

9436

9437

9438

9437

9438

9436

Daig. Cht. No. 9400.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TopographicField No. Ph-28 (47) Office No. T-9436
T-9437
T-9438

LOCALITY

State AlaskaGeneral locality Kotzebue SoundLocality Coastal Area North of CapeKrusenstern194

CHIEF OF PARTY

L.G. Taylor, Chief of Field PartyH.A. Paton, Baltimore Photo. OfficeE.J. Reed, Div. of Photo. Wash., D.C.

LIBRARY & ARCHIVES

DATE June 5, 1958

DATA RECORD

T -9436, 9437, 9438

Project No. (II): **Ph-28(47)** Quadrangle Name (IV): **T-9436 = KIVALINA LAGOON**
T-9437 = KIVALINA RIVER
T-9438 = ~~WULIK RIVER~~ AHVENUK MT
Field Office (II): **Kotzebue Sound, Alaska** Chief of Party: **Thorne G. Taylor**
Photogrammetric Office (III): **Baltimore, Md** Radial Plot: **Hubert A. Paton**
Washington, D.C. Officer-in-Charge: **Louis J. Reed, Chief,**
Stereo-Map Section
Instructions dated (II) (III): Copy filed in Division of
Photogrammetry (IV)
(II) = 21 Apr 48
(III) = 23 Oct 50

Method of Compilation (III): **Reading Plotter, model B**
Manuscript Scale (III): **20,000** Stereoscopic Plotting Instrument Scale (III): **20,000**
Scale Factor (III): **1:1**

Date received in Washington Office (IV): **MAR 28 1952** Date reported to Nautical Chart Branch (IV): **APR 1 1952**

Applied to Chart No. Date: Date registered (IV): **10 June 1952**

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): **NA 1927 (Unadjusted)** 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.: ~~XXADJUSTED~~
Unadjusted

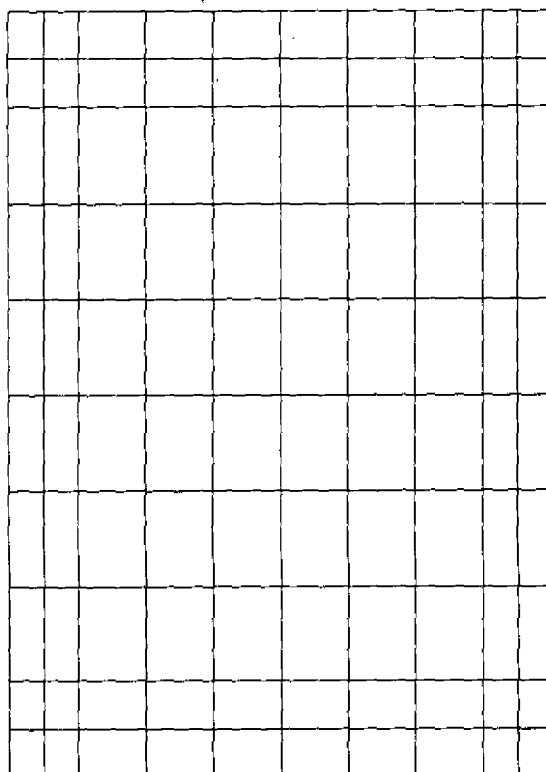
Plane Coordinates (IV): State: Zone:

Y= X=

MILITARY GRID = Universal Transverse Mercator, Zone 3.

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)

(M) (III)

100% by Louis Levin
and
Orvis N. Dalbey

DATA RECORD

Field Inspection by (II): H. R. Spies

Date: June - Sept. 1950

Planetable contouring by (II): None

Date:

Completion Surveys by (II): None

Date:

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

The MHWL is dated 1950; it was delineated on the plotting instrument guided by 1950 field identification of the shore-line on photographs.

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

Date: 2 Feb 51

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

Date: 3 Feb 51

Control plotted by (III): Frank J. Tarca

Date: 6 Aug 51

Control checked by (III): Ruth Hartley

Date: 16 Aug 51

Radial Plot of ~~Stereoscopic~~ Frank J. Tarca

Date: 31 Aug 51

~~Stereoscopic~~ by (III):

delineation by: Planimetry Louis Levin
Stereoscopic Instrument ~~operator~~ (III): and and
Contours Orvis N. Dalbey

Date: 6 Mar 52

compiled
Manuscript ~~delineation~~ by (III): John B. McDonald

Date: 26 Mar 52

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

Date: 28 Mar 52

Elevations on Manuscript Louis J. Reed
checked by (II) (III):

Date: 28 Mar 52

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

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
27619		1217 thru		
thru		1220		
27624		1222		
and	22 Jul 50	~~XXXX~~	1:20,000	none
27742		1458 thru		appreciable
thru		1500		tide
27747		1503		

Note: Mr Disney of Tides and Currents states (7 May 51) that no tide exists in this area, for all practical purposes.

L.J.R.

Tide (III)

Reference Station:
Subordinate Station:
Subordinate Station:

~~Icy Cape~~

Ratio of Ranges	Mean Range	diurnal
		~~Semidiurnal~~
		.61

Washington Office Review by (IV): B.J. Colner
F. Johnson T-9436

Final Drafting by (IV): R. HOPKINS - T-9438
J.H. Frazer T-9437

Date: 15 July 1953

Date: 6-1-56
May 31, 1956

Drafting verified for reproduction by (IV):

W.D. Hallin

Date: 7-24-56

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): See below under Remarks

Shoreline (More than 200 meters to opposite shore) (III): See below

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II):

Recovered:

Identified: Four

Number of BMs searched for (II): None

Recovered:

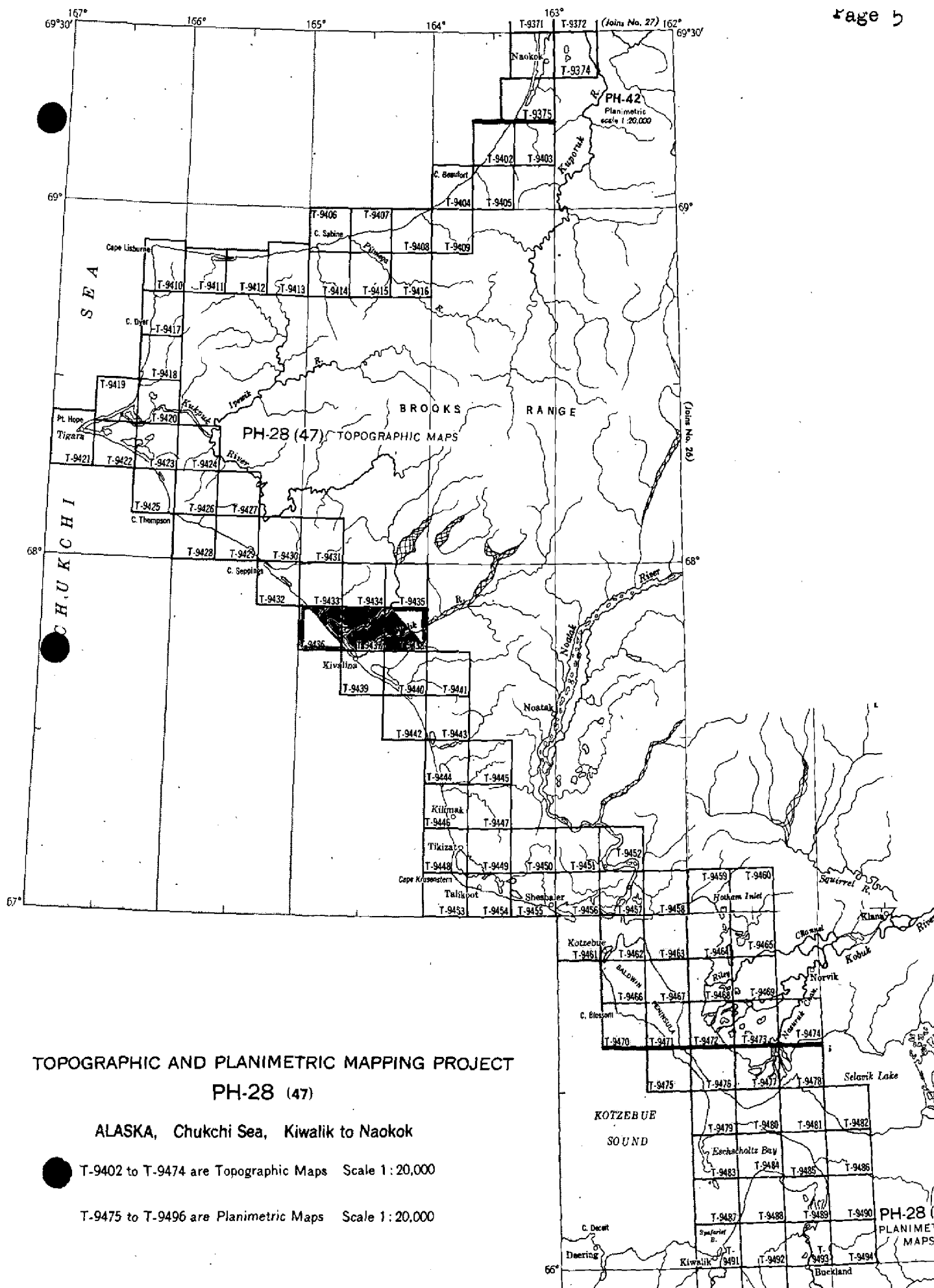
Identified:

Number of Recoverable Photo Stations established (III): Three

Number of Temporary Photo Hydro Stations established (III): None

Remarks:

	AREA	SHORE
T-9438 =	50 sq.mi.	None
T-9337 =	74 "	16 mi
T-9436 =	23 "	9 mi



TOPOGRAPHIC AND PLANIMETRIC MAPPING PROJECT PH-28 (47)

ALASKA, Chukchi Sea, Kiwalik to Naokok

T-9402 to T-9474 are Topographic Maps Scale 1:20,000

T-9475 to T-9496 are Planimetric Maps Scale 1:20,000

PH-28 (47)
PLANIMETRIC MAPS

Summary to Accompany T-9436 through T-9438

Ph-28(47) covers the eastern shore of the Chukchi Sea in Alaska and runs from Candle on the Kiwalik River on the south to Cape Beaufort to the north.

~~Seventy-three of the quadrangles (T-9402 to T-9474)~~
~~of this project, ^{consists of 94} are topographic surveys and twenty-two~~
~~(T-9402 to T-9434) are planimetric, and T-9436 through T-9496).~~

T-9436 through T-9438 are topographic surveys falling in about the middle of the project. These quadrangles contain the Asickpun, Kivalina, Oakpisoorook, Imigrook, and Wulik Rivers.

Each map manuscript consists of one sheet, $7\frac{1}{2}$ minutes in latitude and 20 minutes in longitude, at a scale of 1:20,000, with a contour interval of 50 feet. A cloth-backed lithographic print of each map at the compilation scale will be registered with the descriptive report in the Bureau Archives.

2-20:

See separate report entitled:

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

CAPE KRUSENSTERN TO POINT HOPE, ALASKA

Project Ph-28(47) June to Sep 1950

Lorne G. Taylor, Chief of Party

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

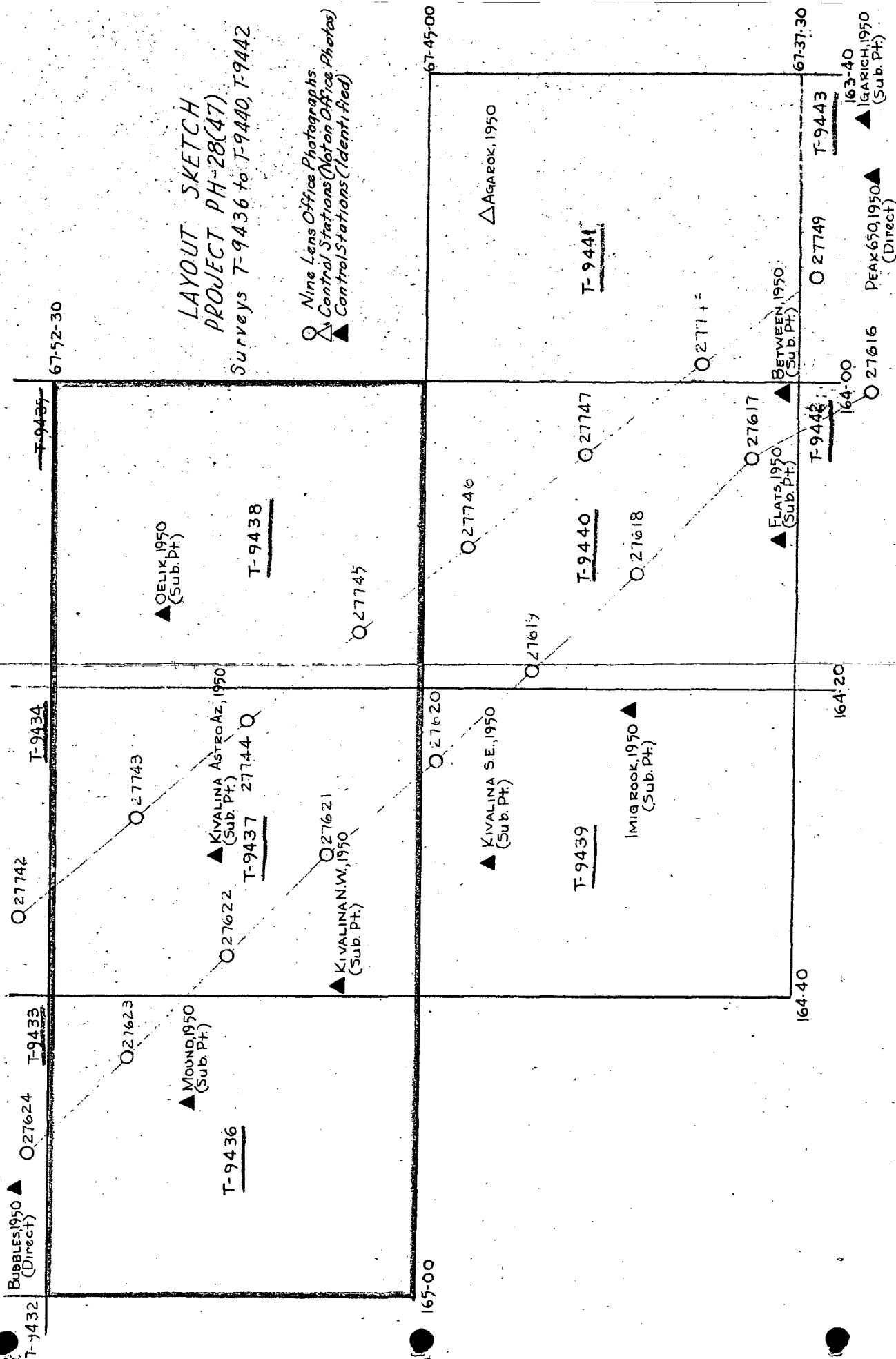
RADIAL PLOT REPORT

PLOT "D"

21-30

Plot D covers the areas of Surveys T-9436 thru T-9441 which includes the three quads of this report. The report for this plot may be found in the descriptive report which accompanies manuscripts T-9439 thru T-9443; it has not been repeated here. However, the LAYOUT SKETCH with that plot report has been reproduced and is included ~~herein~~^{on} ~~as~~ page 9, ~~next~~.

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer



COMPILATION REPORT31. Delineation:

Contours and cultural features were delineated simultaneously on the Reading Plotter, model "B".

The total land area has been compiled on quads T-9436 and T-9437, but on T-9438 the northeast half, approximately, is not completed due to lack of photograph coverage and control for it; the flight and control layouts did not plan to cover this area.

32. Control:

Horizontal control was not as densely located as normally required but, in general, was considered to be satisfactory for radial plot purposes. Reference-the radial plot report.

Vertical control was furnished by a combination of sea-level datum at the shoreline, plus elevations on inland peaks and lake surfaces determined by field observations. There was a shortage of vertical control in the area covered by the inland flight, but this was overcome by extending verticals across a few models of the inland flight while holding to the shore flight plus existing elevations.

33. Supplemental Data:

a. Graphic control surveys: None

b. Hydrographic Surveys: None

c. Plotting Instrument Photos (metal-mounts):

27619 thru 27624, and 27742 thru 27747.

d. Field Inspection Photos:

20688, 89, 90, 91, 925, 26, 27, 28, 975, and 20978.

e. Vertical Control Computations: See separate report compiled by the B'more Office following completion of the radial plot, entitled, "Tabulation of Elevations and Computation of Elevations by Map Manuscripts for Vertical Control Stations in the Area of Map Manuscripts T9434 and T-9436 thru T-9441".

34. Contours and Drainage:

Photograph quality was very good for contouring use and no areas of questionable contours remain.

35. Shoreline and Alongshore Details:

Shoreline inspection was adequate, in so far as it was useful. The inspection was made on 1947 photographs at a scale of 1:30,000 and therefore difficult to transfer to the 1:20,000 scale manuscripts. But the main difficulty was this; the detailing was done using 1950 photos, and because of the changeable nature of the sandy shoreline and flat muddy lagoon areas inland, the features near sealevel were definitely altered in the three years lapse of time. The instrument operators noted this while using this field inspection during compilation, but were convinced that changes had taken place, and therefore they delineated exactly as they saw it. This applies to approximate MLW's and occasional sections of shoreline, and the instrument delineation has been shown on the manuscripts since they to/are subject to change but are more up-to-date at this time.

36. Offshore Details:

None exist.

37. Landmarks and Aids:

None exist and none were recommended by the field party.

38. Control for Future Surveys:

a. Photo-hydro Stations: None.

b. Photo-Topo Stations:

Three such stations were selected, marked, and identified on field pictures by the field party. They have been positioned by the radial plot and may be found on the manuscripts in proper name and symbol. CALF 1950 and EXIT 1950 are on T-9436, and BABE 1950 is located on T-9437.

39. Junctions:

All junctions are in agreement since all adjoining manuscripts that exist have been compiled simultaneously with these three sheets. No quads exist to the west and south of T-9436 since that area is all ocean, and none exist to the north and east of T-9438 since the compilation did not reach that far inland.

40. Horizontal and Vertical Accuracy:

These maps are considered to meet national map accuracy standards in both respects. All contours meet the standards set for a 50ft interval; the 25ft contour is thought to be more accurate due to its nearness to a very well defined shoreline and sea-level.

46. Comparison with Existing Maps:

ALASKA RECONNAISSANCE TOPOGRAPHIC SERIES SECOND
JUDICIAL DIVISION, NOATAK, ALASKA, 1:250,000, USGS,
Edition of 1951.

47. Comparison with Nautical Charts:

- a. ARCTIC COAST, Alaska, NO. 9400, 1:1,587,870, May 1946
6th Edition, last correction date of 27 Nov 50.
- b. Provisional Chart, CAPE PRINCE OF WALES TO POINT
BORROW, CHUCKCHI SEA, Alaska-Arctic Coast, No 9402,
1:750,000, May 1950, 1st Edition.

48. Geographic Name List:

See separate numbered page, following.

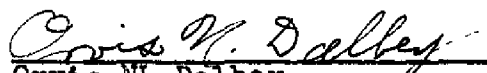
49. Notes for the Hydrographer:

See separate unnumbered page, following.

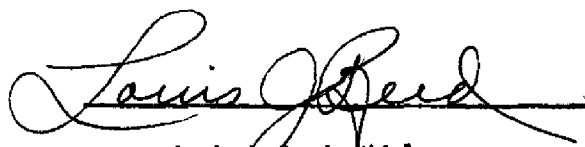
50. Compilation Office Review:

See T-2 form, numbered page, following.

Submitted by:


Orvis N. Dalbey,
Cartographer-Photogrammetric

Approved and Forwarded by:


Louis L. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

Review Report T-9436 through T-9438
Topographic Maps
July 15, 1953

62. Comparison with Registered Topographic Surveys.- None

63. Comparison with Maps of other Agencies.-

USGS Alaska Map, Noatak 1:250,000 1951 edition

Comparison not satisfactory because of scale difference.

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

9400	1:1,587,870	June 1950
9402	1:750,000	May 1950

Comparison not possible with these charts because of scale difference.

66. Adequacy of Results and Future Surveys.- These maps comply with project instructions and are adequate as bases for hydrographic surveys and the construction of nautical charts.

Reviewed by:

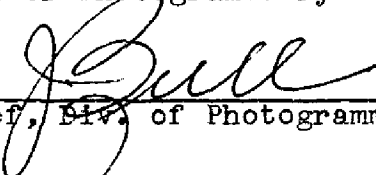


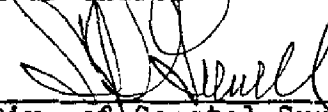
B. J. Colner

APPROVED


Chief, Review Branch
Div. of Photogrammetry


Chief, Nautical Chart Branch
Division of Charts


Chief, Div. of Photogrammetry


Chief, Div. of Coastal Surveys

49: Notes for the Hydrographer:

a. Photo-topo stations:

T-9436

CALF 1950--on photo 20589-- see 524 card
EXIT 1950-- " 20590 "

T-9437

BABE 1950--on photo 20588--see 524 card

T-9438

None

b. Photo-hydro stations:

None

PHOTOGRAMMETRIC OFFICE REVIEW

T-9436-37-38

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 Section
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: