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 Topographic

Field No. Ph-28 (47) Office No. T-9436 T-9437 T-9438

LOCALITY

State Alaska

General locality Kotzebue Sound

Locality Coastal Area North of Cape Krusenstern

194

CHIEF OF PARTY

L.G.Taylor, Chief of Field Party
H.A.Paton, Baltimore Photo. Office
L.J.Reed, Div. of Photo. Wash.,D.C.

LIBRARY & ARCHIVES

DATE June 5, 1958

B-1870-1 (1)

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
Washington, D.C.

Officer-in-Charge: Radial Plot: Hubert A.Paton
Compilation: Louis J.Reed, Chief, Stereo-Map Section

Copy filed in Division of Photogrammetry (IV)

Instructions dated (II) (III):

(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 1957

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.: ~~XXXXXXXX~~ Unadjusted

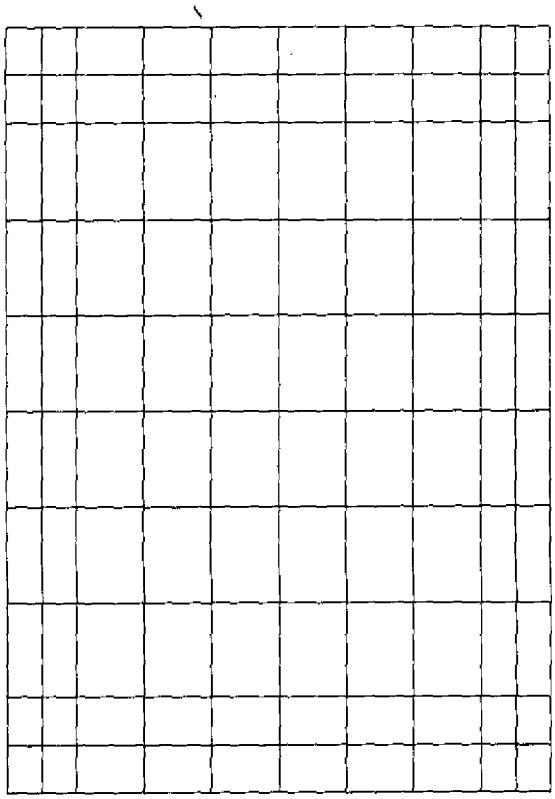
Plane Coordinates (IV): State: Zone:

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)
(X) (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 date and method of location):

The MHWL is dated 1950; it was delineated on the plotting instrument guided by 1950 field identification of the shoreline 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. Tarcza Date: 6 Aug 51

Control checked by (III): Ruth Hartley Date: 16 Aug 51

Radial Plot ~~compilation~~ by (III): Frank J. Tarcza Date: 31 Aug 51

Stereoscopic Instrument ~~compilation~~ (III): delineation by: Planimetry and Contours Louis Levin and Orvis N. Dalbey Date: 6 Mar 52 Date:

Manuscript ~~drafted~~ compiled by (III): John B. McDonald Date: 26 Mar 52

Photogrammetric Office Review by (III): Louis J. Reed Date: 28 Mar 52

Elevations on Manuscript checked by (III): Louis J. Reed Date: 28 Mar 52

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
27619 thru 27624 and 27742 thru 27747	22 Jul 50	1217 thru ~~12:20~~ 1222 ~~XXXX~~ 1458 thru ~~15:00~~ 1503	1:20,000	none appreciable tide

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)

Ratio of Ranges	Mean Range	~~Spring~~ diurnal Range
		~~.6'~~

Reference Station: ~~Icy Cape~~

Subordinate Station:

Subordinate Station:

Washington Office Review by (IV): B. J. Colner Date: 15 July 1953

F. Johnson T-9436 6-1-56

Final Drafting by (IV): R. HOPKINS - T-9438 Date: May 31, 1956

J.H. Frasier T-9437 5-17-56

Drafting verified for reproduction by (IV): W.O. 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: ~~3~~ Four

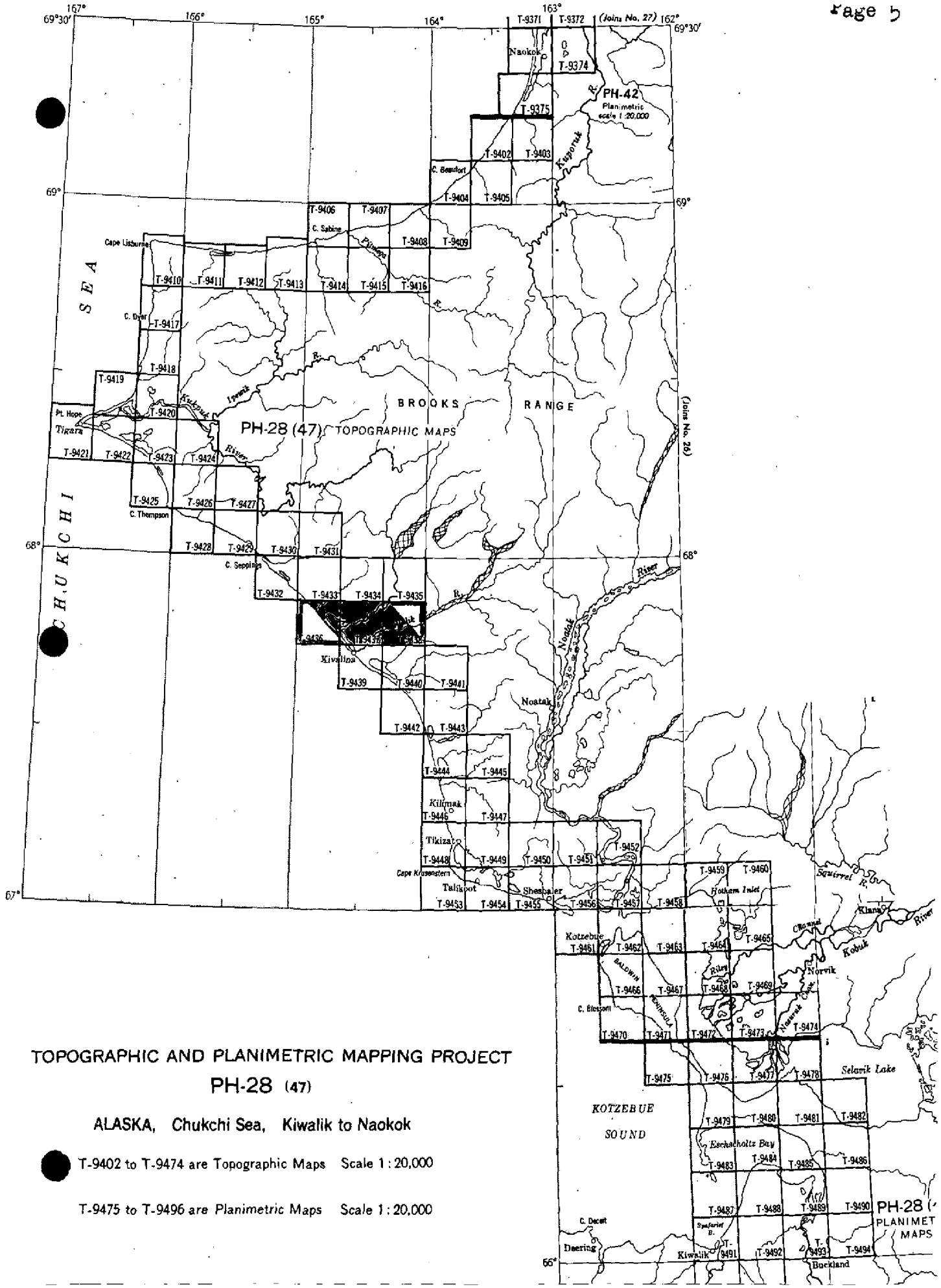
Number of BMs searched for (II): None Recovered: Identified:

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

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 topographic surveys ~~are~~ ~~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, 7½ 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

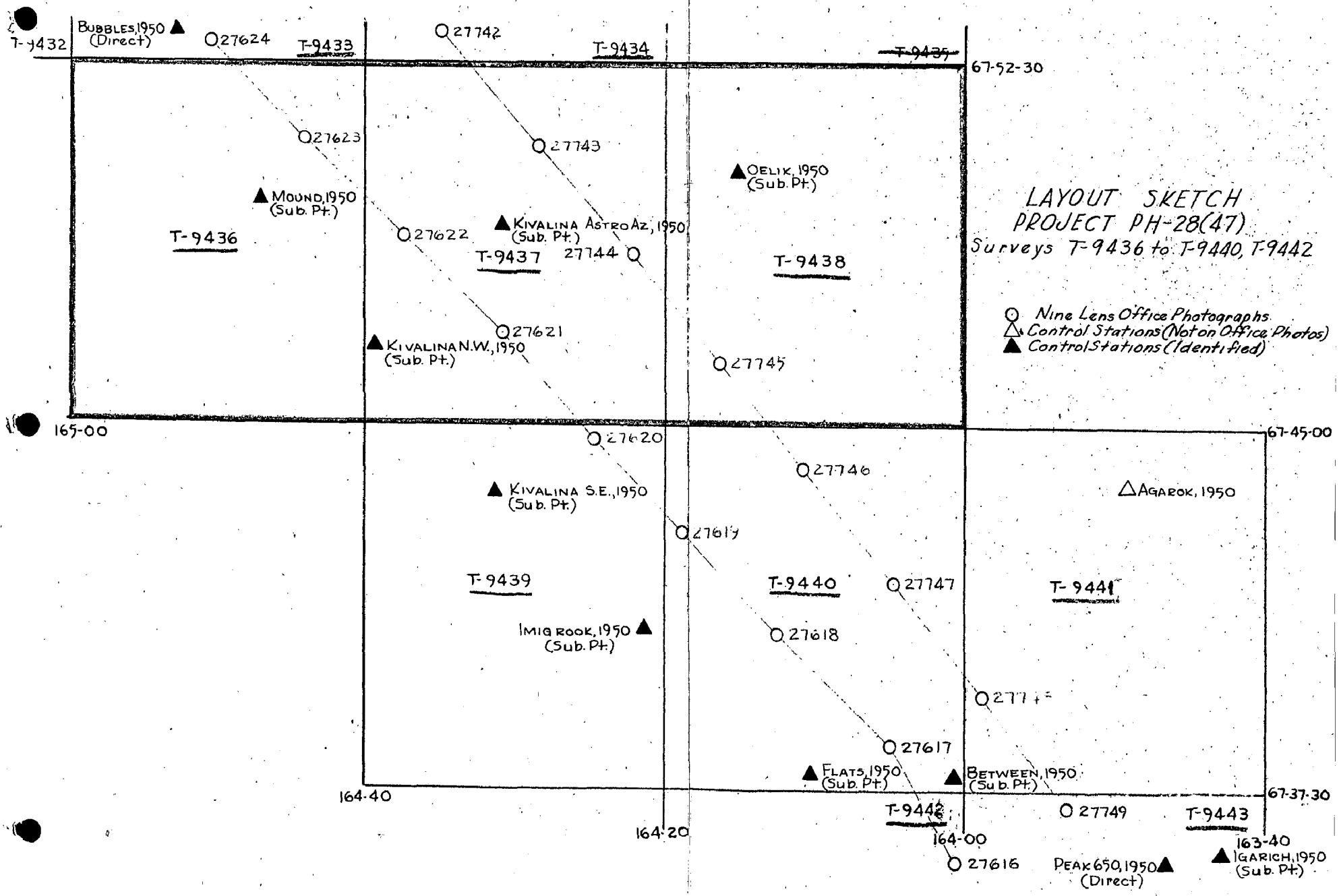
RADIAL PLOT REPORT

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


LAYOUT SKETCH
PROJECT PH-28(47)
Surveys T-9436 to T-9440, T-9442
Nine Lens Office Photographs
Control Stations (Not on Office Photos)
Control Stations (Identified)
T-9432
T-9433
T-9434
T-9435
T-9436
T-9437
T-9438
T-9439
T-9440
T-9441
T-9442
T-9443
Bubbles, 1950 (Direct)
Mound, 1950 (Sub. Pt.)
Kivalina Astro Az, 1950 (Sub. Pt.)
Kivalina N.W., 1950 (Sub. Pt.)
Kivalina S.E., 1950 (Sub. Pt.)
Imig Rook, 1950 (Sub. Pt.)
Oelik, 1950 (Sub. Pt.)
Agarok, 1950
Flats, 1950 (Sub. Pt.)
Between, 1950 (Sub. Pt.)
Peak 650, 1950 (Direct)
Igarich, 1950 (Sub. Pt.)
27624
27742
27623
27743
27622
27744
27621
27745
27620
27746
27619
27747
27618
27617
27749
27616
67-52-30
67-45-00
67-37-30
165-00
164-40
164-20
164-00
163-40

COMPILATION REPORT

31. 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 densly 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 definately 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 MLLW'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 JUDICAL 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

Orvis N. Dalbey,
Cartographer-Photogrammetric

Approved and Forwarded by:

Louis J. Reed

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

GEOGRAPHIC NAMES

Survey No.
T-9436
T-9437
T-9438

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-9436										1
ARCTIC OCEAN	Do not use in addition to Chukchi sea.									2
ASICKPUN MT										3
ASICKPUN RIVER										4
CHUKCHI SEA										5
KIVALINA LAGOON										6
KIVALINA RIVER										7
OAKPISOOROOK RIVER										8
										9
T-9437										10
ITTIVYAK PASS	Company Mountain									11
KISIMEOAKTOOK MT										12
KIVALINA LAGOON										13
KIVALINA RIVER										14
SIKOUCHEK MT										15
WULIK RIVER										16
										17
T-9438										18
AHVENUK MT										19
KILLI MT										20
KIVALINA RIVER										21
IMIGROOK RIVER										22
ITTIVYAK PASS										23
WULIK RIVER										24
					Names approved 7-15-53 L. Heck					25
										26
										27

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

L C Lando
Chief, Review Branch
Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

Act 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

Form T-2

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 N 8. Bench marks N
9. Plotting of sextant fixes N 10. Photogrammetric plot report ✓ 11. Detail points N

✓ = checked
N = non-existent

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line ✓ 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 ✓ 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

Louis J. Reed
Supervisor, Review Section or Unit

Louis J. Reed, 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