "B" 0.6 mm to the S. W. 7-11-47
POF, 1937 0.5 mm to the N. W. 7-11-47
STOW, 1937, Sub. Pt. 0.6 mm to the S. E. 7-11-47

These discrepancies are believed to be due to difficulty in identification, not errors in positions.

25. PHOTOGRAPHY

The photographic coverage was adequate. The photographic definition was very poor, in most of the cases over two-thirds of the photograph the image was fuzzy. In some cases the definition was so poor that points could not be transferred between flights. Poor definition is partly due to extreme enlargement of the photographs.

Respectfully Submitted
1 May 1953

Leroy A. Senassack,
Carto. Photo. Aid
LAYOUT SKETCH
PROJECT PH-88
Surveys T-11097 thru T-11099

- Single Lens Office Photographs
- Control stations (identified)
- Control stations (not identified)
- Control stations (not held in plot)
- Recoverable Topo Station (identified)
- Recoverable Topo Station (not identified)
- Recoverable Topo Station (not held in plot)
<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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<tr>
<td>MID, 1937</td>
<td>G-7609 111 867</td>
<td>N.A. 1927</td>
<td>58</td>
<td>22</td>
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<td>00</td>
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<td>58</td>
<td>22</td>
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<td>HUFF, 1929</td>
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<td>&quot;</td>
<td>58</td>
<td>22</td>
<td>12.153</td>
<td>385.3</td>
<td>(1471.1)</td>
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<tr>
<td>LET</td>
<td>1893</td>
<td>&quot;</td>
<td>58</td>
<td>21</td>
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<td>1929</td>
<td>&quot;</td>
<td>134</td>
<td>02</td>
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<td>20</td>
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<td>00</td>
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<td></td>
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<td>20</td>
<td></td>
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<td>(828.4)</td>
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<tr>
<td>PUB</td>
<td>1893</td>
<td>G-4810 492</td>
<td>58</td>
<td>20</td>
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<td>316.3</td>
<td>(632.4)</td>
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<tr>
<td></td>
<td>1929</td>
<td>&quot;</td>
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<td>03</td>
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<tr>
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<td>134</td>
<td>03</td>
<td></td>
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<tr>
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<td>20</td>
<td></td>
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<td>(721.3)</td>
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<td>DUKE</td>
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<td></td>
<td>134</td>
<td>00</td>
<td></td>
<td>162.7</td>
<td>(813.5)</td>
<td></td>
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1 FT. = 304.8066 METER

COMPUTED BY J. C. Cre yan DATE March 17, 1953 CHECKED BY J. Steinber DATE 3/24/53
<table>
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<th>STATION</th>
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<th>DATUM</th>
<th>LATITUDE OR Ψ-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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<tr>
<td>LAD, 1937</td>
<td>Recovery Card Form 524</td>
<td>NA 1927</td>
<td>58 21</td>
<td></td>
<td>662</td>
<td>(1194)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>133 59</td>
<td></td>
<td>735</td>
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<td>&quot;</td>
<td>&quot;</td>
<td>58 21</td>
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<td></td>
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<td>134 03</td>
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<td>189.0</td>
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<td>LAKE, 1937</td>
<td>&quot;</td>
<td>&quot;</td>
<td>58 19</td>
<td></td>
<td>1071</td>
<td>(785)</td>
<td></td>
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<td></td>
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<td></td>
<td>133 58</td>
<td></td>
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<td>HOW, 1937</td>
<td>&quot;</td>
<td>&quot;</td>
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<td>134 05</td>
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<td>HIGH, 1952</td>
<td>&quot;</td>
<td>&quot;</td>
<td>58 21</td>
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<td>1038</td>
<td>(818)</td>
<td></td>
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<td></td>
<td>134 03</td>
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<td>170</td>
<td>(806)</td>
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</table>

Topo Stations Recovered 1952

1 FT = 0.0480006 METER

COMPUTED BY: J. C. Cregan  DATE: March 18, 1953  CHECKED BY: J. Steinberg  DATE: 2/23/53
31. **DELINEATION:**

Graphic methods were used.

Parts of the MHML were traced directly from graphic control sheets. These parts are in the vicinity of all control stations with the following exceptions:

- PUB, 1893 - 1929
- BLUFF, 1929
- LAD, 1937
- HIGH, 1937

The MHML between FLAT, 1929 and HOW, 1937 was not delineated because it was found to be satisfactorily delineated on Survey T-6580 (1937). Refer to par. 46.

The photographic coverage of the shoreline between FLAT, 1929 and BLUFF, 1929 was unsatisfactory due to shadows cast by the high ground over the entire shoreline area. The location of the MHML, as identified by the field party, did not agree with the planetable location of stations PCP, 1937 and LET, 1893-1929. It appears that the field party identified the treeline. The description of Station BLUFF, 1929 indicates the existence of a rock bluff below the tree line, which is not visible in the shadow areas. An unsurveyed shoreline was determined by holding the planetable location of the shoreline at LET, 1893-1929, PCP, 1937, FLAT 1929 and the MHML at BLUFF, 1929, and then displacing the indicated treeline a distance equal to the approximate width of the bluff and delineating directly from the photographs.

32. **CONTROL:**

Refer to the Radial Plot Report.

33. **SUPPLEMENTAL DATA:**

The field party, using planetable methods, located the MHML in the vicinity of control stations on the following graphic control sheets:

- LJ-B-52 scale 1:10,000 (destroyed after utilization)
- LJ-C-52 scale 1:10,000 (kept prior to review)

These parts of the MHML were traced directly by holding the projection and the positions of the stations. Where there was disagreement between the planetable and field identification on the photographs, the planetable location was accepted and the other was made to join. See par. 31.

34. **CONTOURS AND DRAINAGE:**

Contours - not applicable.

Drainage - no comment.
35. **SHORELINE AND ALONGSHORE DETAILS:**

The shoreline inspection was adequate.

The MHWL between FLAT, 1929 and BLUFF, 1929 was obscured by heavy shadows on all photographs. Refer to paragraph 31.

The character of the foreshore areas have been labeled according to available information, but the limits of these areas, normally the MLLW line, were not shown. According to par. 7 of the field report, the complete MLLW line is shown on the Hydrographic Survey. Refer to Par. 8433, (Page 507) of the Topographic Manual which states that the MLLW line need not be transferred.

The office interpretation was affected by the poor quality of the ratio prints that were used. Refer to par. 25 of the radial plot report.

Except in areas where definite information to the contrary was available, minimum size bluffs were delineated along the entire shoreline, based on par. 2 of the field report, which states that the shoreline is rocky, steep and precipitous.

36. **OFFSHORE DETAILS:**

In addition to field photographs, information regarding offshore details was available on graphic control sheets.

37. **LANDMARKS AND AIDS:**

Form 567 has been submitted for the one landmark on this survey. Copies of this form have been made part of this report. See par. 9 of the field report.

38. **CONTROL FOR FUTURE SURVEYS:**

Forms 524 for one new Recoverable Topographic Station, and four previously established stations are submitted for the five recoverable topographic stations in this area. Refer to par. 11 of the field report regarding the list of these stations.

Hydrographic stations exist in this area and are shown on the graphic control sheets. They were omitted from this manuscript in accordance with project instructions.
39. **JUNCTIONS:**

Junctions have been made and are in agreement with T-11097 to the north and T-11099 to the south. To the east and west there are no contemporary surveys. Junction has also been made with T-6580(1937) at FLAT PT.

40. **HORIZONTAL AND VERTICAL ACCURACY:**

Refer to Radial Plot Report.

41. - 45.

Inapplicable.

46. **COMPARISON WITH EXISTING MAPS:**

This manuscript was compared with T-6580 (1937) scale 1:10,000 in the area between FLAT, 1929 and HOW, 1937. The shoreline on the previous survey between these points was found to be satisfactorily delineated and has been omitted from this manuscript. At station HOW, 1937 the graphic control sheet furnished a new shoreline which was transferred to this manuscript.

No other maps were available in the compilation office for the purpose of comparison.

47. **COMPARISON OF CHARTS:**

Comparison was made with chart 8253, scale 1:40,000, dated 18 Aug. 1952 and corrected to 16 March 1953.

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

Shoreline not delineated on this manuscript should be carried forward from survey T-6580 (1937).

Respectfully submitted:
5 June 1953

Jack Horick
Carto. Photo. Aid

Approved and Forwarded
16 June 1953

Jack C. Sammons
Officer in Charge
Balt. Photo. Office
48. GEOGRAPHIC NAME LIST:

Davidson Creek
*Davidson Point
Flat Point
Scow Cove
Taku Inlet
Annex Creek

All names taken from Chart 8253.

*Refer to par. 13 of the field report.

Names approved
9-8-54
a.j.u.
NOTES TO REVIEWER

There is a Hydrographic signal PIL near landmark HOW, 1937. Description of PIL was not available in the compilation office, but is believed to be a pile adjacent to 4 piles shown on graphic control survey LJ-C-52.

Verification is requested.
PHOTOGRAMMETRIC OFFICE REVIEW

T-11098


CONTROL STATIONS


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES


MISCELLANEOUS


40. Harry P. Reddick

Reviewer

Joseph Staudinger

Supervisor, Review Section for Unit

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:
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Seattle, Washington 10 November 1952

I recommend that the following objects which have (✓) been inspected from seaward to determine their value as landmarks be charted on (✓) the charts indicated.

The positions given have been checked after listing by J. T. Jarman

Roes A. Gilmore, Comdr. Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>MARINE CHART</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CUP</td>
<td>Cupola, Annex Creek Power Plant, sheet metal sided, 3 story bldg.</td>
<td>HOW</td>
<td>58 19</td>
<td>148</td>
<td>134 05</td>
<td>927</td>
<td>Plane-table</td>
<td>1937</td>
<td>T-11098</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by...
George B. Grimm, Geodetic Engineer
Coast and Geodetic Survey
General Delivery
Fort Wentworth, Ga.

3 11 57
62. **Comparison with Registered Surveys.**

- **T-6578** 1:10,000 1937 Davidson Creek to Taku Point (both shores)
- **T-6579** 1:10,000 1937 Jaw Point to Davidson Creek (east shore)
- **T-6580** 1:10,000 1937 Sunny Cove to Flat Point (west shore)

The east shoreline of Taku Inlet on T-11098 supersedes that delineated on surveys T-6578 and T-6569.

The west shoreline of T-11098 from Norris Glacier Moraine to Flat Point is shown by the approximate symbol because shadows on the photographs are so dense that the line could be inferred only. From Flat Point to the small cove north of Annex Creek the shoreline was not drawn on T-11098. Retention of the shoreline on T-6580 was recommended. Photographs 81-205 and 11k-62 afforded offshore views of the shoreline between Flat Point to the cove. The shore was free of shadows and displayed a reef fringing the shoreline for almost the entire distance. This reef was drawn on the manuscript during review. The time at which the photographs were taken is not recorded, but the appearance of the flats on the east shore of the river leads to the assumption that it was near low tide, so that the ledge as drawn probably represents the approximate MLLW.

It is recommended that the shoreline of T-6578 between Flat Point and Norris Glacier moraine be retained for charting purposes, except in Snow Cove which is subject to depositional change, and at those control stations transferred from planable sheets LJ-E-52 and LJ-C-52. (These two sheets had been destroyed before T-11098 had been reviewed thus preventing a check.)

63. **Comparison with Maps of Other Agencies.**

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

The shoreline of these maps is delineated by multiplex and Kelsh plotter methods from 1948 photographs without benefit of field inspection. The small scale of the quadrangles affords only indication of general agreement.

64. **Comparison with Contemporary Hydrographic Surveys.**

- **H-8032** 1:10,000, 1952, Taku River to Flat Point
- **H-8033** 1:10,000, 1952, Flat Point to Jaw Point

The shoreline of these surveys is from T-11097, T-11098, and T-11099 except from Flat Point to the power plant north of...
Anna Creek where T-6580 was used. (See also paragraphs two and three, heading 62.)

65. **Comparison with Nautical Charts.**

8235 1:40,000 Feb. 1951, Corr. November 1953

Noteworthy changes to shoreline have occurred since the surveys of 1937 in areas of deposition: at 58°22'1''/133°59'1'' [w.e.f.] and at Scow Cove. These have not been applied to the chart. All offshore rocks on T-11098 have been applied.

66. **Accuracy.** Control along the eastern shore and field inspection notes made possible a shoreline of charting accuracy. The western shoreline is much generalized and not well controlled, so that it is substandard. (See paragraph 3, heading 62)

Reviewed by:

Lina T. Stevens

APPROVED

[Signatures]

Chief, Review Branch
Division of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Photogrammetry

Chief, Div. of Coastal Surveys

20 August 1957

New photography and new maps shall be issued if and when traffic warrants. This is a sub-standard work.

LW Swanson