9940 9941

9941

9940

Diag. Cht. No. 8863-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-34(48) Office No. T-9940 T-9941

LOCALITY

State Alaska

General locality Aleutian Islands

Locality Kanaga Island

194~~52~~-54

CHIEF OF PARTY

S.B.Grenell, Chief of Field Party
L.W.Swanson, Div. Of Photo.Office
~~Washington, D. C.~~

LIBRARY & ARCHIVES

DATE July 18, 1957

B-1870-1 (1)

DATA RECORD

T - 9940 and T-9941

Project No. (II): C.S. 218
Ph-34(48)

Quadrangle Name (IV): (T-9940) Kanaga Bay
(T-9941) Cape Chlanak

Field Office (II): Ship Explorer

Chief of Party: S. B. Grenell
Photogrammetry Division
Washington, D. C.

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

Officer-in-Charge: L. W. Swanson

Instructions dated (II) (III):
Supplemental Instructions - 19 March 1952
" " - 20 Feb. 1953
" " - 23 Dec. 1953
Compilation Instructions - 21 Sept. 1954
Director's Letter No. 22/MEK, S-1-EX. 4 May 1954

Copy filed in Division of Photogrammetry (IV)

Office Files

Method of Compilation (III): Reading plotter, Model "B"

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): 1.0

Date received in Washington Office (IV): Feb 1955 JUN 1955

Date reported to Nautical Chart Branch (IV): 6-27-55

Applied to Chart No.

Date:

Date registered (IV): AUG 23 1955

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

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):

Lat.:

Long.:

Adjusted
~~Unadjusted~~

Plane Coordinates (IV):

State:

Zone:

Y=

X=

Universal Transverse Mecator Grid
with 1000 meter interval indicated
with marginal ticks.

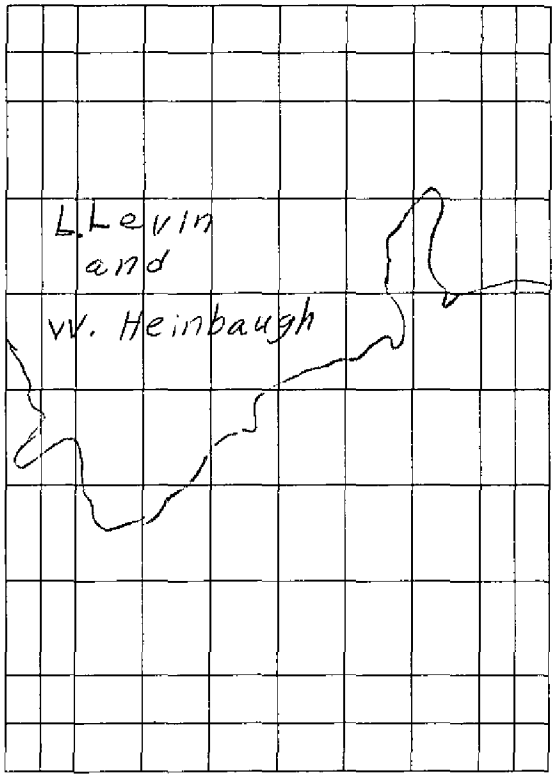
Alaska, Zone 1

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.

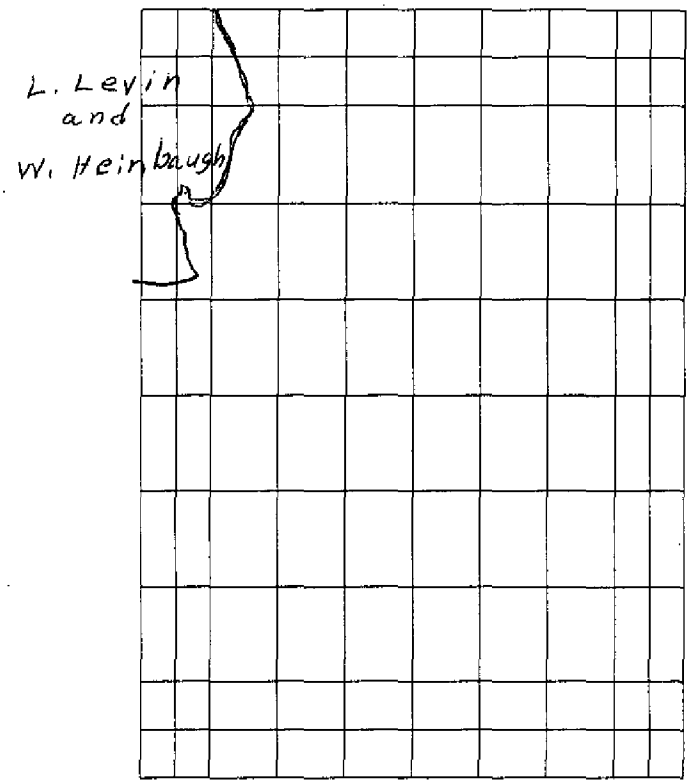
M-2618-12(4)

T-9940



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

T-9941



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

DATA RECORD

Field Inspection by (II): Shoreline inspection by C. W. Clark and H. A. Garcia — Date: 1953, 1954

Planetable contouring by (II): — Date:

Completion Surveys by (II): — Date:

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

Projection and Grids ruled by (IV): Austin Riley (T-9940), " " (T-9941) — Date: 18 Oct. 1954, 15 April 1954

Projection and Grids checked by (IV): H. D. Wolfe (T-9940), Austin Riley (T-9941) — Date: 18 Dec. 1954, 18 Dec. 1954

Control plotted by (III): C. O. DeMarr and G. Amburn — Date: October 1954

Control checked by (III): C. O. DeMarr and R. J. French — Date: October 1954

Radial Plot ~~or Stereoscopic Control extension~~ by (III): S. Blankenbaker, R. J. French — Date: November 1954

Stereoscopic Instrument compilation (III):
- Planimetry: L. Levin, W. Heinbaugh — Date: November 1954
- Contours: L. Levin, W. Heinbaugh — Date: January 1955

Manuscript delineated by (III): Shoreline - R. Sugden; Topography - R. Sugden — Date: November 1954, March 1955

Photogrammetric Office Review by (III): Orvis N. Dalbey — Date: 24 May 1955

Elevations on Manuscript checked by (II) (III): Orvis N. Dalbey — Date: 24 May 1955

Camera (kind or source) (III): U.S.C.&G.S. Nine-lens camera, Model "B"
f = 8.25 inches

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
37693 thru 37694	1 July 1952	17:31	1:20,000	-1.1 MHW
37697 thru 37699	1 July 1952	17:38	1:20,000	-1.1 MHW
38997 thru 38998	9 Sept. 1952	9:16	1:20,000	-2.0 MHW
39000 thru 39001	9 Sept. 1952	9:27	1:20,000	-2.0 MHW

Tide (III)

	Ratio of Ranges	Mean Range	Diurnal ~~Range~~ Range
Reference Station: Sweeper Cove, Adak			3.9
Subordinate Station: Hot Springs, Tanaga (West Coast)			3.1
Subordinate Station: Kanaga Bay, Kanaga (East Coast)			3.9

Washington Office Review by (IV): Date:

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): T-9940 25 sq. mi.
T-9941 4 " "

Shoreline (More than 200 meters to opposite shore) (III): (22 miles (T-9940)
(9 " (T-9941)

Shoreline (Less than 200 meters to opposite shore) (III): ----None

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II): Recovered: (T-9940 2 (T-9941 1 Identified: (T-9940 2 (T-9941 1

Number of BMs searched for (II): Recovered: (T-9940 None* (T-9941 1 Identified: (T-9940 None (T-9941 1

Number of Recoverable Photo Stations established (III): (T-9940 None (T-9941 1

Number of Temporary Photo Hydro Stations established (III): (T-9940 - 21 1954, 6 1953
(T-9941 - None

Remarks:

*None

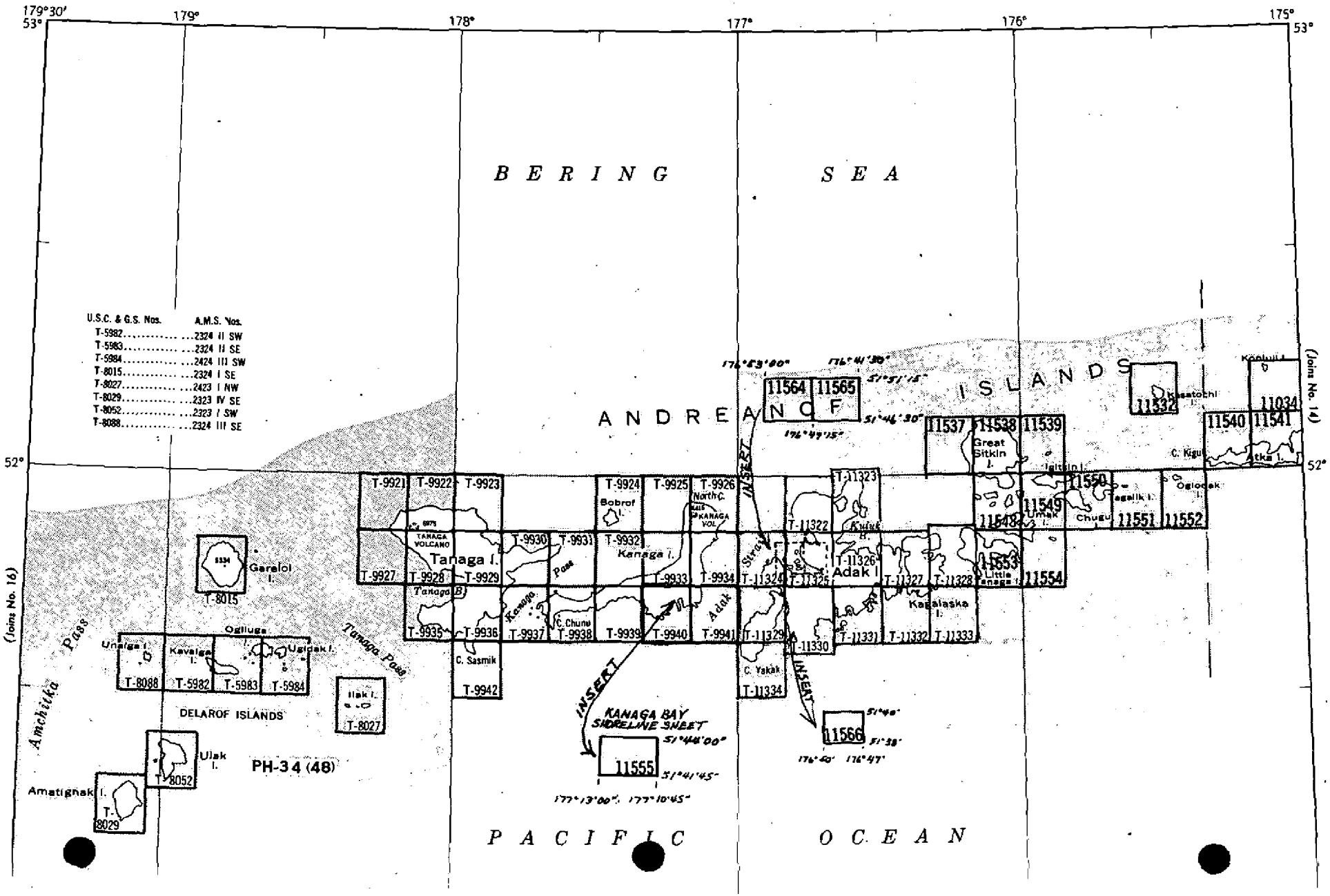
Summary to Accompany T-9940 and T-9941

T-9940 and T-9941 are two topographic surveys which cover the southeastern end of Kanaga Island. These maps were compiled on the 9-Lens Reading Plotter. Field operations preceding compilation included field inspection of shoreline and offshore rocks, recovery and establishment of horizontal control, and the determination of elevations required to control a stereo-instrument project vertically. Compilation was at the scale 1:20,000. Contours were drawn at a 50-foot interval, with a 25-foot interval supplementary contours. The maps received no field edit.

A cloth-backed lithographic print of each map at manuscript scale and the combined descriptive report will be registered and permanently filed in the Bureau Archives.

TOPOGRAPHIC MAPPING PROJECT PH-34

Aleutian Islands . ALASKA Part B



FIELD INSPECTION REPORT included in

Descriptive Report for T-9925 and T-9926.

PHOTOGRAMMETRIC PLOT REPORT included in

Descriptive Report for T-9925 and T-9926.

Photogrammetry

MAP T-9940 PROJECT NO. Ph-34 SCALE OF MAP 1:20,000 SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD	(BACK)	~~DATUM CORRECTION~~ Vol.1[1]	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
Mast 1943	Vol.V	NA	51-43-06.757				208.8	(1645.6)		
	p.183	1927	177-11-43.119				827.8	(324.1)		
Front, 1943	"p.183	"	51-42-21.144				653.5	(1200.9)		
			177-11-53.890				1034.8	(117.3)		
Rear, 1943	" p.179	"	51-42-28.870				892.3	(962.1)		
			177-12-03.690				70.9	(1081.2)		
Knob, 1943	" p.183	"	51-44-45.971				1420.8	(433.6)		
(P-020)			177-15-58.346				1119.4	(31.7)		
Cliff, 1943	" "	"	51-42-29.464				910.6	(943.8)		
(P-021)			177-14-20.880				400.9	(751.2)		
Perch 1954		"	51-43-47.787				1476.9	(377.5)		
			177-12-20.275				389.2	(762.4)		
Cog.(SW Cor.	Topo		51-43-05.505				170.1	(1684.2)		
pier) 1954			177-11-53.447				1026.1	(125.8)		

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: C.O.DeMarr DATE 26 Oct. 1954 CHECKED BY: R. J. French DATE Oct.28, 1954

Photogrammetry

MAP T- 9971 PROJECT NO. Ph-34 SCALE OF MAP 1:20,000 SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
Ran 1943	Vol.V	NA	51-44-11.076				342.3	(1512.1)		
	p.178	1927	177-08-24.384				467.9	(683.5)		
Ran 1943 sub.sta.		"	51-44-				310.2	(1544.2)		
			177-08				489.0	(662.4)		
Dam 2, 1943	" 178	"	51-42-25.053				774.3	(1080.1)		
			177-08-29.492				566.3	(585.8)		

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: C.O.DeMarr DATE Oct. 27, 1954 CHECKED BY: R.J.French DATE 10/28/54

31. DELINEATION:

See Compilation Report T-9925 and T-9926 for special methods used in the preparation of the compilation manuscript (re: grids and controls).

Shoreline, contours and interior planimetry were delineated using Reading Plotter (Model B) and rectified, metal-mounted nine-lens photographs with the exception of the shoreline of Kanaga Bay (appearing on T-9940). This shoreline was plotted by J. D. Perrow, Jr., using Kelsh Plotter (Model A) and single-lens photography. The resultant manuscript of the shoreline had a scale of 1:5000 from which a reduction print (1:20,000) was made to be used as the final shoreline delineation. See separate Compilation Report T-11555 for detailed report on this inset.

32. CONTROL:

Horizontal control and vertical control were adequate. Refer to Paragraph 23, "Radial Plot Report."

33. SUPPLEMENTAL DATA:

See 31 for details of inset T-11555.

34. CONTOURS AND DRAINAGE:

The quality of the photographs was fair and consequently no unusual difficulty was encountered in delineating the contours and drainage.

35. SHORELINE AND ALONGSHORE DETAILS:

Shoreline inspection was adequate. Some loss of detail along the shoreline was encountered as a result of surf, bluff overhang and shadows but, by constant reference to field inspection photographs during delineation, it is believed that accuracy is adequate.

36. OFFSHORE DETAILS:

Some loss of detail in the many offshore features was encountered as a result of surf, bluff overhang and shadows but, by constant reference to field inspection photographs during delineation, it is believed that accuracy is adequate.

37. LANDMARKS AND AIDS:

Not applicable.

38. CONTROL FOR FUTURE SURVEYS:

One Form 524 card is being submitted with this report.

Topographic station, STAG, 1954, identified on photograph 37697, was established in Survey T-9941.

List of recoverable topographic stations and photo-hydro stations, with descriptions of the latter, has been prepared and included in Paragraph 49.

39. JUNCTIONS:

Junction with T-9940 was made on the west by T-9939, on the north by T-9933 and on the east by T-9941.

Junction with T-9941 was made on the west by T-9940 and on the north by T-9934. No contemporary surveys exist on the east as of this date. (T-11329 is proposed.)

40. HORIZONTAL AND VERTICAL ACCURACY:

Not applicable.

46. COMPARISON WITH EXISTING MAPS:

These manuscripts were compared with the following existing maps:

ADAK (U.S.G.S.) N5115-W17 600/60X120 1:250,000 (1951)
KANAGA ISLAND (War Dept., Corps of Engineers)
N51405-W17714/7.5X10 1:25,000 (1943)
KANAGA ISLAND (War Dept., Corps of Engineers)
N5141.5-W17704/7.5X10 1:25,000 (1943)
PRELIMINARY SHORELINE MANUSCRIPT (U.S.C.&G.S.)
RS-489 1:20,000 (1953)

47. COMPARISON WITH NAUTICAL CHARTS:

The manuscripts were compared with the following charts:

U.S.C.&G.S. No. 9121 1:7500 (1947) Revised 25 Aug. 1952
U.S.C.&G.S. No. 9193 1:120,000 (1953) Revised 5 July 1954

No appreciable divergences were noted.

Items to be applied to nautical charts immediately—none.

48. GEOGRAPHIC NAME LIST:

Appended.

49. NOTES FOR THE HYDROGRAPHER:

Appended.

Respectfully submitted:

Wallace Heinbaugh
Cartographer

Approved:

Orvis N. Dalbey
Supervisory Cartographer

GEOGRAPHIC NAMES

Survey No. T-9940 and T-9941

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
T-9940										1
Aleutian Islands										2
Angora Point										3
Cape Tusik										4
Indian Point										5
Kanaga Bay										6
Kanaga Island										7
Kayak Cove										8
Memorial Point										9
Pacific Ocean										10
Point Deceit										11
Range Point										12
Swallow Point										13
Totem Rock										14
Wreck Reef										15
										16
T-9941										17
Adak Strait										18
Aleutian Islands										19
Cape Chlanak										20
False Bay										21
Kanaga Island										22
Pacific Ocean										23
										24
										25
										26
										27

Names approved 8-22-55 W.J.W.

M 234

NOTES TO THE HYDROGRAPHER

One topographic station, STAG 1954 identified on photograph 37697, was established in Survey T-9941.

The following photo-hydro stations were located:

Station	Description	Identified on Photo No.
HOP	WW	2861 37698
GUS	WW	2861 37698
FEZ	WW on SW face of higher part of rock	2861
EAR	Sign board on top of island	2862
DUB	WW on outer face of 15-ft. pinnacle	2860
TANK	Water tank	37694
BON	White tripod	2859
AGE	White tripod	2860
TAP	White tripod	2860
SAY	West gable cabin	37693
RAM	WW on point of cliff	2860
PIX	WW on low rock at point of grass	2861 37694
NIL	WW on large and northerly of several boulders	2861 37693
MOB	WW on SE point of bluff	2862
LUG	WW on SE corner of pilot house of wreck. WW not visible on photo	2861
KIP	WW	2862
JIM	WW	2862
FIG		38997
ELF		38997
DAY		38997
CAT		38997

Photo-hydro stations NOB, OLE, PUN, RIB, SOY, TAT, URN, VIC, WAY, and YAW on T-9940 are 1953 signals and not used in 1954.

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-9940

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 alongshore 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. Orris N. Dalby
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:

M-2623-12

Review Report - T-9940 and T-9941
Topographic Maps
19 August 1955

62. Comparison with Registered Surveys:

There are no prior surveys in the area of T-9940 and T-9941.

63. Comparison with Maps of Other Agencies:

USE, Kanaga Island (Sheets 4 and 5) 1:25,000, 1943 (Local Datum)

Because this area is not subject to rapid change, the maps are in good general agreement. The greater detail of foreshore and shoreline on T-9940 and T-9941 fits them to supersede the quadrangles for charting purposes.

64. Comparison with Contemporary Hydrographic Surveys:

H-8144 (EX 2454) 1:20,000 1954

Blueprints 51868 and 51870 of boat sheets EX 2454a and c were available during review of T-9940 and T-9941. The shoreline for the boat sheets is from RS 490, a preliminary compilation. The final photogrammetric compilations give a greater refinement in shoreline and delineates more rocks and islets, but this causes no conflict with the boat sheet soundings.

65. Comparison with Nautical Charts:

9193 1:120,000 July 1953 Alaska Pass to Adak Strait

The small scale of the chart affords only evidence that there is general agreement.

66. Accuracy:

The maps comply with project instructions, are complete and adequate for charting, and meet the National Standards of Accuracy.

Reviewed by:

Lena T. Stevens

Lena T. Stevens

APPROVED:

Chief, Review Section
Photogrammetry Division

Chief, Nautical Chart Branch
Charts Division

Chief, Photogrammetry Division
18 July '51

Chief, Coastal Surveys Division