9932 9938
9939

9938
9939
9932

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-9932, T-9938 and T-9939

LOCALITY

State Alaska

General locality Aleutian Islands

Locality Kanaga Island, West part.

19 52-54

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

T-9932 = SHIP ROCK
T-9937 = ANNOY ROCK
T-9938 = CHUNI BAY
T-9939 = SENTRY ROCK

Project No. (II): Ph-34(48) Quadrangle Name (IV):

Field Office (II): Ship EXPLORER Chief of Party: S.B.Grenell

Photogrammetric Office (III): Washington, D.C. Officer-in-Charge: Radial Plot = Lester C. Lande
Compilation = Louis J. Reed

Instructions dated (II) (III): Copy filed in Division of Photogrammetry (IV)
FIELD = 8 Apr 48, 19 Mar 52, 20 Feb 53, and 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): MAY 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 (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

Plane Coordinates (IV): State: Zone:

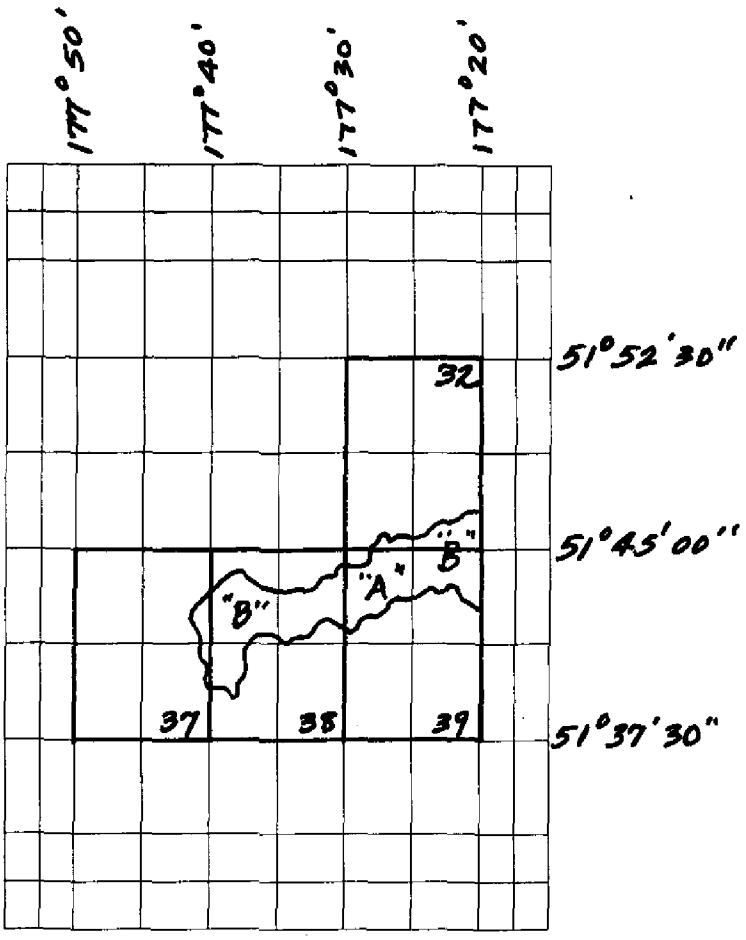
Y= X=

Universal TransMercatMercator 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)
(II) (III)

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

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

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, Date: Completed
G. B. Willey, H. J. Murray 1/18/54

Radial Plot or ~~Stereoscopic~~ Control extension by (III): S. G. Blankenbaker, H. J. Murray Date: Completed 1/21/54

Stereoscopic Instrument compilation (III): Planimetry Louis Levin and Clarence E. Misfeldt Date: 18 Feb 54
Contours 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 (~~D~~) (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)

Ratio of Ranges	Mean Range	diurnal Range
		3.7
		4.2

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

Washington Office Review by (IV): K. N. Mok Date: 27 Dec. 1954

Final Drafting by (IV): M. Charity T-9932 Date: 6-4-56
M. Charity T-9938 6-26-56
M. Charity T-9939 7-3-56

Drafting verified for reproduction by (IV): Wm O. Hallum Date: 9-24-56

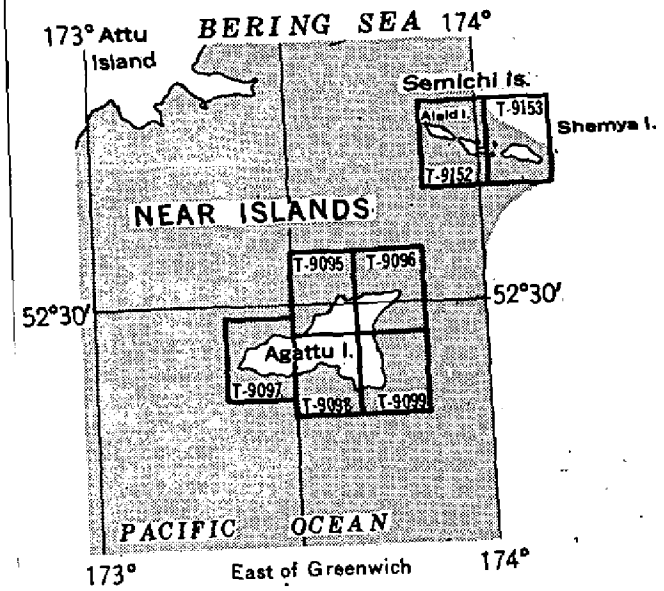
Proof Edit by (IV): Date:

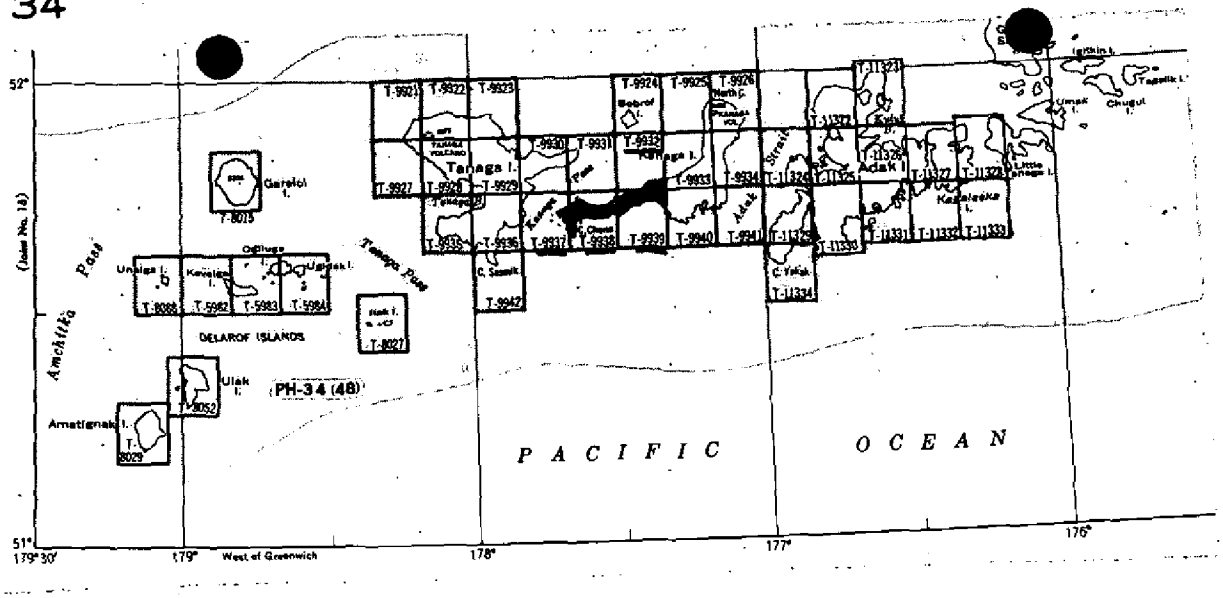
Land Area (Sq. Statute Miles) (III): T-9932 = 5 sq mi; T-9938 = 18 sq mi; 39 = 13 sq mi
Shoreline (More than 200 meters to opposite shore) (III): T-9932 = 9 mi; 38 = 28 mi; 39 = 13 mi.
Shoreline (Less than 200 meters to opposite shore) (III): None
Control Leveling - Miles (II): None
Number of Triangulation 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)

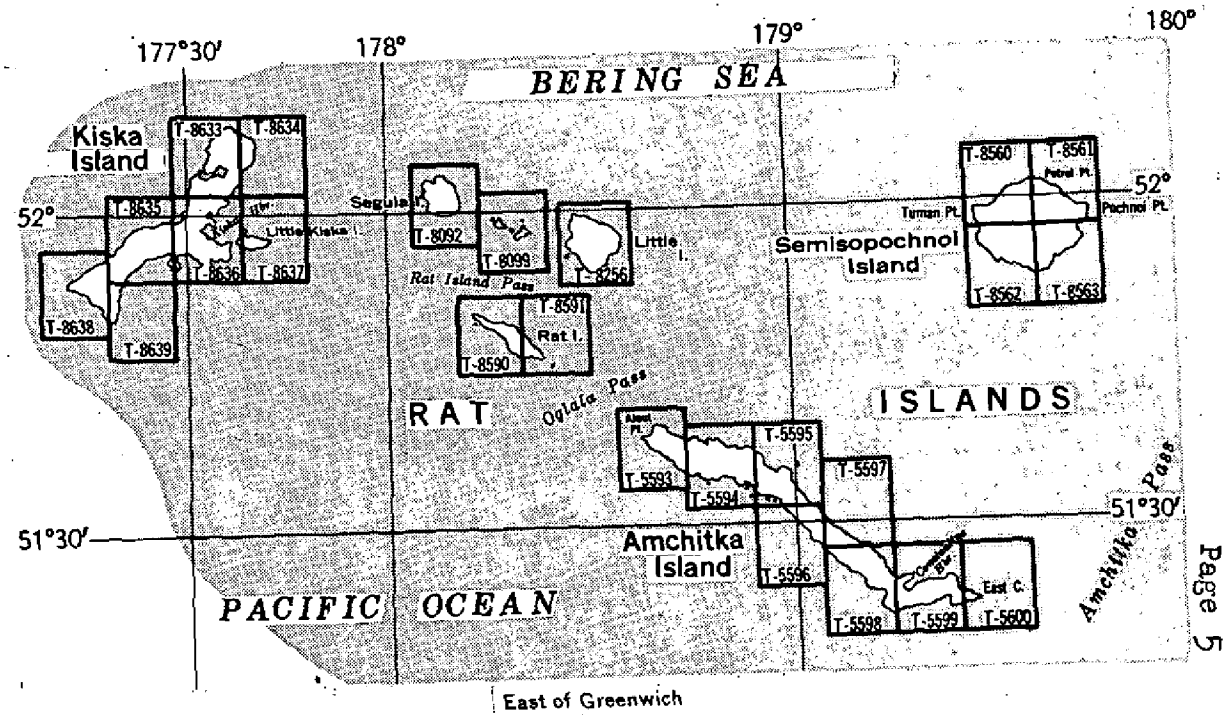
Remarks:

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.

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 [redacted] 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

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

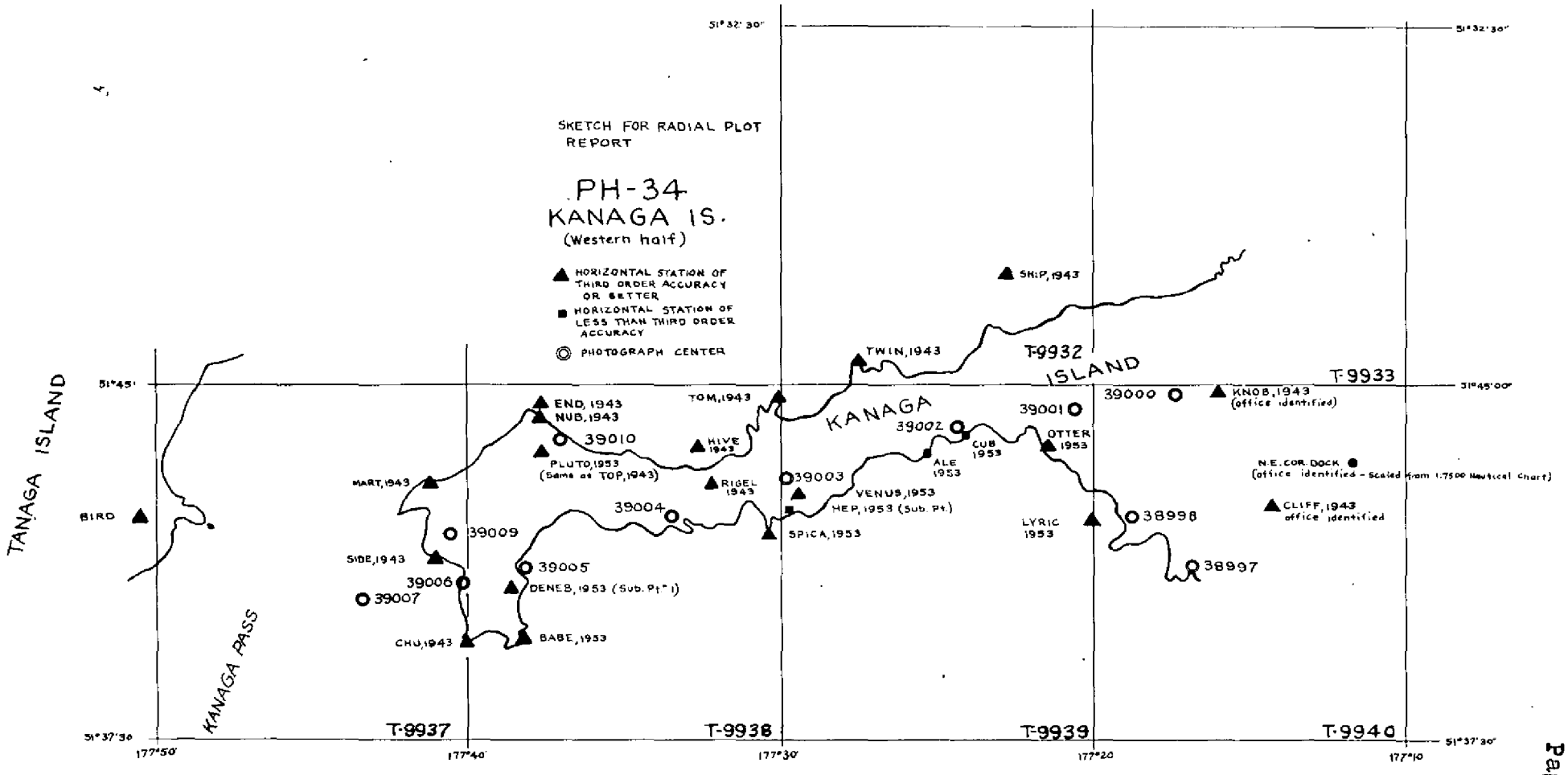
Ph-34 KANAGA ISLAND (western part)

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

Station	Order	Measured difference (mm.)
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


SKETCH FOR RADIAL PLOT REPORT
PH-34
KANAGA IS.
(Western half)
HORIZONTAL STATION OF THIRD ORDER ACCURACY OR BETTER
HORIZONTAL STATION OF LESS THAN THIRD ORDER ACCURACY
PHOTOGRAPH CENTER
TANAGA ISLAND
KANAGA ISLAND
KANAGA PASS
BIRD
SIDE, 1943
MART, 1943
END, 1943
NUB, 1943
PLUTO, 1953
(Same as TOP, 1943)
TOM, 1943
HIVE 1943
RIGEL 1943
SPICA, 1953
VENUS, 1953
HEP, 1953 (Sub. Pt.)
ALE 1953
CUB 1953
OTTER 1953
LYRIC 1953
CLIFF, 1943
office identified
N.E. COR. DOCK
(office identified - scaled from 1:7500 Nautical Chart)
KNOB, 1943
(office identified)
SHIP, 1943
TWIN, 1943
DENES, 1953 (Sub. Pt. 1)
CHU, 1943
BABE, 1953
39000
39001
39002
39003
39004
39005
39006
39007
39009
39010
38997
38998
T-9932
T-9933
T-9937
T-9938
T-9939
T-9940
51°32'30"
51°45'
51°37'30"
177°50'
177°40'
177°30'
177°20'
177°10'
31°45'00"

COMPILATION REPORT

31. 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.

46. Comparison with Existing Maps:

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

47. 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.

41 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 neat line. In the process, FOX, AND, COB, DOT, and EGG were plotted from 1954 theodolite positions, and four other points TIP, BIG, YAP and ZAM were positioned by the 1954 radial plot of the east half of the island.

7 Dec 54

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	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-9932										1
CABIN ROCK Point (Pincer Pt. is on T-99-38)										2
KANAGA ISLAND										3
KANAGA SOUND										4
SHIP ROCK				Names approved 12-21-54 L. Heck						5
Bridge Point										6
T-9938										7
CAPE CHUNI (Chunu)										8
CHUNI BAY										9
COALIE HAT (hill, for its shape)										10
KANAGA ISLAND										11
KANAGA PASS										12
KANAGA SOUND										13
PACIFIC OCEAN										14
PINCER POINT										15
NORTHWEST POINT										16
THE SIGNALS		Hive Rock (80' rock)								17
T-9939					Names approved 12-21-54 L. Heck					18
KANAGA ISLAND										19
KANAGA SOUND										20
PACIFIC OCEAN										21
SENTRY ROCK				Names approved 12-21-54 L. Heck						22
										23
										24
										25
										26
										27

Form T-2

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) N 7. Photo hydro stations ✓ 8. Bench marks N
9. Plotting of sextant fixes N 10. Photogrammetric plot report ✓ 11. Detail points N

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line N 14. Rocks, shoals, etc. ✓ 15. Bridges N 16. Aids to navigation N 17. Landmarks N 18. Other alongshore physical features ✓ 19. Other alongshore cultural features N

PHYSICAL FEATURES

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

CULTURAL FEATURES

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

BOUNDARIES

31. Boundary lines N 32. Public land lines N

MISCELLANEOUS

33. Geographic names ✓ 34. Junctions ✓ 35. Legibility of the manuscript ✓ 36. Discrepancy overlay N 37. Descriptive Report ✓ 38. Field inspection photographs ✓ 39. Forms ✓
40. _____

Reviewer

Supervisor, Review Section or Unit

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

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-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:

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

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

W. W. Swanson
Chief, Div. of Photogrammetry
March 18, 1958

Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. _____

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
9/27/54	9145	E.G. McGann	Before ~~After~~ Verification and Review
		Applied in full. T9932, ~~T9937~~, T9938, T9939.	
11/19/58	8863	J. Walker	~~Before~~ After Verification and Review
		Completely applied to Boards.	
12/30/92	16467	Joseph Bohman	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.