

9927, 9928, 9929  
9930-9931

Diag. Cht. No. 8863-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

T-9927 thru

Field No. Ph-24(48) Office No. T-9931

LOCALITY

State Alaska

General locality Aleutian Islands

Locality Tanaga Island

194 53

CHIEF OF PARTY

S. B. Grenell, Chief of Field Party

L. J. Reed, Div. of Photogrammetry,

Washington, D.C.

LIBRARY & ARCHIVES

DATE January 15, 1958

8-1870-1 (1)



## DATA RECORD

T-9927 thru 9931

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

T-9927 = CAPE SAJAKA, SOUTH HALF  
 T-9928 = CAPE AGAMSIK  
 T-9929 = GUSTY BAY  
 T-9930 = HOT SPRINGS BAY  
 T-9931 = CAPE SUDAK

Field Office (II): C&amp;GSS 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  
 Photogrammetry (IV)

FIELD = 8 Apr 48, 19 Mar 52, 20 Feb 53; and  
 ltr No 22/MEK, S-2-EX, 8 Mar 52, "Modifications of Insts"

OFFICE = 14 Oct 53

Method of Compilation (III): All contouring was accomplished on the Reading Plotter  
 It also did the shoreline on T-9929, 30, and 31; 27 and 28 were done  
 Manuscript Scale (III): Stereoscopic Plotting Instrument Scale (III): graphically.

1:20,000

1:20,000

Scale Factor (III):

1:1

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

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

Applied to Chart No.

Date:

Date registered (IV): 15 April 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  
~~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.




Areas contoured by various personnel

(Show name within area)

(X) (III)

T-9927 and T-9928: Compiled by Clarence E. Misfeldt  
on the Reading Plotter, model "A".

T-9929, T-9930 and: Compiled by Louis Levin on  
T-9931 the Reading Plotter, model "B".



## DATA RECORD

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

Date: 1953

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 on the Reading Ruling machine

Date:

15 Oct 53

Projection and Grids checked by (IV):

Howard D. Wolfe

Date:

19 Oct 53

Control plotted by (III):

Neil S. Shultz

Date:

8 Nov 53

Control checked by (III):

Jeter P. Battley

Date:

13 Nov 53

Radial Plot ~~on Stereoscopic~~Samuel G. Blankenbaker  
and Howard J. Murray

Date:

18 Dec 53

Control extension by (III):

Stereoscopic Instrument ~~compilation~~ <sup>delineation</sup> (III):Planimetry Louis Levin  
and  
Contours Clarence E. Misfeldt

Date:

26 Feb 54

Manuscript ~~checked~~ <sup>compiled</sup> by (III):

John B. McDonald (T-9929-30-31)

Date:

14 May 54

and Robert L. Sugden (all contours  
and shoreline on T-9929, T-9930, and T-9931)Compilation of shoreline(only) on T-9927 and T-9928  
by the Graphic Compilation Branch.

20 Dec 53

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

Date:

20 May 54

Shoreline compilation review by: Roscoe J. French  
and Charles Theurer

20 Dec 53

Elevations on Manuscript

checked by ~~(II)~~ (III):

Louis J. Reed

Date:

20 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

See Photo & Control Sketch and Photograph List, pages 11 and 12 respectively, of the Radial Plot Report found in the Descriptive Report to accompany T-9921 thru T-9923.

## Tide (III)

diurnal

Ratio of Ranges	Mean Range	Strong Range
---	---	3.7
1.1	---	4.0
1.1	---	4.2

0.8 --- 3.1

Date: 11-10-54

3-26-56

1-27-56

2-7-56

2-14-56

2-23-56

Date: 3-56

Date:

Reference Station: Sweeper Cove, Adak Island  
Subordinate Station: Tanaga Bay, Lash Bay  
Subordinate Station: Hot Springs Bay

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

Final Drafting by (IV):  
M. Charity T-9927  
M. Day T-9928  
M. Day T-9929  
M. Day T-9930  
M. Day T-9931

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

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): See remarks (1) below  
Shoreline (More than 200 meters to opposite shore) (III): See remarks (1) below  
Shoreline (Less than 200 meters to opposite shore) (III): None  
Control Leveling - Miles (II): None  
Number of Triangulation Stations searched for (II): Recovered: Identified: <sup>E</sup> NINETEEN  
Number of BMs searched for (II): None Recovered: Identified:  
Number of Recoverable Photo Stations established (III): SIXTEEN  
Number of Temporary Photo Hydro Stations established (III): See remarks (2) below

## Remarks:

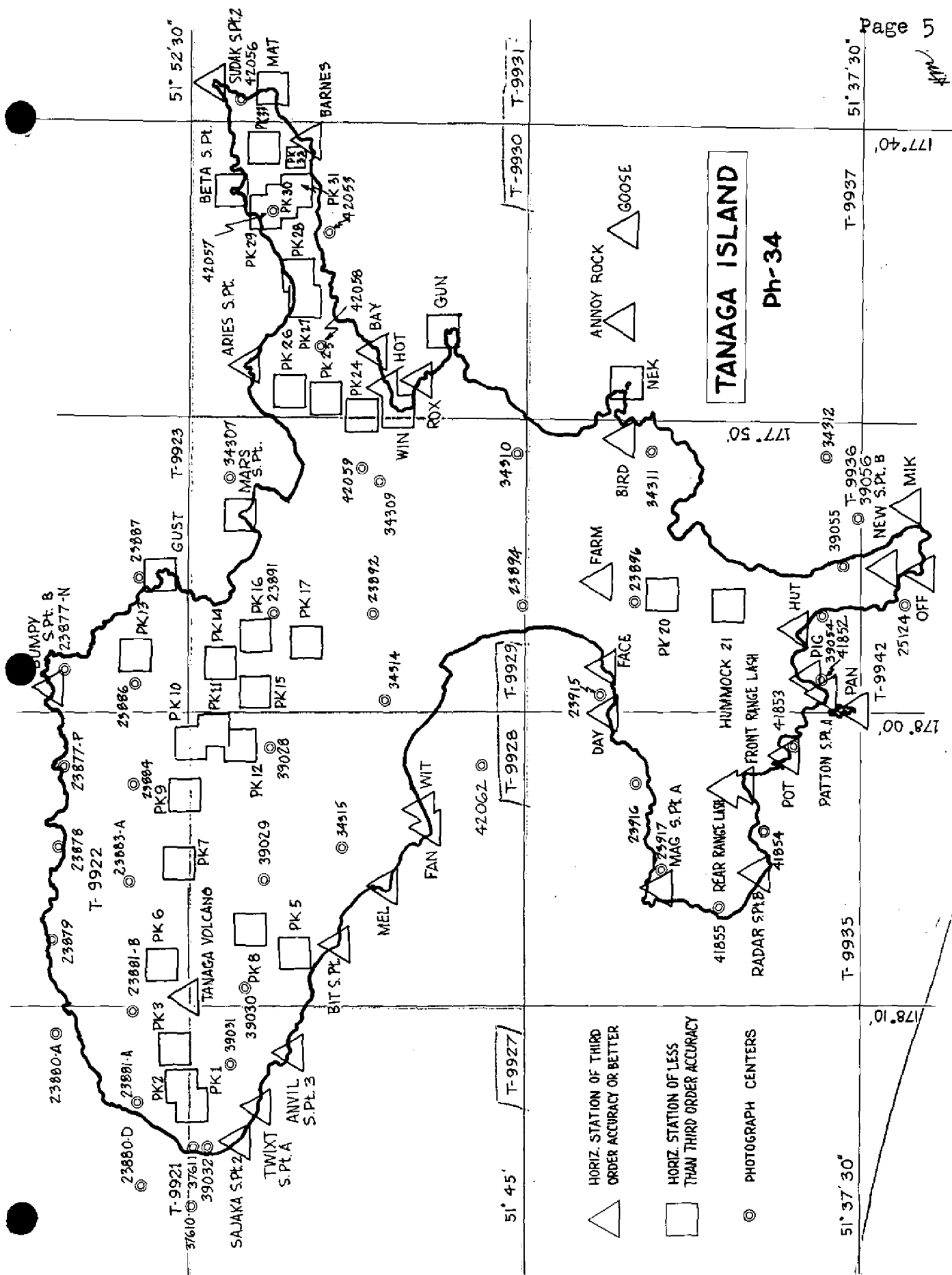
(1)

Land Area =  $\frac{T-9927}{4 \text{ sq mi}}$   $\frac{T-9928}{47 \text{ sq mi}}$   $\frac{T-9929}{60 \text{ sq mi}}$   $\frac{T-9930}{20 \text{ sq mi}}$   $\frac{T-9931}{3 \text{ sq mi}}$

Shoreline = 5 miles 13 miles 10 miles 27 miles 8 miles

(2) Numerous hydro stations were located with a theodolite and positions were computed by the field party. No 524 cards were submitted but the stations are dated 1953 and are shown on the manuscripts with a 2.5mm black circle. All dated stations without 524 cards are in this category. *Dates removed during review for all non-permanently marked stations not having 524 card descriptions*







Summary to Accompany Descriptive Report T-9927 thru  
T-9931

T-9927 thru T-9931, inclusive, are five topographic surveys covering the central area of Tanaga Island from Cape Sajaka to Cape Sudak. These maps are a combination of graphic compilation and 9-lens Reading Plotter compilation. 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. The 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.

*Corona*  
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 entitled: *Filed in general files, Div. of  
Photogrammetry.*

FIELD INSPECTION REPORT

FOR MAPS

T-9921 thru T-9923  
T-9927 thru T-9931  
T-9935 thru T-9937  
and T-9942

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

Ship EXPLORER  
S.B.Grenell, Comdg



RADIAL PLOT REPORT

21-31

Please refer to the radial plot report beginning on page 8 of the descriptive report to accompany T-9921 thru T-9923. The area of this report is also covered by that radial plot report.



COMPILATION REPORT31. Delineation:

The shorelines on T-9927 and T-9928 were delineated and compiled on the manuscripts by graphic methods. Shoreline and rock data were compiled from metal-mounted office photos with the aid of a stereoscope and field inspection photos. The method involved a preliminary investigation of the photos and the radial plot to determine those areas of common scale in order to aid the compiler when inking the manuscripts. Detail and pass-points of ~~sea~~ level elevation were inked on the work sheets to hold to as control during the compilation. The proper density of detail points is dependent on scale and position of shoreline and islands. Offshore islands of any consequence have a minimum of two detail points to control their position. Where scale was not sufficiently close, the work sheets were transferred with the reflecting projector. The work sheets were detailed under the stereoscope and are therefore a stereoscopic interpretation of the MHHWL and foreshore aided by the field inspection information.

All contours were delineated on the Reading Plotter. The shoreline on T-9929, 30, and 31 was also delineated on the instrument. Shoreline indications and other field inspection data on the field inspection photos were used as a guide during this delineation. The entire land area of all five quads has been delineated during this operation.

32. Control:

Both horizontal and vertical control were adequate for instrument compilation purposes; see side-heading 23, page 9 of the Radial Plot Report.

33. Supplemental Data:

Refer to side-heading 14, page 17 of the Field Inspection Report. In addition a graphic control survey, No. 6974b covers the east shore of Tanaga Bay at 1:10,000 scale and dated May 1944, and No. 6933b covers Hot Springs Bay at 1:5,000, 1944. The shoreline in these areas has now been delineated on the plotting instruments and should supersede the field shoreline; a comparison shows only minor differences.

34. Contours and Drainage:

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



35. Shoreline and Alongshore Details:

Field inspection as provided on field inspection photos and on RS-426 were quite adequate and have been incorporated into these compilations. Please refer to side-heading 7, page 14 of the Field Inspection Report, and to side-heading 31 above.

36. Offshore Features:

Included as part of side-heading 35 above.

37. Landmarks and Aids:

Landmarks are to be recommended as a part of a future phase of the field work - see side-heading 9, page 16 of the Field Inspection Report, which also says that no aids exist.

38. Control for Future Surveys:

Refer to side-heading 11, page 16 of the field Inspection Report. Certain hydro and topo stations were located by field methods. Other stations identified in the field were located by graphic plotting.

Hydro Stations: No descriptions were furnished the compilation office, and all were transferred from field photos to office photos by direct pricking, the transfer being verified by a second compiler. Manuscript location was then accomplished by graphic methods.

Topo Stations: Those for which descriptions were written by the field party have 524 forms whether located by field or office methods. They include:

T-9927 = Fin 1953 (office) *Form 524 on file in Div. of Photogrammetry general files.*  
 T-9928 = None  
 T-9929 = Mars, 1953 (field)  
 T-9930 = Beta, 1953 (field) *-This is triangulation (adjusted position) reported by Div. Geodesy 8/26/54. K.H.M.*  
 T-9931 = None  
 T-9930 = Barabara, 1953 - this

39. Junctions:

*is a marked station; the description was not available during review.*

All existing junctions are shown on the diagram on page 5 of this report, and all junctions are in agreement since all sheets on Tanaga Island were compiled as one project.

40. Horizontal and Vertical Accuracy:

The five manuscripts of this report are considered as meeting the requirements for accuracy established by the National Map Accuracy Standards for sheets at 1:20,000 scale using 50ft contours to depict relief. An occasional 25ft supplemental contour has been used in relatively flat areas.



46. Comparison with Existing Maps:

Prior to this project no accurate maps of Tanaga Island had ever been compiled.

47. Comparison with Nautical Charts:

Three charts exist of the area:

- a. 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.
- b. Preliminary Chart, Alaska-Aleutian Islands, TANAGA BAY AND APPROACHES, No. 9146, 1:40,000, 1st edition, march 1945, last correction date of 27 August 1951.
- c. Alaska-Aleutian Islands, Harbors and Approaches, Andreanof Islands, HOT SPRINGS BAY? TANAGA, ISLAND, No. 9121, 1:10,000, 2nd edition, last corrected 25 Aug 52.

48. Geographic Name List:

See page 12, this report.

49. Notes for the Hydrographer:

Not applicable.

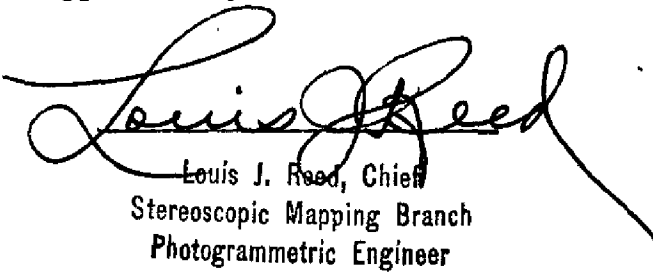
50. Compilation Office Review:

See page 13 of this report.

Submitted by:

  
Orvis N. Dalbey, Chief,  
Nine-Lens Plotting Instrument Section

Approved by:

  
Louis J. Reed, Chief  
Stereoscopic Mapping Branch  
Photogrammetric Engineer



## GEOGRAPHIC NAMES

Survey No.

T-9927 thru 31

Name on Survey

	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-9927									1
CAPE SAJAKA									2
FAN POINT									3
TANAGA ISLAND									4
TANAGA PASS									5
									6
T-9928									7
BLACKFACE POINT									8
CABLE BAY									9
CAPE AGAMSIK									10
TANAGA BAY									11
TANAGA ISLAND									12
									13
T-9929									14
BERING SEA									15
FORTRESS POINT									16
GUSTY BAY									17
PILLBOX ROCK									18
ROUGH BAY									19
TANAGA BAY									20
TANAGA ISLAND									21
									22
T-9930									23
BARABARA ISLAND									24
BERING SEA									25
EIDER REEF									26
HOT SPRINGS BAY									27
KANAGA <del>XXXXXX</del> PASS									28
POINT ARENA <del>ARIES</del>									29
PORTAGE BIGHT									30
ROUGH BAY									31
TANAGA ISLAND									32
THE DITCH									33
TRUNK POINT									34
VILLAGE REEF									35
									36
T-9931									37
BARNES POINT									38
BERING SEA									39
CAPE SUDAK									40
KANAGA SOUND									41
PENDANT POINT									42
TANAGA ISLAND									43
									44
									45

Names approved  
10-8-54  
A. J. G.



## PHOTOGRAMMETRIC OFFICE REVIEW

T-9927-31

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. ☒

41. Remarks (see attached sheet)

Supervisor, Review Section or Unit

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-9927 thru T-9931  
Topographic Maps  
10 November 1954

62. Comparison with Registered Topographic Surveys

T-6933, 1:5,000, 1943 (Planetable)  
T-6974b, 1:10,000, 1944 " "  
RS 426, Sheets 1, 2 and 3 of 6, 1:20,000 scale.  
RS 426 is a revision survey compiled without  
field inspection as a preliminary shoreline survey  
for boat sheet use on hydrographic survey operations.

T-9927 thru T-9931 supersede all of the above  
listed prior surveys.

63. Comparison with Maps of Other Agencies

The area covered by these maps is previously un-  
surveyed and no maps are available for comparative  
purposes other than reconnaissance maps of Garelol  
Island and Adak, Alaska. These latter maps are in-  
complete and are published by the U. S. Geological  
Survey at scale 1:250,000, dated 1951.

64. Comparison with Contemporary Hydrographic Surveys

H-6778	1:20,000	1943
6879	1:5,000	1943
6908	1:20,000	1933
6931	1:20,000	1943
7005	1:10,000	1944
8052	1:20,000	1953
8053	1:20,000	1953
8054	1:20,000	1953

839  
RMC  
Surveys T-9927 thru T-9931 are in agreement with  
the latest hydrographic surveys. The topographic  
surveys provided shoreline and foreshore features  
for the 1953 dated hydrographic surveys. Some adjust-  
ments were made to rock elevations above the sounding  
datum on the basis of field inspection data. Changes  
were generally limited to one or two feet and were  
noted in red on the map manuscript.

65. Comparison with Nautical Charts

8863	1:300,000, corrected to 1/14/52
9121	1:10,000 (inset) corrected to 8/25/52
9145	1:40,000, corrected to 8/13/51
9146	1:40,000, corrected to 8/27/51



65. Comparison with Nautical Charts (continued)

The maps and the charts are in general agreement only, the shoreline configuration being more detailed on the maps than on the charts. Form lines on the charts generally indicate higher elevations than are shown for the corresponding areas on the topographic maps.


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.


67. Control

The geographic position of the marked horizontal control station Beta, 1953, formerly a topographic station, was adjusted by Geodesy and it is now a 3rd order triangulation position.

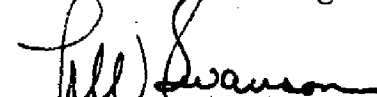
Reviewed by:

  
K. N. Maki 11/22/54

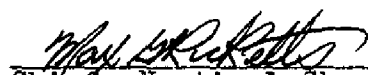
APPROVED BY:


  
L. C. Lande

Chief, Cartographic Branch  
Division of Photogrammetry

  
Chief, Division of  
Photogrammetry

26 Dec 1957

  
Chief, Nautical Chart Branch  
Division of Charts

  
Chief, Division of Coastal  
Surveys



## NAUTICAL CHARTS BRANCH

SURVEY NO. \_\_\_\_\_

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
9/27/54	9145	J. P. McGinnis	Before After Verification and Review Applied in field. T 9929, T 9930, T 9931. Verified after review. H/A Before After Verification and Review (Before Signatures)
11/18/58	8863	J. P. Walker	Before After Verification and Review T 9927-28-29-30-31
12/30/92	16467	Joseph Robinson	Before After Verification and Review T 9928, T 9929, T 9930, T 9931 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.