

9932

9938

9939

Diag. Cht. No. 8863-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TopographicField No. Ph-34 (48) Office No. T-9932, T-9938
and T-9939

LOCALITY

State AlaskaGeneral locality Aleutian IslandsLocality Kanaga Island, West part.1945-54

CHIEF OF PARTY

S.B.Grenell, Chief of Field Party

L.J.Reed, Div. of Photo., Wash., D.C.

LIBRARY & ARCHIVES

DATE March 31, 1958

B-1870-1 (1)

DATA RECORD

T-9932 and ^{*}T-9937, 38, 39

Project No. (II): Ph-34(48)

Quadrangle Name (IV):

T-9932 = SHIP ROCK

T-9937 = ANNOY ROCK

T-9938 = CHUNI BAY

T-9939 = SENTRY ROCK

Field Office (II): Ship EXPLORER

Chief of Party: S.B. Grenell

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

Radial Plot = Lester C. Lande

Officer-in-Charge:

Compilation = Louis J. Reed

Instructions dated (II) (III):

Copy filed in Division of

FIELD = 8 Apr 48, 19 Mar 52, 20 Feb 53, and Photogrammetry (IV)

Ltr No 22/MEK, S-2-EX, dated 8 Mar 52, subject:

"Modification of Instructions"

OFFICE = 14 Oct 53

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000

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

Scale Factor (III):

Date received in Washington Office (IV): JUL 20 1954

Date reported to Nautical Chart Branch (IV): JUL 23 1954

Applied to Chart No. 9145

Date: 9/27/54

Date registered (IV):

9 May 1957

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): NA 1927

Vertical Datum (III):

Mean sea level except as follows:

Elevations shown as (26) 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

~~XXXXXXXXXX~~

Plane Coordinates (IV):

State:

Zone:

Y=

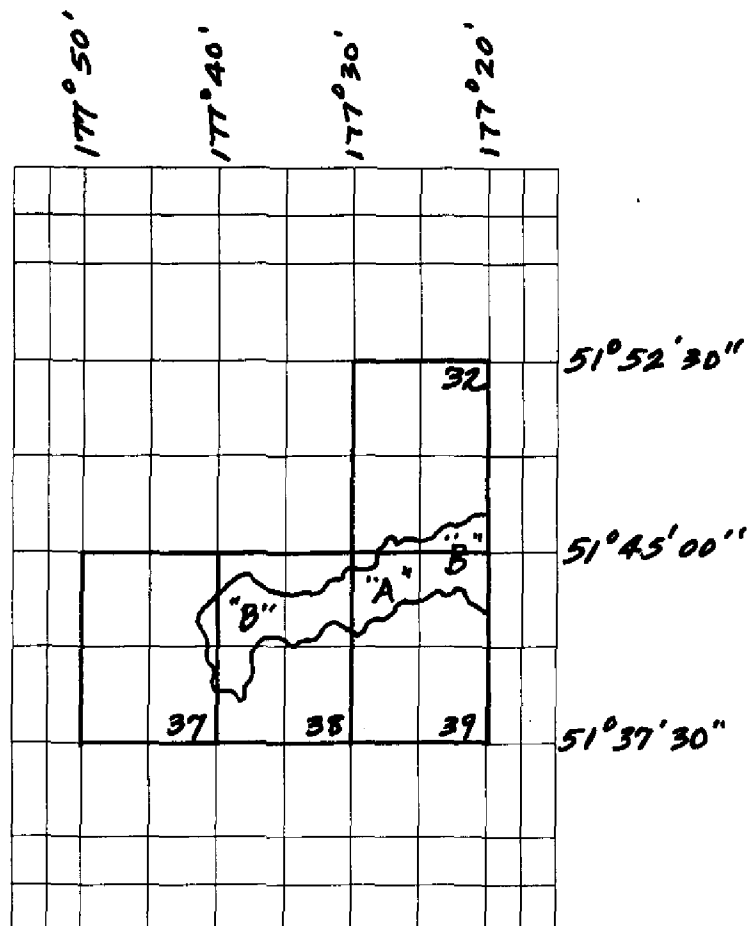
X=

Universal Transverse Mercator Grid, Zone 1, with 1,000m interval

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.

**Refer to combined descriptive report for
T-9935, 6, 7 and T-9942.*



Areas contoured by various personnel

(Show name within area)

(A) (III)

"A": T-9932 and 39, western halves of, by Clarence E. Misfeldt on the Reading Plotter, model A.

"B": T-9937 and 38, by Louis Levin on the Reading Plotter, model B.
and balance of T-9932 and 39

DATA RECORD

Field Inspection by (II): S.B. Grenell, Ship EXPLORER

Date: 1953, 1954

Planetable contouring by (II): None

Date:

Completion Surveys by (II): *None*

Date:

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

The shoreline on this project was compiled following indications of the shoreline on photographs as produced during 1953 field inspection. Therefore the MHHWL is dated "1953".

Projection and Grids ruled by (IV): Austin Riley

Date: 12/10/53

Austin Riley

1/7/54

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

Date: 12/11/53

H. D. Wolfe

1/8/54

Control plotted by (III): N. S. Schultz, J. P. Battley,

Date: January 1954

Control checked by (III): N. S. Schultz, J. P. Battley,
G. B. Willey, H. J. MurrayDate: Completed
1/18/54

Radial Plot on Stereoscopic Control extension by (III): S. G. Blankenbaker, H. J. Murray

Date: Completed
1/21/54

Stereoscopic Instrument compilation (III):

Planimetry

Louis Levin and

Date:

Contours

Clarence E. Misfeldt

18 Feb 54

Date:

Manuscript delineated by (III): John B. McDonald

Date: 7 May 54

Photogrammetric Office Review by (III): Louis J. Reed

Date: 14 May 54

Elevations on Manuscript
checked by (III):

Louis J. Reed

Date: 14 May 54

Camera (kind or source) (III): USC&GS 9-lens camera, model "B", $f = 8.25$ inches

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
38997 thru 39010	19 Aug 52	13:25	1:20,000	2.0ft below MHHW or 2.2ft above MLLW

Tide (III)

Reference Station: **Sweeper Cove**
 Subordinate Station: **Lash Bay**
 Subordinate Station:

diurnal

Ratio of Ranges	Mean Range	Range Range
		3.7
		4.2

Washington Office Review by (IV): *K. N. Maki*

Date: *27 Dec. 1954*

Final Drafting by (IV): *M. Charity T-9932*
M. Charity T-9938
M. Charity T-9939

Date: *6-4-56*
6-26-56
7-3-56

Drafting verified for reproduction by (IV): *W. O. Hallum*

Date: *9-24-56*

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): T-9932 = 5 sq mi; T-9938 = 18 sq mi; 39 = 13 sq mi

Shoreline (More than 200 meters to opposite shore) (III): T-9932 = 9 mi; 38 = 28 mi; 39 = 13 mi.

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

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II):

Recovered:

Identified: 20

Number of BMs searched for (II): None

Recovered:

Identified:

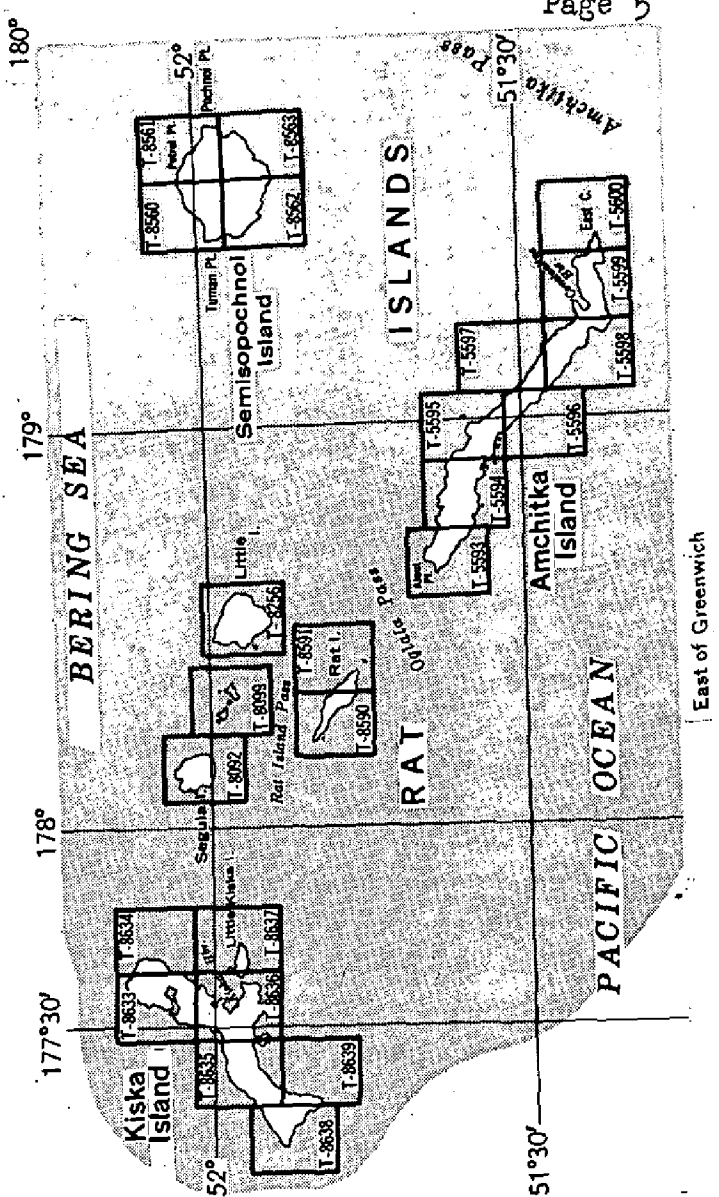
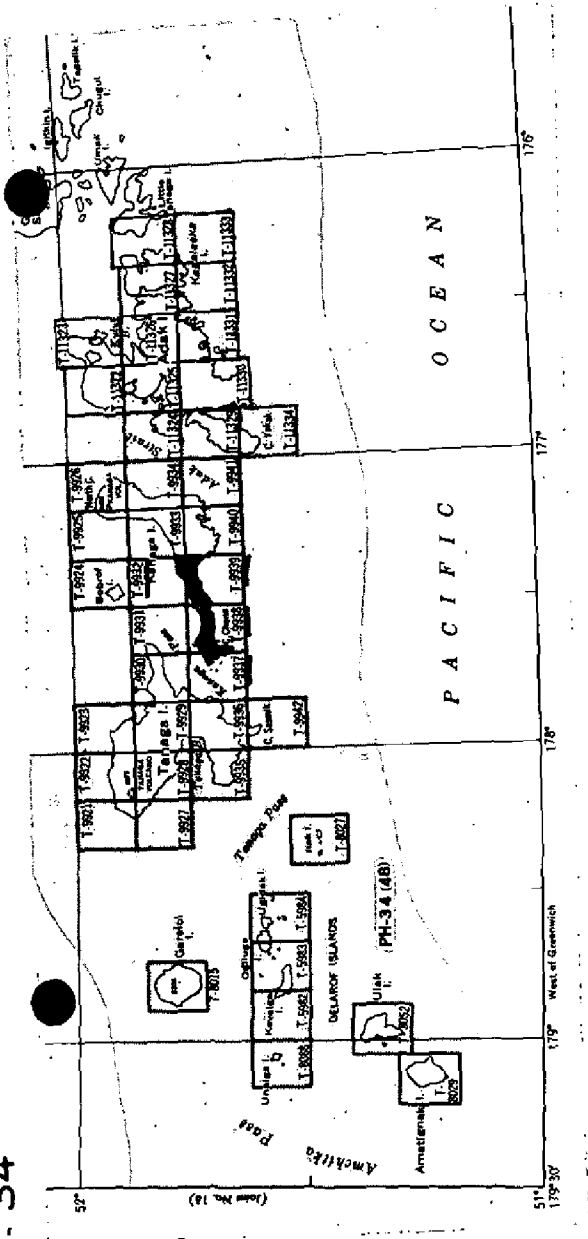
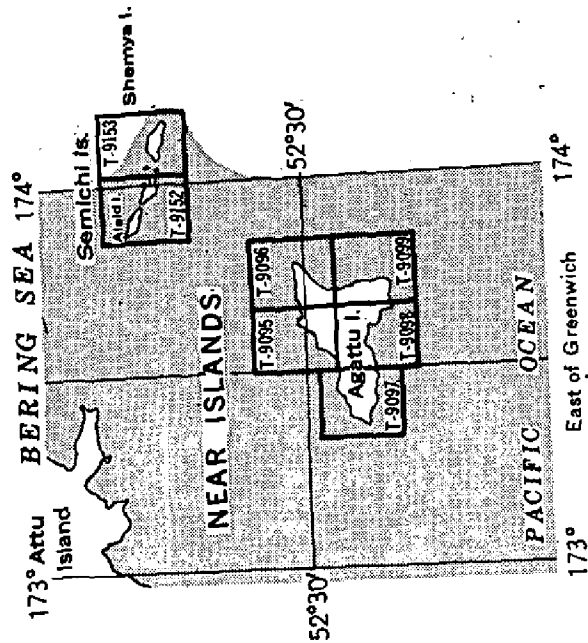
Number of Recoverable Photo Stations established (III): *three (on T-9939)*

Number of Temporary Photo Hydro Stations established (III): *sixty (37 on T-9938; 23 on T-9939)*

Remarks:

POGRAPHIC MAPPING PROJECT PH-34

Aleutian Islands ALASKA



Summary to Accompany Descriptive Report
T-9932, T-9938 and T-9939

T-9932, T-9938 and T-9939 are three topographic surveys covering the western portions of Kanaga Island from Cape Chunu eastward to longitude 177° 20'. The feature, Ship Rock, a small rocky islet, occurs on the easterly limits of T-9932. These maps were compiled on the 9-lens Reading Plotter. Field operations preceding compilation included field inspection, recovery and establishment of horizontal control and the determination of elevations required to control a stereo-instrument project vertically. Compilation was at a scale of 1:20,000. Contours were drawn at a 50-foot interval with 25-foot interval supplemental contours. The maps were not field edited.

Owner
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.

FIELD INSPECTION REPORT

2-20 See separate report with title on cover page typed
as follows: *In general files, Div. of Photogrammetry
(Separate Report for 1953 and 1954 Season)
covers field work for T-9932*

FIELD INSPECTION REPORT

FOR MAPS

T-9932
T-9937 (part)
thru T-9939

Project CS-218, Ph-34
Kanaga Island, Alaska

Ship EXPLORER

S. B. Grenell, Commanding

PHOTOGRAMMETRIC PLOT REPORT

Ph-34 Kanaga Island (western half)

21. Area covered:

The ~~manuscripts~~ topographic manuscripts included in the photogrammetric plot are as follows:

T-9932 T-9937 T-9938 T-9939 T-9933 T-9940

T-9933 and T-9940 were ordered as a supplement so as to make use of two office-identified control stations (CLIFF, 1953, and KNOB, 1953) as well as to afford a strong junction of the plots when the eastern portion of the island is mapped in the future.

22. Method:

The vinylite manuscripts were ruled at a scale of 1:20,000 with polyconic projections and 1000 meter UTM, Alaska Zone I grids. The horizontal control was plotted on the manuscripts by referencing to the polyconic projection. The sheets were joined by holding the corresponding UTM grid lines. Small discrepancies were reduced to a negligible minimum in the proximity of the land areas to be mapped. Polyconic projections only were ruled on T-9933 and T-9940, and these sheets were joined to the others by holding corresponding projection lines.

The following nine lens metal-mounted photographs were used in the plot:

38997, 38998 39000 39001 39002 39003
39004 39005 39006 39007 39009 39010

The templets were prepared using vinylite stock. In each case master calibration templet No. 36269 was used. The transforming errors proved to be minimal.

Closure and adjustment to control was very good. See 23, Adequacy of Control.

23. Adequacy of Control:

The control index included in this report shows the density and distribution of horizontal control. A list showing the measured differences in millimeters between the radial plot positions and the geographic positions of the horizontal control is also included. Of the 24 stations 2 were discarded, 11 held, 3 held within 0.2 mm., 5 within 0.3 mm., 2 within 0.4 mm., and 1 within 0.6 mm. The two discarded stations are Venus, 1953, and Lyric, 1953. The field party did not consider Venus, 1953 to be

-2-

identified well enough to be used as horizontal control, while Lyric 1953 was shown by the plot to be misidentified. Station Rigel, 1953 held within 0.3, but was not considered as usable for horizontal control by the field party, as was Babe, 1953 (held within 0.4 mm.). Spica, 1953, the other station held within 0.4 mm., showed on only two photographs. Its photo location is dubious. A position of a dock corner was scaled from Nautical Chart 9121, scale 1:7500, and was used as a horizontal control point. The station held within 0.6 mm., though no great effort was made to hold it. Two nearby stations, Knob, 1943 and Cliff, 1943 were office-identified. Both held. See Item 21. Topographic stations Ale and Hep subpoint held, while Cub was within 0.2 mm. All but 5 of the 24 stations used are of second or third order accuracy.

A junction with the Ph-34 plot of Tanaga Island was made on T-9937. One cut from photo 39007 held Bird, 1943, while a three-way intersection was obtained on a pass-point on a tip of Tanaga Island.

The plot is considered to be very good and the numerous pin-point intersections were pleasing to behold.

25. Photography:

All 1952 photography was used. The coverage is adequate and the clarity very good save possibly for some unavoidably obscured shadowed areas along the northern coastline.

Submitted by: *Howard J. Murray*

Howard J. Murray

Approved by:

L. C. Lande
L. C. Lande

Ph-34 KANAGA ISLAND (western part)

List of horizontal control stations showing difference
in millimeters between radial plot position and plotted
position

<u>Station</u>	<u>Order</u>	<u>Measured difference (mm.)</u>
SIDE, 1943	Third	Held
MART, 1943	Second	Held
BIRD, 1943	Third	Held (1 ray)
CHU, 1943	Second	Held
DENEB S.pt 1, 1953	Third	0.2
BABE, 1953	Third	0.4
NUB, 1943	Second	Held
END, 1943	Third	Held
*PLUTO, 1953	Third	0.2
HIVE, 1943	Third	Held
HEP S. pt.	Less than third	0.3
VENUS, 1953	Third	Misidentified
TOM, 1943	Third	0.3
SPICA, 1953	Third	0.4
RIGEL, 1953	Third	0.3
LYRIC, 1953	Third	Misidentified
CLIFF, 1943	Third	Held
KNOB, 1943	Third	Held
SHIP, 1943	Second	0.3
TWIN, 1943	Second	Held
OTTER, 1953	Third	0.3
ALE	Less than third	Held
CUB	" " "	0.2
**dock	" " "	0.6

*PLUTO, 1953 is same station as TOP, 1943

**Position scaled from Nautical Chart 9121, scale 1:7500

COMPILATION REPORT31. Delineation:

Shoreline and relief were delineated simultaneously on the Reading Plotters as indicated on page 2 of this report. The entire area of all four quads has been mapped; there are no holidays.

32. Control: Adequate - see side-heading 23, this report.33. Supplemental Data: Refer to side-heading 14, Field Report.34. Contours and Drainage:

The photos were of good quality for contouring purposes and no areas of questionable contours remain.

35. Shoreline and Alongshore Details:

Field Inspection was quite adequate and has been used as a guide during instrument delineation. Later, during the manuscript compilation phase, the delineation was checked by comparison and certain detailed information was applied to the sheets from the field photos. Compiled foul lines are a combination of field and instrument interpretation.

36. Offshore Details: Treated along with shoreline, 35 above.37. Landmarks and Aids: None exist - refer side-heading 9, Field.38. Control for Future Surveys:

Several hydro stations, but no topo stations, were field identified and located by the radial plot. Please refer to side-heading 11, page 11 of the Field Inspection Report.

39. Junctions: All junctions are in agreement.40. Horizontal and Vertical Accuracy:

It is considered that these compilations meet the requirements established by National Map Accuracy Standards for maps having a scale of 1:20,000 and showing relief by means of a 50ft interval with supplemental contours (25ft) being used to better portray relatively flat areas.

41. Comparison with Existing Maps:

No accurate maps of Kanaga Island were ever made for comparison with the compilations of this survey.

42. Comparison with Nautical Charts:

The one existing chart of the same area does not have a scale of comparison value. The chart is:

"Preliminary Chart, Alaska-Aleutian Islands, KANAGA PASS AND APPROACHES, No. 9145, 1:40,000, 1st edition, April 1945, last correction date of 13 August 1951."

48. Geographic Name List:

See next page, page 14.

49. Notes for the Hydrographer:

Not applicable.

50. Compilation Office Review:

See T-2 form, page 15.

411 FINAL SHORELINE COMPLETION: 1954 Field Inspection on photos 37710, 38999, and 39001 has been applied (7 Dec 54) to the north shore of T-9932 continuing 1953 inspection eastward to the next line. In the process, FOX, AND, COB, DOT, and EGG were plotted from 1954 theodolite positions, and four other points, T, P, B, G, YAP and ZAM were positioned by the 1954 radial plot of the east half of the island.

Submitted by:

Orvis N. Dalbey
Orvis N. Dalbey, Chief,
9-lens Plotting Instrument Section

Approved by:

Louis J. Reed
Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

GEOGRAPHIC NAMES

Survey No.

T-9932 and
T-9938, 39

Name on Survey

Page 14

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
T-9932									1
<u>CABIN ROCK</u> Point (Pincer Pt. is on T-99-38)									2
<u>KANAGA ISLAND</u>									3
<u>KANAGA SOUND</u>									4
<u>SHIP ROCK</u>									5
<u>Bridge Point</u>									6
T-9938									7
<u>CAPE CHUNI</u>									8
<u>CHUNI BAY</u>									9
<u>COALIE HAT</u>									10
<u>KANAGA ISLAND</u>									11
<u>KANAGA PASS</u>									12
<u>KANAGA SOUND</u>									13
<u>PACIFIC OCEAN</u>									14
<u>PINCER POINT</u>									15
<u>NORTHWEST POINT</u>									16
<u>THE SIGNALS</u>									17
T-9939									18
<u>KANAGA ISLAND</u>									19
<u>KANAGA SOUND</u>									20
<u>PACIFIC OCEAN</u>									21
<u>SENTRY ROCK</u>									22
									23
									24
									25
									26
									27

Names approved 12-24-54
L. Heck

(chun u)

(hill for its shape)

Hive Rock (80' rock)Names approved 12-23-54
L. HeckNames approved 12-24-54
L. Heck

PHOTOGRAMMETRIC OFFICE REVIEW

T-9938, 39, 32

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. ☒

Reviewer

Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

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-9932, T-9938 and T-9939
Topographic Maps
27 December 1954

62. Comparison with Registered Topographic Surveys:

There are no prior surveys for the area covered by these maps.

63. Comparison with Maps of Other Agencies:

The area covered by these maps is previously unsurveyed. A reconnaissance map, Adak, Alaska, published by the U. S. Geological Survey, at scale 1:250,000, dated 1951 is incomplete and is not adequate for comparative purposes.

64. Comparison with Contemporary Hydrographic Surveys:

H-8053	1:20,000	1953
H-8055	1:20,000	1953

Surveys T-9932, T-9938 and T-9939 are in agreement with the hydrographic surveys.

65. Comparison with Nautical Charts:

9145	1:40,000	corrected to 8/13/54
8863	1:300,000	corrected to 1/14/52

The maps and the charts are in general agreement with no conflicts. The shoreline configuration is much more detailed on the maps than on the charts.

66. Adequacy of Results and Future Surveys:

These maps are complete and adequate for use in hydrographic surveys and the construction and maintenance of nautical charts. These maps comply with the National Standards of Map Accuracy.

Reviewed by:

K. N. Maki
K. N. Maki

APPROVED:

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

Max S. Ricketts
Chief, Nautical Chart Branch
Div. of Charts

W. W. Swanson
Chief, Div. of Photogrammetry

J. D. Smith
Chief, Div. of Coastal Surveys

March 18, 1958

NAUTICAL CHARTS BRANCH

SURVEY NO. _____

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.