9242

Diag. Cht. No. 8802

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-8B (46) *Office No.* T-9242

LOCALITY

State ALASKA

General locality BRISTOL BAY AREA

Locality SUMMIT ISLAND

1947-48

CHIEF OF PARTY

A.N.Stewart, Chief of Field Party.
C.W.Clark, Portland Photogrammetric Office

LIBRARY & ARCHIVES

DATE May - 22 - 1953

8-1870-1 (1)

9242

DATA RECORD

T-9242

Project No. (II): Ph-8B(46) Quadrangle Name (IV): SUMMIT ISLAND

Field Office (II): Chief of Party: A.Newton Stewart

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Charles W.Clark
Washington, D.C. Louis J. Reed, Chief, Stereomapping Section

Instructions dated (II) (III): Copy filed in Division of Photogrammetry (IV) Office Files

II = 25 Apr 47 and 21 Apr 48
III = 19 Mar 48 and 4 Feb 49

Method of Compilation (III): Reading Plotter

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

Scale Factor (III): 1:1

Date received in Washington Office (IV): OCT 19 1951 Date reported to Nautical Chart Branch (IV): OCT 29 1951

Applied to Chart No. Date: Date registered (IV): 3-11-53

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

The difference between Unadjusted Datum and N.A. 1927 Datum is Lat. plus/~~minus~~ 9 m. and Long. ~~plus~~/minus 6 m.

Reference Station (III):

Lat.: Long.: ~~Adjusted~~ Unadjusted

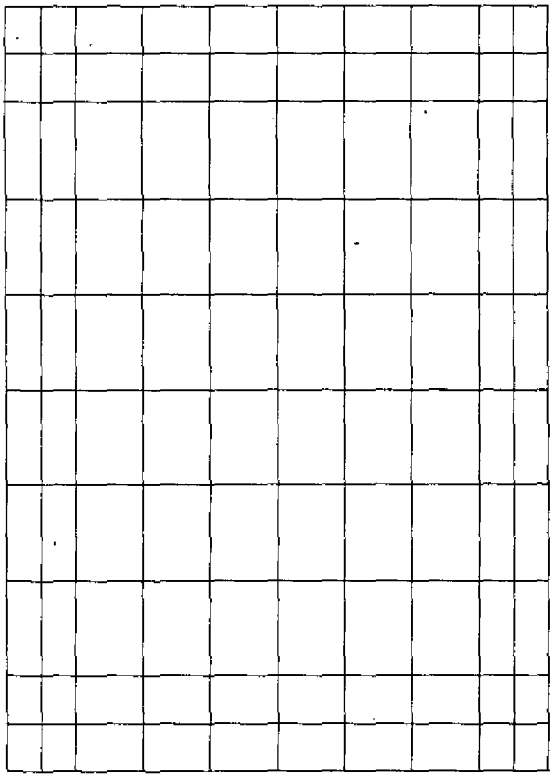
Plane Coordinates (IV): State: Zone:

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.

M-2618-12(4)



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

100% by Clarence E. Misfeldt on the Reading Plotter (model A) with Robert L. Sugden assisting as student operator.

DATA RECORD

Field Inspection by (II): A. Newton Stewart Date: 1947-1948

Planetable contouring by (II): None Date: ——

Completion Surveys by (II): None Date: ——

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

MHWL is dated 1947 since it was photo-identified during that year. It has been compiled on the Reading Plotter using this field identification as a guide.

Projection and Grids ruled by (IV): Theodore L. Janson on the Reading Ruling Machine Date: 18 Oct 50

Projection and Grids checked by (IV): Harland R. Cravat Date: 20 Oct 50

Control plotted by (III): C.C.Wiebe Date: 28 Dec 50

Control checked by (III): H.B.Elrod Date: 28 Dec 50

Radial Plot or Stereoscopic Control extension by (III): James L. Harris & Roy A.Davidson Date: 4 Jun 51

Stereoscopic Instrument ~~compilation~~ delineation (III): Planimetry and Contours Clarence E.Misfeldt Date: 25 Sep 51 Date:

Manuscript ~~delineated~~ compiled by (III): Henri Lucas Date: 16 Oct 51

Photogrammetric Office Review by (III): Louis J. Reed Date: 19 Oct 51

Elevations on Manuscript checked by (~~H~~ X) (III): Louis J. Reed Date: 19 Oct 51

M-2618-12(4)

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
23198C 23199A	1 Sep 48	13:05	20,000	~~8~~ ft above MLLW
28675 28676	13 Aug 50	clock stopped	20,000	unknown

Tide (III)

Ratio of Ranges	Mean Range	Spring Range
	15'	20'
	6'	10'

Reference Station: Nushagak Bay
Subordinate Station: *Black Rock, Walrus Islands
Subordinate Station:

Washington Office Review by (IV): Gordon B. Willey Date: ~~11-6~~ 6-11-53

Final Drafting by (IV): E. Hunter Date: 8-52

Drafting verified for reproduction by (IV): S. Dean Date: 8-28-52

Proof Edit by (IV): W.O. Hallin Date: 10-27-52

Land Area (Sq. Statute Miles) (III): 4 sq mi
Shoreline (More than 200 meters to opposite shore) (III): 13 miles
Shoreline (Less than 200 meters to opposite shore) (III): none
Control Leveling - Miles (II): none
Number of Triangulation Stations searched for (II): Recovered: Identified: One
Number of BMs searched for (II): none Recovered: Identified:
Number of Recoverable Photo Stations established (III): six
Number of Temporary Photo Hydro Stations established (III): twenty

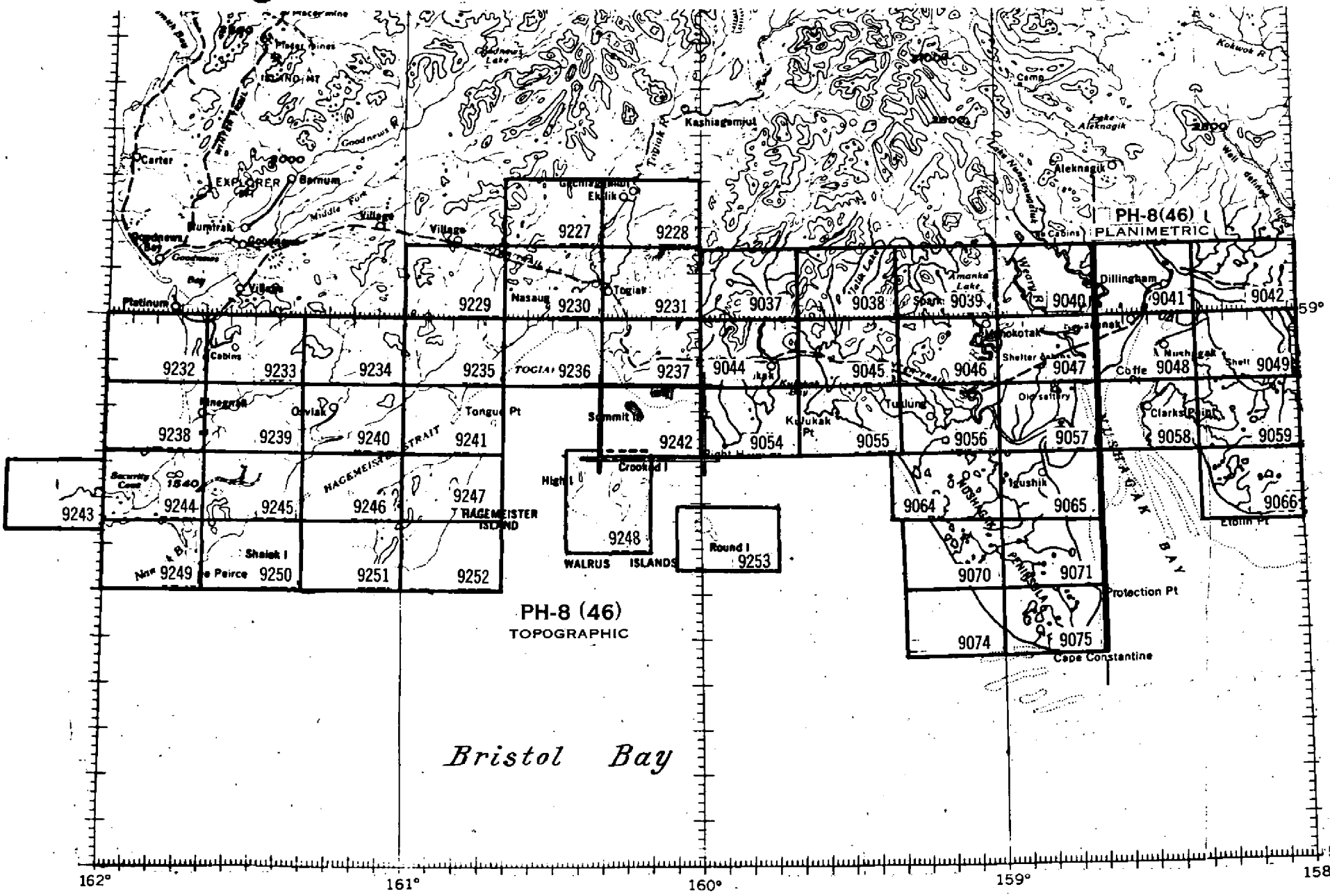
Remarks:

* 1951 predictions used for better tide value.

M-2618-12(4)

TOPOGRAPHIC MAPPING PROJECT PH-8 (46)

ALASKA, Vicinity of Bristol Bay



Summary to Accompany T-9242

Ph-8(46) is a topographic map project consisting of 45 maps extending from Nushagak Peninsula to Cape Newenham and north to Goodnews Bay, including the offshore islands, along the northern shore of Bristol Bay, Alaska. Ph-8(46)A consists of 23 planimetric maps covering the area from Egegik Bay to Nushagak Bay including Kvichak Bay, Alaska. Ph-8(46)B consists of ~~2 shoreline surveys~~. The hydrography has not been completed in the area of the topographic maps.

T-9242 covers Summit Island and the tip of the first peninsula northwest of Right Hand Point, extending from Latitude 58°-45' to 58°-52'-50" and from Longitude 160°-00' to 160°-20', at a scale of 1:20,000. Planimetry and contours were delineated on the Reading Plotter using photographs taken in 1948 and 1950. The field inspection, consisting of the identification of control, selection of topographic and hydrographic station sites, establishment of vertical control and partial shoreline inspection, was accomplished in 1947 and 1948.

A cloth-backed lithographic print of this map at the compilation scale and the descriptive report will be registered in the Bureau Archives. These Maps will not be published. The vinylite manuscript and a copy of the Descriptive Report will be filed in the Division of Photogrammetry.

FIELD INSPECTION REPORT

2-19:

Refer to project reports entitled:

a. PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

BRISTOL BAY, ALASKA

Project Ph-8(46) May to July 1948

A. Newton Stewart, Chief of Party

Library, No 172

b. PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

BRISTOL BAY?, ALASKA

Project Ph-8(46) May to Sept 1947

A. Newton Stewart, Chief of Party

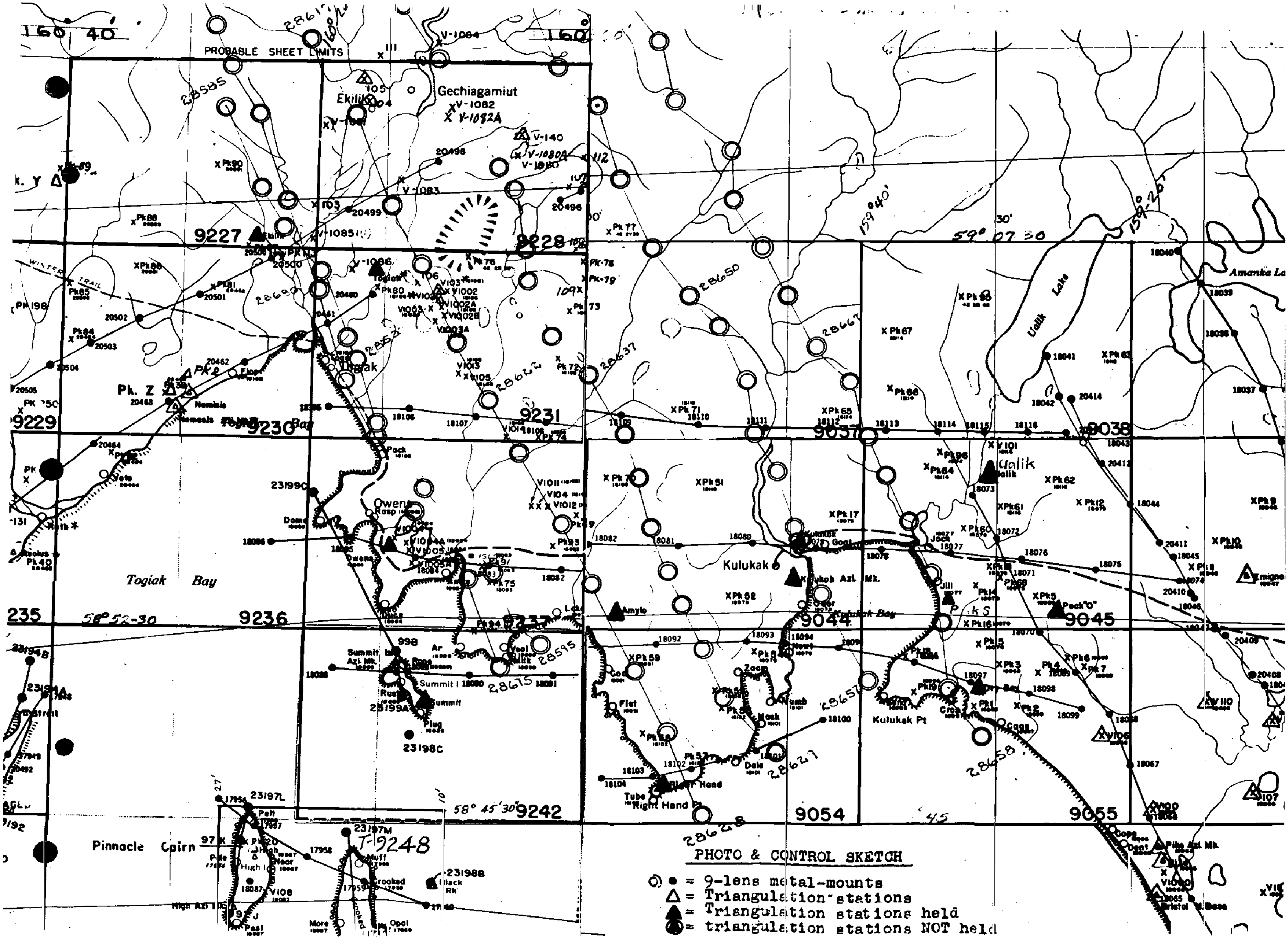
Library, No. 138

Reports filed in ~~Division of Photogrammetry general files~~ Library.

RADIAL PLOT REPORT

20-29:

See descriptive report to accompany manuscript T-9237 wherein the radial plot report covers the area of the quadrangle of this report as well.


PROBABLE SHEET LIMITS
Gechiagamiut
Ekilik
9227
9228
9229
9230
9231
9236
9242
T-9248
9037
9038
9044
9045
9054
9055
Togiak Bay
Kulukak
Kulukak Bay
Kulukak Pt
Ualik Lake
Amanka La
Pinnacle
Cairn
59° 07' 30
58° 52-30
58° 45' 30
PHOTO & CONTROL SKETCH
◎ ● = 9-lens metal-mounts
△ = Triangulation stations
▲ = Triangulation stations held
= triangulation stations NOT held

COMPILATION REPORT

31. Delineation:

All contours and cultural features have been delineated simultaneously on the Reading Plotter, model A. Photo coverage was complete and shoreline inspection was adequate. The land area within this quad has been completey mapped.

32. Control:

Horizontal control was not as adequate as desired; it is discussed in the Radial Plot report accompanying the full report on T-9237. The land area of this report, T-9242, is small and is a small portion of the plot area itself, and is considered to be adequately controlled.

Vertical control was also considered to be adequate. It was furnished primarilly by sea-level at the shoreline, but ~~the~~ peak elevations were also available for use.

33. Supplemental Data:

a. Plotting Instrument Photos (metal-mounted): 23198C, 23199A, 28675, and 28676.

b. Field Inspection Photos: 18089 and 18090.

c. Graphic Control Surveys: None

d. Hydrographic Surveys : None

e. Computation Reference: The Portland Photogrammetric Office compiled and bound into one 70-page volumn all their vertical control computations following the completion of Plot E. It is entitled: COMPUTATION & TABULATION OF VERTICAL CONTROL IN THE AREA OF RADIAL PLOT "E", Project Ph-8B, including T-9038, T-9044, T-9045, T-9054, T-9055, T-9228, T-9231, T-9237, and T-9242.

34 Contours and Drainage:

The photograph quality of the instrument photos was satisfactory for contouring use and no areas of questionable contours remain.

35 Shoreline and Alongshore Details:

Instrument photos were exposed at alower tide than the field inspection photos and for this reason the compiler was able to map a good many details that were under water to the field inspector. Most of the foul areas are instrument located.

36. Offshore Details:

Included in side-heading 35, above.

37. Landmarks and Aids:

None recommended by field party.

38. Control for Future Surveys:

a. Photo-hydro Stations:

A total of 20 such signal points have been selected by the field man and have been located on the map by the radial plot where they may be recognized by proper name and symbol. 17 of these stations are on Summit Island and the other 3 are on the mainland.

b. Photo-topo Stations:

Six have been positioned by the radial plot, three on Summit Island and three on the mainland opposite. They are shown in proper symbol and name. All six were field selected, marked, and photo-identified. Form 524 for all 6 stations on file in Div. Photogr. general files

39. Junctions:

Only the north edge of this quad has a land-match and the edge has been transferred to the quad to the north to assure a perfect junction when that quad, T-9237, is compiled in the near future.

40. Horizontal and Vertical Accuracy:

Horizontal accuracy is standard. All contours meet accuracy standards set for 50ft contouring.

46.& 47. Comparison with Existing Maps and Nautical Charts:

None exist.

48. Geographic Name List: See separate numbered page, following.

49. Notes for the Hydrographer: A separate unnumbered page follows.

50 Compilation Office Review: See T-2 form, following.

Submitted by:
Orvis N. Dalbey
Orvis N. Dalbey,
Cartographer-Photogrammetric

Approved and Forwarded by:
Louis J. Reed
Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

49: Notes for the Hydrographer:

(a) Photo Hydrographic Stations:

Signal No.	Photo No.	Description
12	18090	A rock outcrop at the top of the bluff fronting the beach. The station is about 85' above the beach.
13	18090	The face of the rock at the point.
14	18090	a 2'x 4' rock atop a rock ledge making out into a point and slanting on down into the water.
41	18089	On the W shore of the island, 2000' N of the S end. It is the high point of a large isolated rock just off the third point from the S end.
42	18089	3000' N of the S end of the island, on the W shore. It is just off the fourth projection from the S end. It is the highest point of an isolated mass of rock.
43	18089	On the W shore of the island, it is a 4'x 7' rock on the HWL just S and around the point from the S end of the beach.
44	18089	On the W shore at the end of the first jutting of rock 600' N of the N end of the beach. The station is the extreme end of the finger.
45	18089	On the W shore of the island near the center of the first cove N of the beach (same approx. size). It is the southerly of 2 pinnacles projecting about 18'.
46	18089	Off the W shore about 500' and just southerly from the mass of rock lying off the NW side of the island. It is a prominent isolated rock -- could be covered at high water.
47	18089	Off the NW side of the shore about 60', 1600' NE of the large mass offshore and 2100' SW from the elongation of the shore. SE and NW on the N end of the island. Station is a lone rock.

Signal No.	Photo No.	Description
48	18089	On the N end of the island, 2200' westerly from the small beach on the extreme end, it is an isolated rock 40' offshore.
49	18089	On the NE corner of the island, 900' easterly and S of the N end of the island (of the small beach there) it is an isolated rock just offshore.
50	18089	On the E shore of the island 1500' northerly from the N end of the northern of 2 beaches on the E side. It is the rock face of a finger of rock about 22' high.
51	18089	On the E shore of the island, near the center of the low ground in the center of the island. It is the biggest rock of the point seen to the southward from the N beach.
52	180 89	On the E shore of the island, 190' S of the N end of the southern of 2 beaches. It is a 4'x 4' boulder near the high water line.
53	18089	On the E shore of the island 1500' SE of the S end of the S beach. It is an isolated mass of rock 12' above HWL.
54	18089	On the E shore of the island about 4/5 of a mi. N of the S end. It is the s econd point N of the S end, very prominent.
55	18089	On the E shore of the island at about the S end. It is a prominent point on the SE corner.
56	18089	About 4/5 of a mi. from the S end of the island. It is a rocky knob on the highest part of a saddle. The saddle is between the 2 high parts of the island.
57	18089	On the SE corner of the island on the high ridge as it breaks rapidly downward. It is the southernmost rocky point.

(b) Recoverable Topographic Stations see item 38 b

Station	Photo	Station	Photo
APEX 1947	18090	ROPE 1947	18089
MILK 1947	18090	RUST 1947	18089
PLUG 1947	18089	VEAL 1947	18090

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9242

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 N

9. Plotting of sextant fixes N 10. Photogrammetric plot report ✓ 11. Detail points N

✓ = Checked
N = Non-existant

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. Read, Chief
Stereoscopic Mapping Section
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-9242
Topographic Map
11 June 1952

62. Comparison with Registered Topographic Surveys:

None.

63. Comparison with Maps of Other Agencies:

None.

64. Comparison with Contemporary Hydrographic Surveys:

None.

65. Comparison with Nautical Charts:

Chart 8802 1:1,023,188 Scale 17th Edition (1944) 51-6/11

No discrepancies are to be noted.

66. Adequacy of Manuscript:

This topographic map complies with Bureau standards and with project instructions.

Reviewed by:

G. B. Willey by KW

Gordon B. Willey

Approved:

S V Griffith
Chief, Review Section
Division of Photogrammetry

H C Johnson Jr
Chief, Nautical Chart Branch
Division of Charts

O S Reading
Chief, Div. of Photogrammetry

Earl O Heaton
Chief, Div. of Coastal Surveys

HORIZONTAL DATUM ADJUSTMENT

Bristol Bay, Alaska

The subject maps were radial plotted on unadjusted (Field) datum which was subsequently adjusted to the North American 1927 datum by the Division of Geodesy. The datum correction has been computed for each sheet, and stamped into the Descriptive Report on page 1, and on the manuscripts and registered cloth-backed copies near the title block. However, as the title block of each clothback sheet contains the note, "1927 North American Datum", it was necessary to stamp the word, "(Unadjusted)" beside this datum note in the title block of each sheet.

See the special report, Horizontal Control Datum, Ph-8(46), Ph-8A(46), and Ph-8B(46), filed with the Completion Report for the project for details and lists of the maps, reports, and registration copies marked with this adjustment. The following is a list of the maps in the projects:

Ph-8(46), TOPOGRAPHIC

T-9038 thru T-9040
9044 " 9047
9054 " 9057
9064,-9065,-9070
9071,-9074,-9075
9227 thru 9253

Ph-8A(46), PLANIMETRIC

T-9041 thru T-9043
9048 " 9053
9058 " 9063
9066 " 9069
9072,-9073
9076,-9078

Ph-8B(46), SHORELINE

T-8873 (E&W) and T-8874