

11102

Diag. Cht. No. 8201.& 8152-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photogrammetric Shoreline

Field No. Ph-87 Office No. T-11102

LOCALITY

State Alaska

General locality Tuxekan Passage

Locality Staney Island

1948-53

CHIEF OF PARTY

R.A.Gilmore, Chief of Field Party

J.C.Sammons, Baltimore Photo. Office

LIBRARY & ARCHIVES

DATE July 21, 1959

8-1870-1 (1)

11102

DATA RECORD

T - 11102

Project No. (I): **Ph-87**

Quadrangle Name (IV):

Field Office (II): **Seattle, Washington**

Chief of Party: **Ross A. Gilmore**

Photogrammetric Office (III): **Baltimore, Md.**

Officer-in-Charge: **Jack C. Sammons**

Instructions dated (II) (III):
11 June 1952
24 Dec. 1952
8 Jan. 1953
28 Oct. 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**

MAR 13 1952

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

17 Feb 1958

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N.A. 1927**

Vertical Datum (III): **MHW**

Mean sea level except as follows:
 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): **LESTER, 1952**

Lat.: **55° 49' 18.983" (587.1m.)**

Long.: **133° 12' 55.890" (973.1m.)**

~~Unadjusted~~
 Unadjusted

Plane Coordinates (IV):

State: **Alaska**

Zone: **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.

Not applicable

Areas contoured by various personnel
 (Show name within area)
 (II) (III)

DATA RECORD

Field Inspection by (II): Ross A. Gilmore
ym. O. Barbee

Date: *8* August ^{*90ct.*} 1952
27 June - 15 July, 1953

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): June - August 1948
Field and office identification

Projection and Grids ruled by (IV): Jack Allen

Date: 1/9/53

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

Date: 1/15/53

Control plotted by (III): H. R. Rudolph

Date: 1/30/53

Control checked by (III): A. Queen

Date: 2/2/53

Radial Plot or Stereoscopic H. R. Rudolph
Control extension by (III):

Date: 2/11/53

Planimetry
Stereoscopic Instrument compilation (III):
Contours

Date:

Date:

Manuscript delineated by (III): Ruth M. Whitson

Date: 3/9/53
revision 25 Jan. 1954

Photogrammetric Office Review by (III): R. Glaser

Date: 3/11/53

Elevations on Manuscript
checked by (II) (III):

Date:

Camera (kind or source) (III): U. S. Navy single lens.

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
		Time			
SEA 15-029 & 15-030	6/8/48	Not available		1:10,000	Not available
SEA 22-040 & 22-041	6/9/48	"		"	"
SEA 101-195	9/14/48	"		"	"
SEA 103-037 & 103-038	8/8/48	"		"	"

Tide (III)
From Predicted Tables

Reference Station: SITKA

Subordinate Station: Karheen, Sea Otter Sound

Subordinate Station:

Diurnal		
Ratio of Ranges	Mean Range	Spring Range
	7.7	9.9
1.1	8.4	10.6

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

Date: 6 April 1954

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III): 20 Mi.

Shoreline (Less than 200 meters to opposite shore) (III): 8 Mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): *

Recovered:

Identified:

Number of BMs searched for (II): None

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): None

Number of Temporary Photo Hydro Stations established (III): 6

Remarks:

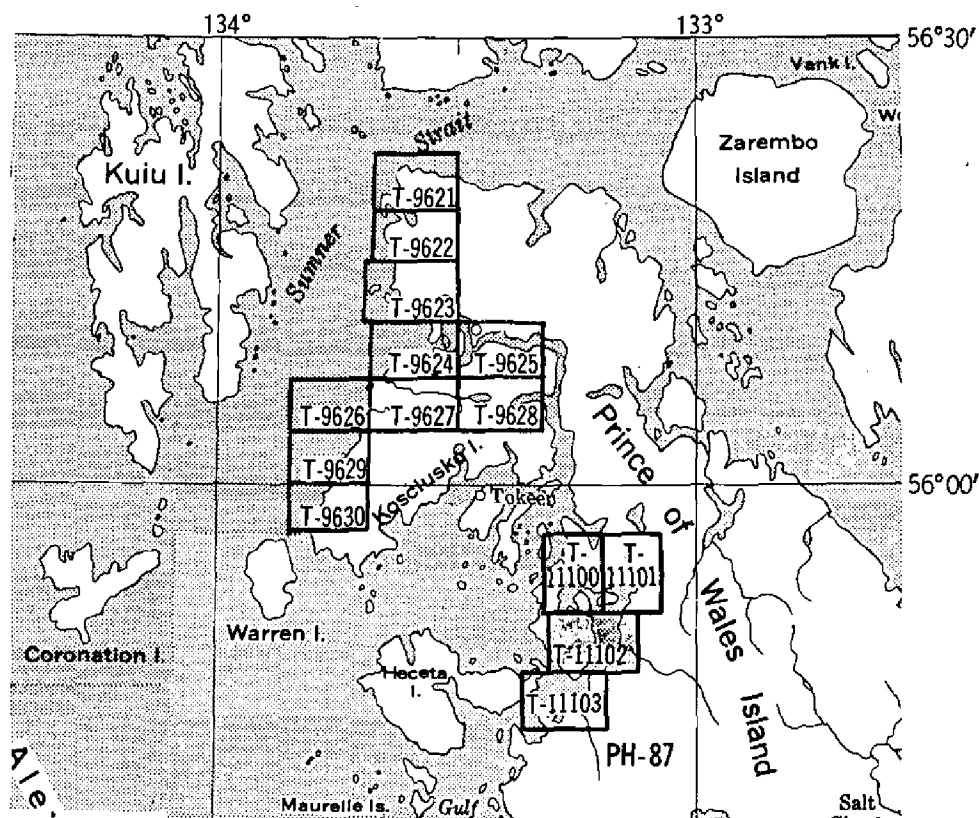
* Stations

Established 1952: 13

Identified: 10

SHORELINE MAPPING PROJECT PH-87

Tuxekan Passage & Sumner Strait, ALASKA



PH-87 OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET NO.	AREA SQ. MILES	LIN. MILES
		SHORELINE
T-11100	32	32
T-11101	9	9
T-11102	18	18
T-11103	16	16
T-9621	12	12
T-9622	16	16
T-9623	15	15
T-9624	17	17
T-9625	21	21
T-9626	4	4
T-9627	15	15
T-9628	14	14
T-9629	5	5
T-9630	7	7
TOTALS	201	201

Summary to Accompany T-11102

Shoreline project Ph-87 has two parts: T-9621 (Pt. Baker) to T-9630 (Cape Pole) at the north end of Prince of Wales Island and the south-west tip of Kosciusko Island, respectively; and T-11100 to T-11103, covering Tuxekan Passage. The project carries out the photogrammetric phase of Coastal Surveys project CS-347 for which instructions were issued 11 June 1952 and 3 June 1953.

Field inspection was made in 1952 and included establishment of control; delineation of shoreline, rocks, and shoals on 1:20,000 photographs; and descriptive notes for along-shore features. In 1953 additional inspection was accomplished. This information was added to the previously delineated manuscript.

T-11102 includes that part of Tuxekan Passage included between $55^{\circ} 47\frac{1}{2}'$ and $55^{\circ} 51'$, the Stoney Island, Stoney Creek area.

MAP T. 11102 PROJECT NO. Ph-87 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR κ -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)	
KRAUSE, 1952	Field Comp. Unadj.	N.A. 1927	55	50	54.013		1670.5	(185.2)	
			133	13	12.287		213.8	(830.2)	
NAUKATI, 1952	"	"	55	50	25.029		774.1	(1081.6)	
			133	10	15.261		265.6	(778.6)	
LESTER, 1952	"	"	55	49	18.983		587.1	(1268.6)	
			133	12	55.890		973.1	(71.6)	
AWASH, 1952	"	"	55	48	58.046		1795.3	(60.4)	
			133	11	11.639		202.7	(842.2)	
CLIP, 1952	"	"	55	48	32.408		1002.3	(853.4)	
			133	13	50.125		873.1	(172.0)	
LYLE, 1952	"	"	55	48	09.416		291.2	(1564.5)	
			133	11	39.991		696.6	(348.6)	
BRUCE, 1952	"	"	55	48	02.202		68.1	(1787.6)	
			133	13	49.159		856.4	(188.9)	
CEDAR, 1952	"	"	55	47	39.349		1217.0	(638.7)	
			133	12	30.526		531.9	(513.6)	
CREEK, 1952	"	"	55	49	32.041		991.0	(864.7)	
			133	09	57.007		992.5	(52.1)	
JIGS, 1952	"	"	55	49	26.525		820.4	(1035.3)	
			133	12	52.167		908.2	(136.4)	
BROWN, 1952	"	"	55	50	18.942		585.8	(1269.8)	1
			133	13	06.591		114.7	(929.5)	00

1 FT. = 3048006 METER

COMPUTED BY: J. C. Cragan

DATE: 26 January 1953

CHECKED BY: E. L. Williams

DATE: 29 January 1953

M. 2388.12

M-2388-12

COMPILATION REPORT
T-11102

Field Inspection Report:

The field inspection report for this survey is covered by the 1952 season report for Tuxekan Passage, Southeast Alaska, Project CS-347, which has been submitted as part of the Descriptive Report for T-11103, Ph-87.

MS revised Jan. 1954 by use of 1953 FI data per item 61 of Review

Photogrammetric Plot Report:

The Photogrammetric Plot Report covering the area of this survey has been submitted with the Descriptive Report for Survey T-11103.

31. DELINEATION

This manuscript was compiled by graphic methods.

The navy photographs furnished for this project were not very satisfactory as regards definition of detail. This may be partly due to the ratio of enlargement. Where there was no definite field data indicating rock ledge alongshore, it was difficult to distinguish this feature from sand, boulders and gravel.

Field information at 1:20,000 scale was transferred to office photographs at 1:10,000 scale by use of the projector in preparation for delineation. Field information was also transferred from office photograph to office photograph stereoscopically to avoid use of tilted or distorted photographs.

Due to inadequate photo coverage, the character of the alongshore features to the north and to the south of control station CLIP, 1952 cannot be determined, and is incomplete.

The shoreline of Karheen Passage in the SW corner of this survey was not delineated because of weakness in the radial plot. Refer to paragraph 23 of the Photogrammetric Plot Report.

32. CONTROL

The density and placement of horizontal control was adequate but identification was doubtful at some stations. Refer to Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours:
Inapplicable

Drainage:
No comment.

35. SHORELINE AND ALONGSHORE DETAIL

The shoreline inspection was adequate.

Delineation of low water, shallow areas, shoal and reef lines, ledge features and rocks awash, is based on data furnished by the field party supplemented by office interpretation.

36. OFFSHORE DETAILS

Six (6) sextant fixes were plotted on rocks awash, shoal areas and ledges in the area of Staney Island. They agreed closely with the positions of the features on the low water photographs.

Numerous reef and ledge areas were delineated from office interpretation.

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

Six (6) photo-hydro stations were located.

A list of the photo-hydro stations has been prepared and are included in paragraph 49.

39. JUNCTIONS

Junctions to the north with Surveys No. T-11100 and T-11101, and to the south with Survey No. T-11103 are in agreement.

There are no contemporary Surveys to the east and west.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. through 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

None were available at the compilation office.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart No. 8171, scale 1:40,000, published June 1947; and corrected to August 4, 1952.

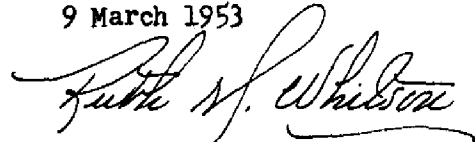
Items to be applied to nautical charts immediately:

None

Items to be carried forward:


None

Respectfully submitted
9 March 1953



Ruth M. Whitson
Cartographic Photo Aid

Approved and forwarded



Jack C. Sammons,
Capt. U.S.C. & G. S.
Officer in Charge

48. GEOGRAPHIC NAME LIST

Prince of Wales Island

*Staney Creek

Staney Island

Tuxekan Island

Tuxekan Passage

* Name used by the Fish and Wildlife, and Forestry Services and recommended by the field party for charting.

New names from project names report

Ahtun Point

Nunde'i Cove

Yahku Cove

Kugun Point

Kleit Islands

Chusini Cove

Kladen Flats

Kussan Point

Surtu Cove

Nichin Cove

misspelled
on sheet Jan 2/20/63

Names approved
4-6-54. L. Heck

49. NOTES TO HYDROGRAPHER

The compilation office was not able to satisfactorily complete the classification of the foreshore. If possible, the hydrographic party should verify the delineation of rock ledge, sand, gravel, mud, etc.

The following is a list of Photo-hydro Stations:

- No. 003 - Outermost of three (3) trees on projecting point.
- No. 004 - Two (2) moss covered trees on grassy flat.
- No. 005 - Tallest of two (2) trees on islet.
- No. 006 - NW'ly tree on outer corner of semi-detached islet.
- No. 007 - Easternmost tree of group (there are taller trees slightly detached from station tree).
- No. 008 - Outermost tree on corner point (slightly detached from other trees).

NOTES TO REVIEWER
Project Ph-87

See Report No. T-11103.

- Res coordinates

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11602

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

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours none 23. Stereoscopic instrument contours none 24. Contours in general none 25. Spot elevations none 26. Other physical features none

CULTURAL FEATURES

27. Roads none 28. Buildings ☒ 29. Railroads none 30. Other cultural features none

BOUNDARIES

31. Boundary lines none 32. Public land lines none

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay none 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒

40. _____
Reviewer C. Glavin
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:

Shoals & ledges T-11102 FI photo 101-195 1:20,000

#1. Shoal 18 ft depth @ 0845 9-5-'52 (Kelp covers this)

Approx Fix: Δ Clip 36° 45'

Jigs ck & Lester-Jigs 12° 15'

Brown 58° 38'

#2. Rk. Rm. (Unconv. 5 ft @ 0900 9-5-'52) \rightarrow (4)

#3 Shoal 10 ft depth @ 0900 9-5-'52 (Kelp covers this)

Approx Fix: Δ Clip 20° 55'

Jigs ck & Lester-Jigs 06° 35'

Brown 54° 30'

#4 Rk. Rm. (Unconv. $\frac{1}{2}$ ft @ 0910 9-5-'52 \rightarrow Rm. HLLW)

Fix: Δ Jigs 46° 46'

Brown ck & Naukati-Creek 65° 20'

Naukati 99° 16'

#5 Rk. Rm. (reel Unconv. 3 ft. @ 0930 9-5-'52) \rightarrow (3)

Fix Δ Brown 122° 01'

Naukati ck & Jigs-Brown 43° 15'

Creek 81° 40'

#6 Rock unconv. 5 ft @ 0942 9-5-'52 \rightarrow (6)

Δ Brown 96° 50'

Naukati

Creek 96° 24'

(Above angles were taken during storm with poor visibility and may be slightly in error. Most shoal spots are visible on photo and fixes were taken to corroborate them. R.A.G.)

REVISION REPORT
T-11102
Project Fh-87

Revisions were made in accordance with para. 2 and 4 of Project Instructions dated 28 October 1953.

Refer to item 49 of the Compilation Report and para. 2 of the 1953 Field Inspection Report which is part of the Descriptive Report for Survey T-11100.

The shoreline changes, shown in red on the manuscript, were taken from Graphic Control Sheet FA-B-53.

The foreshore changes were obtained from 1953 Field Inspection and inked in red on the manuscript.

*See item 61
of previous report*

Respectfully submitted
25 January 1954

Frank J. Tarcza,
Super. Carto. (Photo)

Approved and Forwarded

E. H. Kirsch,
Comdr. USC&GS
Officer in Charge

Review Report
Shoreline Map T-11102
6 April 1954

61. General

This map manuscript was originally compiled by the aid of 1952 field inspection notes on 1948 photographs. In 1953 additional field inspection was carried out, and the map manuscript was revised to include the newer information on the photographs and on planetable survey PA-B-53.

62. Comparison with Registered Topographic Surveys

T-2692 1:20,000, 1904, with contours. Datum not recorded. Sea Otter Island, Tuxekan Passage.

Except for position the older survey is in good general agreement with T-11102 for shoreline, islets, and rocks. Because the present survey is delineated from new detailed field inspection and is supplemented by contemporary hydrographic surveys T-11102 supersedes the older survey, except for contours, for charting purposes.

63. Comparison with Maps of other Agencies:

USGS CRAIG (d-4) 1:63,360, 1951

This quadrangle was compiled by multiplex from the 1948 photographs, probably without benefit to field inspection. Differences in scale prevent more than a general agreement in shoreline detail. Hydrographic data are from C. & G. S. charts.

64. Comparison with Contemporary Hydrographic Surveys

H-8036 1:10,000, 1953 (PA-1153)
H-8037 1:10,000, 1953 (PA-1253)

These surveys are not available for comparison.

65. Comparison with Nautical Charts

8171 1:40,000 June 1947, Rev. Aug. 1952

Tuxekan Passage has not been fully charted. The present survey, together with the hydrographic surveys supersedes the charts for shoreline and offshore features in Tuxekan Passage.

66. Accuracy

T-11102 Conforms to project instructions and meets
the National Standards of Map Accuracy.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

Approved by:

H. C. Lande
Chief, Review Section
Division of Photogrammetry

Max B. Kelleys
Chief, Nautical Chart Branch
Division of Charts

Lee Swanson
Chief, Div. of Photogrammetry

15 July '59

J. B. Skell
Chief, Div. of Coastal
Surveys

NAUTICAL CHARTS BRANCH

Record of Application to Charts

[illegible]

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.