

9339

Diag. Cht. No. 8252-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE

Field No. PH-19(19) Office No. T-9339

LOCALITY

State SOUTHEASTERN ALASKA

General locality SITKA SOUND

Locality REDOUT LAKE

1946

CHIEF OF PARTY

L.C.Lande, Chief, Graphic Compilation Section
K.G.Crosby, Div. of Photogrammetry, Wash.D.C.

LIBRARY & ARCHIVES

DATE OCT 7 - 1951

9339

DATA RECORD

T-9339

Project No. (II): Ph-49(49) Quadrangle Name (IV):

Field Office (II):

Chief of Party: Kenneth G. Grosby

Photogrammetric Office (III): Washington, D.C.

Officer-in-Charge: L. C. Lande, Chief,
Graphic Compilation Section

Instructions dated (II) (III): 13 June 1945

Copy filed in Division of

Supplemental Instructions CS-247-
Photogrammetric Field Work

Photogrammetry (IV) —
Office Files

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): 2-16-50 Date reported to Nautical Chart Branch (IV): 2-24-50

Applied to Chart No.

Date:

Date registered (IV): 9-12-51

Publication Scale (IV): —

Publication date (IV): —

Geographic Datum (III): N.A. 1927

Vertical Datum (III): M.H.W.

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (g) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): ILPUT, 1943

Lat.: 56°54'22.569" (698.1) Long.: 135°21'51.817" (877.0)

Adjusted

~~Unadjusted~~

Plane Coordinates (IV):

State:

Zone:

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): K. G. Crosby

Date: Sept. Oct.
1945 1946

Planetable contouring by (II): _____

Date:

Completion Surveys by (II): _____

Date:

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

- (1) MHW line shown on 1942 nine-lens photographs field inspected in 1945.
- (2) Graphic control surveys (see compilation report).

Projection and Grids ruled by (IV): W. E. Ward

Date: 1949

Projection and Grids checked by (IV): W. E. Ward

Date: 1949

Control plotted by (III): S. G. Blankenbaker

Date: Dec. 1949

Control checked by (III): R. W. Williams

Date: Dec. 1949

Radial Plot ~~or Stereoscope~~ S. G. Blankenbaker
~~Control extension by~~ (III):

Date: Jan. 1950

Stereoscopic Instrument compilation (III):
Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): S. G. Blankenbaker

Date: Jan. 1950

Photogrammetric Office Review by (III): G. B. Willey

Date: Apr. 1950

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

Date:

Camera (kind or source) (III):

Number	Date	Time	Scale	Stage of Tide
09387-09391	7/8/42	9:08-9:10	1:10,000	
09397-09402	"	9:17-9:20	"	
09405-09409	"	9:25-9:27	"	
09433-09431	"	10:09-10:11	"	
09441-09439	"	10:16-10:17	"	
10532	7/31/42	2:22	"	
10531	"	2:22	"	

Tide (III)

Reference Station: SITKA
Subordinate Station:
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	7.7	

Washington Office Review by (IV): G. B. Willey

Date: 28 Apr. 1950

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV): C. Kupiec

Date: 1-22-51

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):

Number of Triangulation Stations searched for (II):

Recovered:

Identified:

Number of BMs searched for (II):

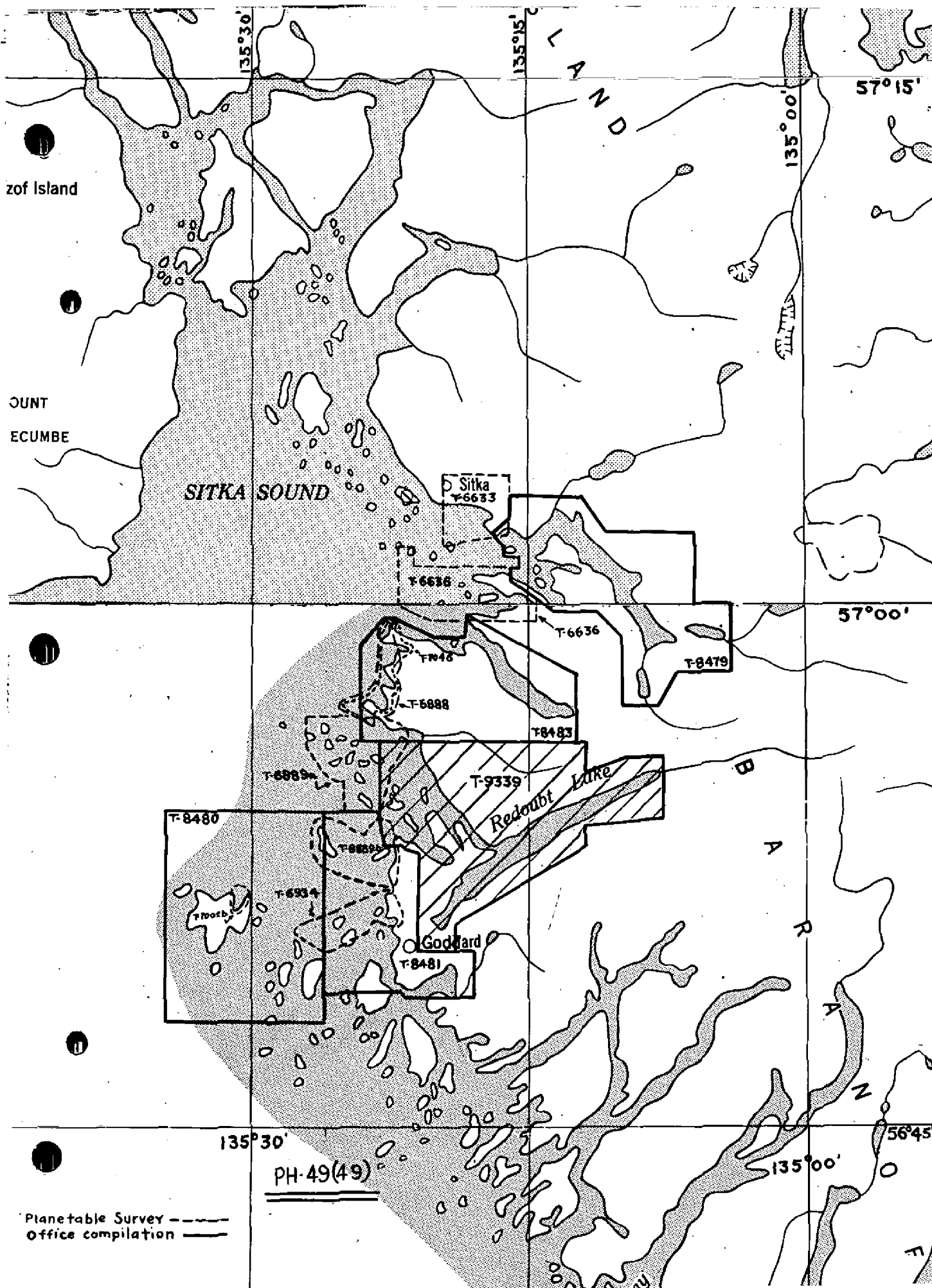
Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:



Summary to Accompany T-9339

Data pertaining to T-9339 is filed as follows:

A. Division of Photogrammetry General Files.

1. Acetate manuscript
2. Duplicate of the Descriptive Report

B. Bureau Archives

1. A cloth-backed lithographic print of the revised map at the compilation scale.
2. Registered original Descriptive Report.

FIELD INSPECTION

Field inspection covering T-9339 is contained in
the ¹⁹⁴⁶ "Field Inspection Report, Sitka Sound - Southeastern
Alaska, Project CS-247" by Kenneth G. Crosby. This
report is filed in the general files of the Division of
Photogrammetry.

Radial Plot Report

T-9339

21. Area Covered:

This radial plot was completed in order to compile shoreline manuscript T-9339. T-9339 supersedes^a section of shoreline manuscript T-8481 ~~and T-8483~~ in the Kanga and Redoubt Bay Areas and completes the compilation of Redoubt Lake.*

22. Method:

Twenty-three acetate templates were made from nine-lens photographs taken in 1942 at an approximate scale of 1:10,000. No master calibration template was available for this series of photographs. Difficulty was experienced in preparing the photographs. High mountains surround Redoubt Lake and cover the area east of Redoubt Bay. The entire area is heavily wooded and consequently overhang and shadows prevented seeing sections of the shoreline.

23. Adequacy of Control:

The horizontal control was adequate in the Kanga Bay and Redoubt Bay Areas. There are no control stations on Redoubt Lake. The plot was bridged and tied to control stations and pass points in the Deep Inlet Area of shoreline manuscript T-8483. The plot was also tied to a photo center (10531) and pass points south of Silver Bay on shoreline manuscript T-8479.

Seventeen of the field identified triangulation stations that fall on T-9339 were held in the plot. In addition numerous field identified triangulation stations that fall on shoreline manuscripts T-8481 and T-8483 and pass points established by the radial plot for T-8483 were held in this radial plot.

Six field identified triangulation stations that fall on T-9339 were not held in the plot.

(1) Triangulation Station Kanga, 1943 was held within .7 mm. The station is listed as being of doubtful accuracy on the pricking card. The area is covered by shadow.

(2) Triangulation Station Gold, 1943 was held within .8 mm. The station is listed as being of doubtful accuracy on the pricking card. The area is covered by shadow and overhanging trees.

(3) Triangulation Station Bald, 1943, was held within .7 mm. The pricking is listed as being of positive accuracy on the pricking card. The station is on a rocky ledge extending into the water and falls outside the shoreline detail shown on this sheet.

(4) Triangulation Station Center, 1943, was held within .8 mm of its geographic position. The pricking is listed as being of positive accuracy on the pricking card. The ^{vec}tri-angulation stations close to Station Center were held in the plot.

(5) Triangulation Station Gator, 1945, was held within 1.0 mm of its geographic position. The pricking is listed as being of positive accuracy on the pricking card. However, there is a heavy shadow in the area. Three stations in the vicinity were held.

(6) Triangulation Station Kodon, 1945, was held within .8 mm of its plotted position. Its pricking is listed as being of doubtful accuracy on the pricking card.

24. Supplemental Data:

(1) Graphic Control Board <sup>Not registered
destroyed 2/1/51 - G.M.J. - S. C. hydro</sup> T-7002a was used as supplemental control for the radial plot. Numerous signals were identified on the field photographs. No recovery cards were submitted and the only data consisted of the "W.W." notations on the field photographs. Stations Art, Van, Caw, Cob, Rot and Pep were held in the plot. The planetable shoreline agrees with the field photograph and radial plot interpretation in most instances and has been shown on T-9339 in red where the two surveys are in agreement. The shoreline as interpreted from the radial plot and field photographs was applied in black where the two surveys differed.

In the eastern inlet (one of two inlets at the head of Redoubt Bay) the Graphic Control Survey shoreline does not agree with the shoreline shown on T-9339. There are no triangulation stations in the inlet. An attempt was made to hold Topographic Stations Pie, Yet, and Dix and they were held within approximately .7 mm. The three stations are off in the same direction, however they could not be held and hold to triangulation stations positions which were not in the immediate vicinity, but were close enough to be considered of more value to the radial plot.

(2) Graphic Control Board T-6889b: The area around and directly south and west of Triangulation Station Kan, 1942, does not agree with the interpretation shown on T-9339. High water photographs and field inspection data seem to give a better interpretation.

Radial Plot Report
T-9339
Page 3

(3) Graphic Control Board T-6889a: The detail in the area around Round Island, Triangulation Stations Bolt, 1942, Pipe, 1942, and Bolt, 1942, was transferred from the graphic control board to T-9339, *and is shown in red ink.*

In general the plot was good in the heavily controlled Kanga Bay and Redoubt Bay areas. Few good pass point intersections were obtained in the high mountainous areas. Difficulty was experienced in bridging the plot to tie to the radial plot for T-8433 and T-8479.

*Submitted by
D. G. Blankenbaker*

*Approved by
H. C. Landy*

IDENTIFICATION DATA
Horizontal Control
Project Ph-49(49)

*Ratings as given on pricking data

Recovery Photo	Recovery Date	Pricking Source	Data* Remarks	Accuracy Tolerance
PIPE, 1942 09397		Pricked Direct		Held
BOLT, 1942 09391		Pricked Direct		Held
ROAD, 1942 09391	9-25-45	Pricked Direct	Sketch	Held
DEEP, 1942 09391	9-25-45	Pricked Direct	Doubtful	
		Card	Positive	Held
ROUND, 1942 09391	9-24-45	Pricked Direct	Sketch	Held
		Card	Positive	
VIXEN, 1945 09398	10-17-45	Pricked Direct	Positive	Held
		Card		
SHOAF, 1942 09391		Pricked Direct		Held
ILPUT, 1942 09391		Pricked Direct		Held
KAN, 1942 09390	9-20-45	Card	Sketch	Held
			Positive	
KANGA, 1943 09390	9-21-45	Card	Sketch	
			Doubtful	.7 mm
GOLD, 1943 09390	9-19-45	Pricked Direct	Doubtful	.8 mm
BALD, 1943 09379	10-2-46	Pricked Direct		
		Card	Sketch	.7 mm
FAN, 1943 09398		Pricked Direct	Positive	
NOVOI, 1943 09399	9-20-45	Card	Sketch	Held
			Positive	Held
CENTER, 1943 09389	9-20-45	Card	Sketch	.8 mm
			Positive	
GULL, 1943 09389	9-19-45	Card	Sketch	Held
			Positive	
EAGLE, 1943 09388	9-19-45	Card	Sketch	Held
			Positive	
HEAD, 1943 09389	9-19-45	Card	"	Held
JOIN, 1943 09388	9-19-45	Card	"	Held
GATOR, 1945 09398	10-17-45	Card	Positive	1.0 mm
		Pricked Direct		
CABIN, 1945 09399	10-17-45	"	Positive	
INLET, 1945 09400	10-17-45	"	Positive	Held
KODON, 1945 09400	10-17-45	Card	Sketch	.8 mm
			Doubtful	

Station pricked on
1 photo

Area covered by shadow
Shadows - overhanging
trees

Shadows on photos.

MAP T. 03339

PROJECT NO. Ph-49(49)

SCALE OF MAP 1:10,000

SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE	N.A. 1927 DATUM -DISTANCE FROM GRID IN FEET- OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		Sheet 1 of 3 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
VIXEN, 1945	855	1927	56° 54' 43.978	1360.4	1495.60					
			135° 20' 46.338	784.1	231.17					
CHUCK, 1945	855	1927	56 55 13.030	403.1	1152.92					
			135 20 15.488	262.0	753.00					
GATOR, 1945	855	1927	56 54 31.554	976.1	879.92					
			135 19 42.561	720.3	295.12					
CABIN, 1945	855	1927	56 54 15.531	480.4	1375.55					
			135 20 10.530	178.2	837.27					
INLET, 1945	855	1927	56 53 55.032	1702.3	153.67					
			135 19 35.309	597.7	117.96					
KODON, 1945	855	1927	56 54 11.415	353.1	1502.87					
			135 18 49.609	839.6	175.87					
DRAN, 1942	821	1927	56 54 49.02	1516.3	339.6					
			135 17 37.15	628.6	386.6					
KOF, 1943	821	1927	56 54 27.81	860.2	995.7					
			135 17 04.02	68.0	947.3					
MT. DRANISH, 1943	821	1927	56 54 01.74	53.8	1802.2					
			135 17 02.26	38.3	977.4					
* CAMEL, 1924 (Elev. 1499 ft.)	811	1927	56 52 16.353	505.8	1350.2					
			135 20 49.067	831.2	185.2					
BALD, 1943	818	1927	56 52 38.959	1205.1	650.86					
			135 22 54.939	930.5	85.72					
GOLD, 1943	818	1927	56 53 25.853	799.7	1056.26					
			135 21 45.526	770.8	215.07					

1 FT. = 3048006 METER
COMPUTED BY S.G.B.

DATE November 1949

Plotting ckd. by R.W.W.
CHECKED BY:

DATE

M-2388-12

MAP T-9339

PROJECT NO. Ph-49(49)

SCALE OF MAP 1:10,000

SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE LONGITUDE OR x -COORDINATE	N.A. 1927 DATUM DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
KANGA, 1943	818	1927	56 53 52.393	1620.7	235.30				Sheet 2 of 3
			135 21 56.434	955.3	60.36				
FAN, 1943	818	1927	56 54 34.603	1070.4	785.60				
			135 21 06.886	116.5	898.84				
KUDA, 1943	818	1927	56 54 00.461	14.3	1811.71				
			135 20 50.044	847.1	168.52				
NOVOI, 1943	818	1927	56 53 57.423	1776.3	79.71				
			135 21 20.764	351.5	661.14				
ILPUT, 1943	819	1927	56 54 22.569	698.1	1157.85				
			135 21 51.817	877.0	138.48				
CENTER, 1943	819	1927	56 53 19.640	607.5	1248.45				
			135 20 49.323	835.1	180.78				
GULL, 1943	819	1927	56 53 15.958	493.6	1362.35				
			135 20 28.450	481.7	534.23				
EAGLE, 1943	819	1927	56 53 00.982	30.4	1825.60				
			135 20 42.455	719.0	297.12				
JOIN, 1943	819	1927	56 53 05.179	160.2	1695.78				
			135 19 55.723	943.6	72.42				
HEAD, 1943	819	1927	56 52 42.419	1312.1	543.83				
			135 19 16.008	271.1	745.13				
SHOAF, 1942	815	1927	56 54 14.846	459.2	1396.75				
			135 22 59.216	1002.2	13.26				
DEEP, 1942	814	1927	56 54 57.661	1783.6	72.35				
			135 22 42.812	724.3	290.80				

1 FT. = 3048006 METERS
COMPUTED BY: S.G.B.

DATE November 1949

Plotting ckd. by R.W.W.
CHECKED BY:

DATE

M-2368-12

[illegible]

Compilation Report T-9339

31. Delineation:

The graphic method was used in compiling the manuscript. There was no field inspection in Redoubt Lake. Sections of the shoreline were covered by heavy shadows and other areas were covered by overhanging trees. The shoreline inspection in the Kanga Bay and Redoubt Bay areas was complete. However, heavy shadows covered sections of the shoreline on all photographs.

32. Control:

The control was adequate in regard to density, placement and identification in the Kanga Bay and Redoubt Bay areas. There is no control on Redoubt Lake.

33. Supplemental Data: Graphic Control Boards T-~~7002a~~^{Not registered}, T-6889b and T-6889a were used to supplement the photographs. ^{see Hydro. G.F.J.} Shoreline has been transferred from these boards in some instances and shown in red on the manuscript. See paragraph 24, Supplemental Data, in the radial plot report.

34. Contours and Drainage: Not applicable.

35. Shoreline and Alongshore Details:

The shoreline inspection was adequate except in Redoubt Bay.

The low water and shoal lines were based principally on field inspected photographs and planetable board interpretations. Office interpretation was used in some instances.

36. Offshore Details:

Offshore details were shown on graphic control boards or were shown on field inspected photographs.

37. Landmarks and Aids: Not applicable.

38. Control for Future Surveys: Not applicable.

39. Junctions:

(1) T-8481 - junction agrees, (2) T-8483 - junction agrees, (3) T-8482: The area of T-8482 that overlaps T-9339 has been superseded by this manuscript. The area of T-8482 to the north and west of this manuscript has been superseded by T-8483 and planetable board T-6889a.

40. Horizontal and Vertical Accuracy:

The western section of the manuscript in the Kanga and Redoubt Bay area is believed to be of standard map accuracy. Although the plot was bridged ~~and~~ tied to the control on T-8483 in Deep Inlet and secondary radial plot control on T-8479, the radial plot position of the Redoubt Lake shoreline may be out up to approximately 3 mm due to lack of control in this area.

46. Comparison with Existing Maps: Not applicable.

47. Comparison with Nautical Charts:

Chart No. 8255. Published in 1943, revised 1945, 40/7.

Items to be Applied to Nautical Charts:

Only a small section of Redoubt Lake is shown on Nautical Chart 8255. There is an apparent difference in geographic position between T-9339 and Nautical Chart 8255 in the Kanga Bay and Redoubt Bay area.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9339

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) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒
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 ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒40. SP Willey
ReviewerLC Rande
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-9339
Shoreline Map
28 April 1950

61. General Statement.-Shoreline map T-9339 covers the area of Sitka Sound-Redoubt Lake, southeastern Alaska, from latitude 56°51' to 56°56' and longitude 135°08' to 135°23'. This shoreline map was compiled to furnish shoreline for nautical charts.

62. Comparison with Registered Topographic Surveys.-

T-6889a	1:10,000	1942-43
6889b	"	1942
70022 See hydro.	"	1945

Refer to paragraph 24, Supplemental Data, in the radial plot report. *T-9339 supersedes these surveys for nautical charting purposes.*

63. Comparison with Maps of other Agencies.- None

64. Comparison with Contemporary Hydrographic Surveys.-

H-6948	1:10,000	1942-43
7096	"	1945

No discrepancies were noted between T-9339 and these surveys.

65. Comparison with Nautical Charts.-

8255 1:40,000 5th ed. Corr. 8-2-48

66. Adequacy of Results and Future Surveys.-*Refer to item 47 for differences between the maps and the chart.* This map is adequate for use as a base for construction of nautical charts and meets the accuracy requirements of the Bureau for shoreline maps, except as is qualified in Item 40, of the Compilation Report "Horizontal and Vertical Accuracy".

Reviewed by:

G. B. Willey
G. B. Willey

APPROVED:

A. V. Griffiths
Chief, Review Section
Div. of Photogrammetry

H. C. Edmonston
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

W. M. Acaife
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. *T-9339*

Record of Application to Charts

[illegible]

M-2168-1

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.