

11097

Diag. Cht. No. 8202-3.

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey <u>Shoreline Photogrammetric</u>	
Field No. <u>Ph-88</u>	Office No. <u>T11097</u>
LOCALITY	
State <u>Alaska</u>	
General locality <u>Taku Inlet</u>	
Locality <u>Taku Point and Taku Glacier</u>	
<u>1948-52</u>	
CHIEF OF PARTY <u>R.A.Gilmore, Chief of Field Party</u> <u>J.C.Sammons, Balto., Photo. Office</u>	
LIBRARY & ARCHIVES	
DATE <u>May 23, 1958</u>	

8-1870-1 (1)

11097

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-346)
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): 6-15-53

Date reported to Nautical Chart Branch (IV): 6-23-53

Applied to Chart No.

Date:

Date registered (IV): 20 June 1957

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Mean sea level except as follows: MHW
Elevations shown as (25) refer to mean high water
Elevations shown as (5) 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
~~Unadjusted~~

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.

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.

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

Date: 23 Jan. 1953

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

Date: 27 Jan. 1953

Control plotted by (III): J. Steinberg

Date: 26 March 1953

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

Date: 13 April 1953

Radial Plot or Stereoscopic
Control extension by (III): L. A. Senasack

Date: 1 May 1953

Planimetry
Stereoscopic Instrument compilation (III):
Contours
Inapplicable

Date:

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:

Camera (kind or source) (III): U.S.N. 153.42 mm

Number		Date	Time	Scale	Stage of Tide
SEA-116-123		13 Aug. 1948	unknown	1:10,000*	unknown
124	"	"	"	"	"
125	"	"	"	"	"
SEA-116-132		"	"	"	"
133	"	"	"	"	"
134	"	"	"	"	"

*Field Photo's approximate 1:20,000

Tide (III)

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

NH W	Ratio of Ranges	Mean Range	Spring Range
		14.0	16.6
15.7	1.0	14.1	16.7

Time + 0:15

Washington Office Review by (IV): *Lana T. Stevens*

Date: 3 Sept. 1954

Final Drafting by (IV): John H. Frazier

Date: 8/2/56

Drafting verified for reproduction by (IV): *WMO. Ballin*

Date: 10-26-56

Proof Edit by (IV):

Date:

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):

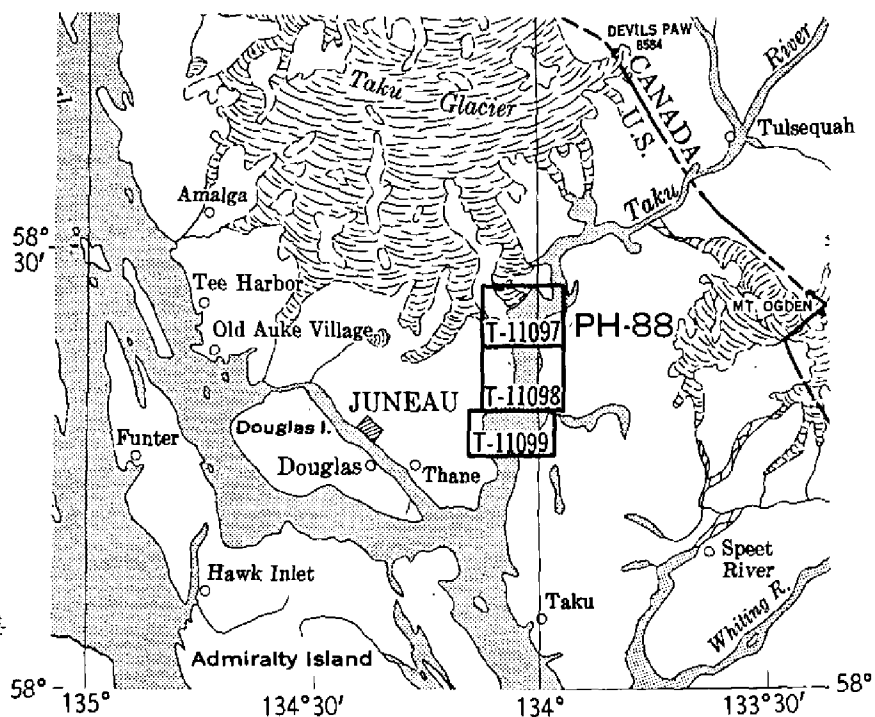
Remarks:

* 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

Sheet No.	Sq. Miles Area	Lin. Miles Shoreline
T-11097.....	18	18
T-11098.....	14	14
T-11099.....	14	14
TOTALS	46	46

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.

MAP T. 11097 PROJECT NO. Ph-88 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
JOYCE, 1937	G-7609 III 867	N.A. 1927	58 26 05.052				156.3	(1700.2)		
			133 59 12.222				198.3	(775.3)		
Sub Ft. JOYCE, 1937		"	58 26				155.9	(1700.6)		
			133 59				193.4	(780.2)		
MARY, 1937	G-7609 III 867	"	58 25 07.842				242.6	(1613.8)		
			133 57 35.955				583.7	(390.4)	not held	
TAKU, 1929	G-484 493	"	58 24 15.644				484.0	(1372.4)		
			134 00 35.532				577.1	(397.4)		
Sub Ft. TAKU, 1929		"	58 24				482.0	(1374.4)		
			134 00				602.0	(372.5)		
OOZE, 1937	G-7609 III 867	"	58 24 13.731				424.9	(1431.6)		
			134 02 32.891				534.2	(440.3)		
Sub Ft. OOZE, 1937		"	58 24				667.6	(1188.9)		
			134 02				405.9	(568.6)		
LIP 1893 1929	G-484 492	"	58 23 38.541	A white "X" of 6m x 6ft boards, can still be a land mark here (M-8032)			1192.5	(664.0)		
			134 00 54.463				884.8	(89.9)	not held	
Sub Ft. LIP "A" 1893 1929		"	58 23				1209.4	(647.1)		
			134 00				883.1	(91.6)		
Sub Ft. LIP "B" 1893 1929		"	58 23				1177.4	(679.1)		
			134 00				870.9	(103.8)		

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MAP T-11097

PROJECT NO. Ph-88

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927-DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
						FORWARD	(BACK)	FORWARD	(BACK)
			TOPO STATIONS RECOVERED 1952						
ROT, 1937	Form No. 524	N.A. 1927	58 26			1675	(181)		
			134 00			611	(362)		
DYE, 1937	"	"	58 24	A memorial monument		1309	(547)		
			133 59	Plane table position		949	(25)		not held
STOW, 1937	"	"	58 24	A memorial monument		130	(1726)		
			134 00	4 ft high		804	(171)		not held
NEWT, 1952	"	"	58 23	Plane table position		05	(1851)		
			134 02			963	(12)		not held
BILL, 1952	"	"	58 23	Plane table position		580	(1276)		
			134 00			694	(281)		not held
DILL, 1952	"	"	58 25	Plane table position		597	(1259)		
			134 03			806	(168)		
Sub. Pt. A NEWT, 1952		"	Plot graphically						
Sub. Pt. B NEWT, 1952		"	Plot graphically						
Sub. Pt. STOW, 1937		"	Plot graphically						

1 FT. = 3048006 METER

COMPUTED BY: J. C. Cregan

DATE 18 March 1953

CHECKED BY: J. Steinberg

DATE 23 March 1953

M-2388-12

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COMPILATION REPORT
T-11097

FIELD REPORT:

The field report is part of the Descriptive Report for T-11098.

PHOTOGRAMMETRIC 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

Forms 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. *Bill, 1952; Dill, 1952; Newt, 1952.*

Refer

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
John C. Richter,
Carto. Photo. Aid

Approved and forwarded;

Jack C. Sammons
Jack C. Sammons,
Capt. USC&GS
Officer in Charge
Baltimore Photo. Office

48. GEOGRAPHIC NAMES LIST

Swede Point

Taku Glacier

Taku Inlet

Taku Point

Taku River

Norris Glacier

Names approved

9-3-54

A.J.W.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11097

1. Projection and grids H.R.R. 2. Title H.R.R. 3. Manuscript numbers H.R.R. 4. Manuscript size H.R.R.

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy H.R.R. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) H.R.R. 7. Photo hydro stations H.R.R. 8. Bench marks _____
9. Plotting of sextant fixes None 10. Photogrammetric plot report H.R.R. 11. Detail points H.R.R.

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline H.R.R. 13. Low-water line H.R.R. 14. Rocks, shoals, etc. H.R.R. 15. Bridges None 16. Aids to navigation None 17. Landmarks H.R.R. 18. Other alongshore physical features H.R.R. 19. Other along-shore cultural features H.R.R.

PHYSICAL FEATURES

20. Water features H.R.R. 21. Natural ground cover H.R.R. 22. ~~Planetable contours~~ _____ 23. ~~Stereoscopic instrument contours~~ _____ 24. ~~Contours in general~~ _____ 25. ~~Spot elevations~~ _____ 26. Other physical features H.R.R.

CULTURAL FEATURES

27. Roads None 28. Buildings H.R.R. 29. Railroads None 30. Other cultural features H.R.R.

BOUNDARIES

31. Boundary lines _____ 32. Public land lines _____

MISCELLANEOUS

33. Geographic names H.R.R. 34. Junctions H.R.R. 35. Legibility of the manuscript H.R.R. 36. Discrepancy overlay None 37. Descriptive Report H.R.R. 38. Field inspection photographs H.R.R. 39. Forms H.R.R.
40. Harry R. Rudolph Joseph Steinberg
Reviewer Supervisor, Review Section or 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:

REVIEW REPORT T-11097
Shoreline Map
3 September 1954

62. Comparison with Registered Surveys:

T-6576	1:10,000	1937	Taku Inlet (west shore)
T-6577	1:10,000	1937	Taku Point, Swede Point (East shore of Taku Inlet)
T-6578	1:10,000	1937	Davidson Creek to Taku Point
T-7088	1:10,000	1952	Taku Inlet, Taku Glacier

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)
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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
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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:

Lena T. Stevens
Lena T. Stevens

Approved by:

A. C. Landy
Chief, Review Section

May Skellett
Chief, Nautical Charts Division

B. J. Bruce
Chief, Div. of Photogrammetry

J. D. Howell
Chief, Division of Coastal
Surveys