9453 9454 9455
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9456 9457

Diag. 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-9453 thru T-9457

LOCALITY

State Alaska

General locality Kotzebue Sound

Locality Cape Krusenstern

194 50

CHIEF OF PARTY

L. G. Taylor, Chief of Field Party
H. A. Paton, Chief B'more Photo.Off.
~~L.J.Reed, Div. of Photo.,Wash.,D.C.~~

LIBRARY & ARCHIVES

DATE August 20, 1957

B-1870-1 (1)

DATA RECORD

T-9453 thru T-9457

T-9453 = CAPE KRUSENSTERN
T-9454 = TOOKROOK RIVER
T-9455 = AUKOOLAK LAGOON
T-9456 = SHESUALEK VILLAGE
T-9457 = KINUK ISLAND

Project No. (II): Ph-28(47) Quadrangle Name (IV):

Field Office (II): Kotzebue Sound, Alaska Chief of Party: Lorne G. Taylor

Photogrammetric Office (III): Baltimore, Md. Washington, D.C. Officer-in-Charge: Hubert A. Paton Louis J. Reed, Chief, Stereoscopic Mapping Sec.

Instructions dated (II) (III):

(II) = 21 Apr 48
(III) = 23 Oct 50

Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): Reading Plotters, both A and B

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) AUG 28 1951 Date reported to Nautical Chart Branch (IV): AUG 30 1951

Applied to Chart No. Date: Date registered (IV): 26 April 1951

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

Geographic Datum (III): NA 1927 (Readjusted) 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 ~~Unadjusted~~

Plane Coordinates (IV): State: Zone:

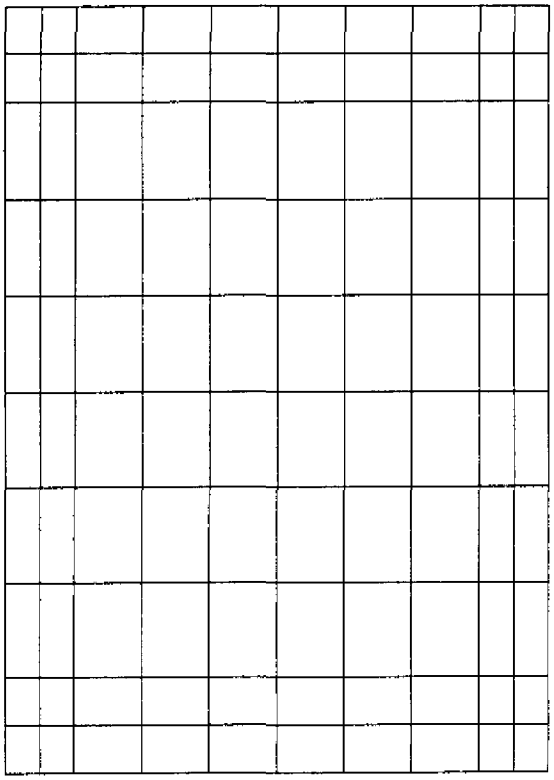
Y= X=

MILITARY GRID: Universal Transverse Mercator, Zone No.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.

M-2618-12(4)



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

T-9453 and T-9454 delineated by Clarence E. Misfeldt

T-9455, T-9456 and T-9457 delineated by Louis Levin

DATA RECORD

Field Inspection by (II): Lorne G. Taylor Date: 1950

Planetable contouring by (II): None Date:

Completion Surveys by (II): None Date:

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

MHW was delineated on the plotting instruments guided by 1948 (small amount) and 1950 field location of the shoreline.

Projection and Grids ruled by (IV): Theodore L. Janson (on the ruling machine) Date: 29 Nov 50

Projection and Grids checked by (IV): Howard D. Wolfe Date: 5 Dec 50

Control plotted by (III): John C. Richter Date: 22 Dec 50

Control checked by (III): Frank J. Tarcza Date: 22 Dec 50

Radial Plot ~~or Stereoscopic Control extension~~ by (III): Frank J. Tarcza Date: 19 Feb 51

Stereoscopic Instrument delineation by ~~[redacted]~~ (III): Planimetry and Contours Clarence E. Misfeldt and Louis Levin Date: 20 Jul 51

Manuscript ~~delineated~~ compiled by (III): John B. McDonald and Frank J. Lesslie Date: 6 Aug 51

Photogrammetric Office Review by (III): Louis J. Reed Date: 10 Aug 51

Elevations on Manuscript checked by ~~(O)~~ (III): Louis J. Reed Date: 10 Aug 51

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
27550 thru 27579	22 Jul 50	~~11:15~~ 1050 thru 1123	20,000	~~none~~ no appreciable tide

NOTE: Mr Disney of Tides and Currents states (7May 51) that for all practical purposes no tide exists in This Area.

LJR

Tide (III) diurnal

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

Reference Station: ~~Icy Cape~~

Subordinate Station:

Subordinate Station:

Washington Office Review by (IV): Date:

Final Drafting by (IV): T-9457 John H. Frazier T-9456 F. Johnson H-5-56 Date: April 4, 1956
T-9453 R.A. Hildebrand Apr.
T-9455 R.A. Hildebrand Mar. 27 1956
T-9454 P. Lach

Drafting verified for reproduction by (IV): W.O. Hallin Date: 3-27-56 6-8-56

Proof Edit by (IV): Date:

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

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

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

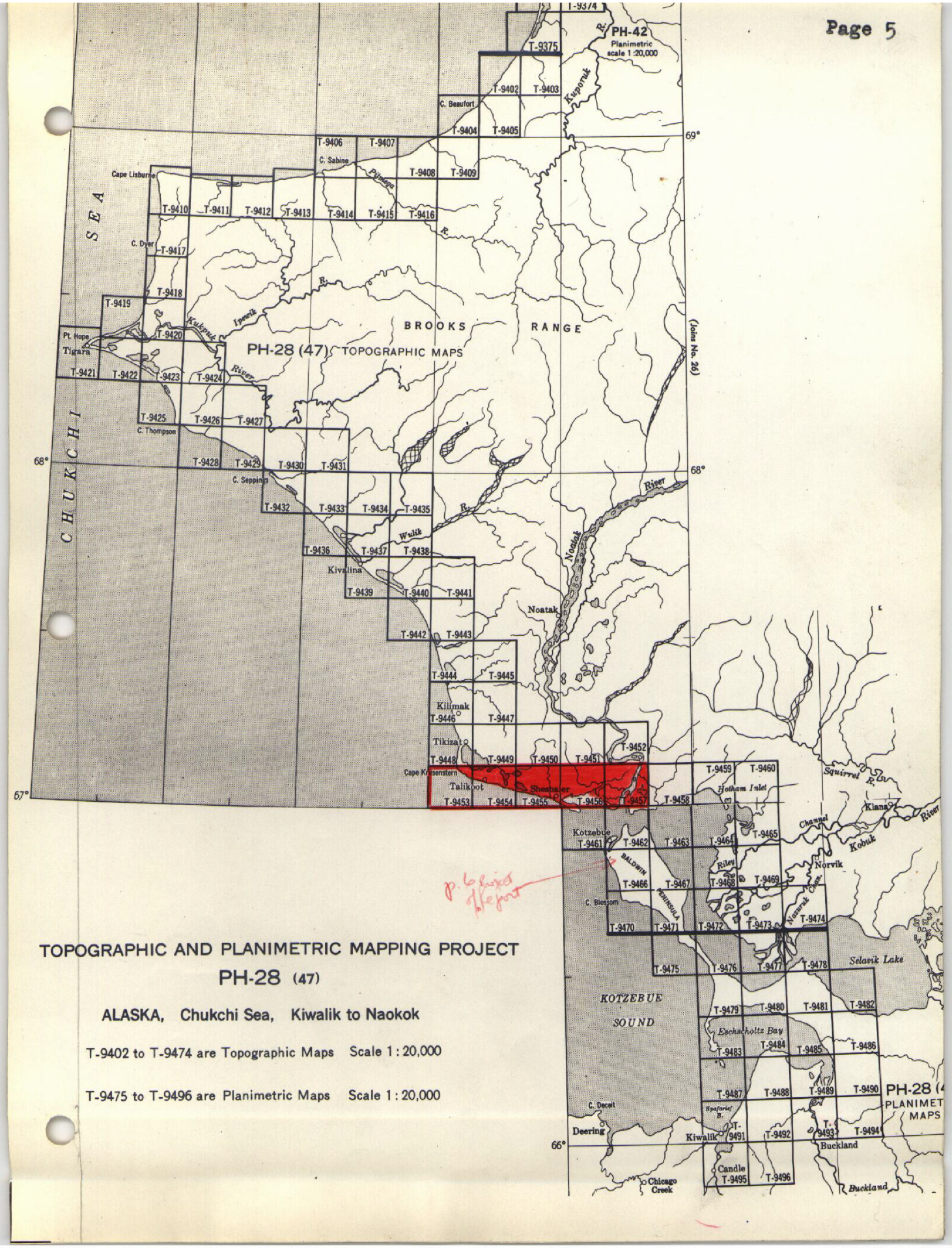
Number of Recoverable Photo Stations established (III): seven

Number of Temporary Photo Hydro Stations established (III): two

Remarks:

	AREA	SHORELINE
T-9453 =	2.29 mi	
T-9454 =	25 " "	2.5 Mile
T-9455 =	50 " "	9.5 "
T-9456 =	54 " "	9.5 "
T-9457 =	77 " "	55 "
		126 "

M-2618-12(4)



p. 6 fixed Teleport

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-9453 through T-9457

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 9474) of~~ This project consists of 94 topographic surveys ~~and twenty-two (T-9475 to 9496) are planimetric.~~ (T9402 to T9434 incl. and T-9436 to T-9496 incl.).

T-9453 through T-9457 are topographic surveys of the shore north of Kotzebue Sound extending from Cape Krusenstern on the west to the mouth of the Noatak River on the east.

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~~ cronar print of each map at the compilation scale will be registered with the descriptive report in the Bureau Archives.

FIELD INSPECTION REPORT

2-20: See separate reports entitled as follows:

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

KOTZEBUE SOUND, ALASKA

Project Ph-28(47) July to Sept 1948

A.Newton Stewart, Chief of Party

and

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

CAPE KRUSENSTERN TO POINT HOPE, ALASKA

Project Ph-28(47) June to Sept 1950

Lorne G. Taylor, Chief of Party

PHOTOGRAMMETRIC PLOT REPORT

PROJECT PH-28(47)

SURVEYS T-9448 to T-9457, inclusive

T-9461 and T-9462

21. AREA COVERED

This radial plot covers the areas of Surveys T-9448 to T-9451, incl., T-9453 to T-9456, incl., and T-9461. Three other surveys on the east, T-9452, T-9457, and T-9461, were partially done in a previous radial plot. They were completed in this radial plot and will be considered as a part of the plot in this report. All are topographic surveys situated along the shore of Kotzebue Sound from Noatak River to Cape Krusenstern.

22. METHOD - RADIAL PLOT

Map Manuscripts: Vinylite sheets, with polyconic projections and Universal Transverse Mercator grids, at a scale of 1:20,000, were furnished by the Washington Office. The radial plot was constructed on the map projection sheets and no base sheets were required.

All control stations and substitute stations were plotted using beam compass and meter bar.

A sketch showing the layout of the these surveys and the distribution of control and photograph centers is attached to this report.

Photographs

All photographs used are nine-lens, metal-mounted photographs, scale 1:20,000. Forty-three photographs were used in this radial plot. They are numbered as follows:

27551 to 27564 inclusive
27567 to 27578 inclusive
27595 to 27605 inclusive
27608 to 27610 inclusive
27755 to 27757 inclusive

The symbols used on the photographs were given in special instructions for all radial plots with nine-lens photographs which will be used later with the Reading plotters.

Templets

Vinylite templets were made from all photographs using a master templet to adjust for errors due to chamber displacements. Radial lines were scratched on the templets with a sharp needle point and the scratch filled in with china marking pencils. Red was used for all shoreline (rectification) pass points and all other radial lines are in black.

Closure and adjustment to control

The radial plot was constructed directly on the map manuscripts. A preliminary plot was run to determine whether there were any badly tilted photographs. The relative amount of tilt was noted by observing the displacement of image points, represented by red dots on the templets, of shoreline points and points of known elevation. Three photographs were apparently tilted considerably; Nos. 27561, 27575 and 27609. Two of them could be bypassed in the final plot but No. 27575 had to be used. The two were placed on top of the completed plot so that the positions of all points could be pricked and circled thereon.

The final plot was started at the eastern end of this area where points had been established in a previous radial plot making this merely an extension of the first plot. It was necessary to disregard PEAKS NO3. 321 and 322 in order to hold other control. It was in this area that the tilted photograph 27575 is located. Considerable adjustment was necessary, particularly with the most northerly flight, because no other control was available in the immediate vicinity. The western part of the radial plot offered no problem and control was held.

Transfer of points

The position of all centers, pass points and control were pricked on the top templets and circled with 3 mm circles. The positions were established on the remaining templets and map manuscripts by drilling down through with a small (.01 inch) jeweler's drill. All points were circled on each templet before it was removed.

23. ADEQUACY OF CONTROL

With the exception of Survey T-9452, control was adequate for a satisfactory radial plot. Photography did not reach NOATAK, 1949 and with the bad positions for PEAK 321, 1948 and PEAK 322, 1948, the radial plot may be a little weak in this survey and also in Survey T-9451. ~~in Survey T-9451.~~ Since the northern side of the most northerly flight is uncontrolled, many positions near the edge of photography are marked with green circles although they are believed to be within the desired accuracy.

Three horizontal control stations could not be held in the radial plot:

The radially-plotted position for PEAK 321, 1948 falls 3.5 mm southwest from the geographic position and the radially-plotted position for PEAK 322, 1948 falls 3.0 mm west from the geographic position. Both of these have "no check" positions, being intersected from SHESUALEK, 1949 and NOATAK, 1949. Both peaks are between the two occupied stations, so that weak angles of intersection are formed. The geographic position for PEAK 322, 1948 falls on the side of the peak. There is an almost flat area at PEAK 321, 1949 and it is possible to prick a point near the true position on the rounded top of the mountain. However, a check was obtained on the radially-plotted positions. When observing vertical angles to the two peaks from DELTA, 1949, a check horizontal angle was turned for the purpose of field identification. With a protractor this angle was turned on the map manuscripts and found to be nearer the radially-plotted positions in both cases. Since DELTA, 1949 was not an occupied station, no observation could be used in computation by Division of Geodesy.

The radially plotted position for SUB.PT. FIRST, 1950, falls 0.6 mm southwest from the geographic position. It was possible to prick the station direct from identification on K-20 photograph and this was held in the radial plot. Also on this small field photograph there appeared a small "tongue" on the pond extending northward. This was not apparent on the field photograph and the corner of the pond was pricked. The sketch on the pricking card was inadequate for determining the correct point. The true position falls at the north end of the "tongue" of the pond and field pricking is in error.

24. SUPPLEMENTAL DATA

No graphic control surveys were used.

25. PHOTOGRAPHY

Photographic coverage was adequate for all of the surveys except the northern areas of Surveys T-9451 and T-9452. The definition of the photographs was good. Many of the photographs in the two northerly flights had scattered clouds which made peak identification more difficult, and some peaks are pricked on only two photographs. No tilt determination was made but at least three photographs showed evidence of tilt, Nos. 27575, 27561, and 27609. The latter two could be bypassed and placed on top but it was necessary to use 27575. With considerable adjustment, it was found possible to use it without correction. As noted in the previous radial plot report, Chamber No. 8 is weak in most photographs and this was considered when laying the plot. Chamber No. 3 had one collimation mark missing on all photographs of the northerly flight and one of the two flights running northwest on Survey T-9449, but this did not seem to introduce any serious errors in the radial plot.

26. VERTICAL CONTROL

During the computations of elevations for peaks following the radial plot, several discrepancies were found. The single horizontal angles, observed for identification purposes in the field, were turned with a protractor on the map manuscripts to verify the identification. The following discrepancies were found:

T9452

At PEAK 321, 1948 and PEAK 322, 1948, radially plotted positions were established, as previously mentioned. The elevations of these were recomputed using the new positions and both checked, within one meter, the elevation furnished.

PEAK 316 (Survey T-9452) - The two observations gave elevations with an error of only 3.5 meters. However, the horizontal angles did not check the plotted position and indicated another point on the rounded peak may have been observed in the field. This peak is outside of the survey limits and the elevation should be considered weak.

PEAK 330 (Survey T-9451) - The three elevations computed checked within 5 meters. When horizontal angles were turned, they indicated that a point about 6 mm southwest of the photogrammetric position was observed by the

field party. This peak is covered by clouds on one photograph and is pricked on two photographs near the edges. This made it difficult to prick with sufficient accuracy and the elevation and position must be considered rather inaccurate.

PEAK 356 (Survey T-9451) - The two observations given did not check in elevation. Horizontal angles indicated another peak to the north may have been observed, but it was off the office photographs.

PEAK 361 and PEAK 362 (Survey T-9450) - The elevations of these did not check, and the reasons could not be established It is found that one observation on PEAK 361, from V-211 is incorrect and probably on another peak. It is possible that the peaks have been misidentified from station BUTTE, 1949.

PEAK 575 (Survey T-9457). The two observations gave elevations which did not check. There is no doubt about the identification. This peak should be rejected and does not appear necessary. If desired, the one correct elevation, of the two computed, could be determined with Reading plotter.

PEAK 559. (Survey T-9450) - Although six different observations were computed, no two elevations were found to check. It was apparently the wrong peak. But when horizontal angles were turned it was also apparent that more than one peak was observed by the field party. In attempting to re-identify the peak, there were several possible locations at intersections of horizontal angles. Only one of these was near a peak and this peak was pricked and located. The elevations from four stations checked within ½ two meters. This peak was marked PEAK 559 (OFFICE) and is about 900 meters southwest from the original identified peak.

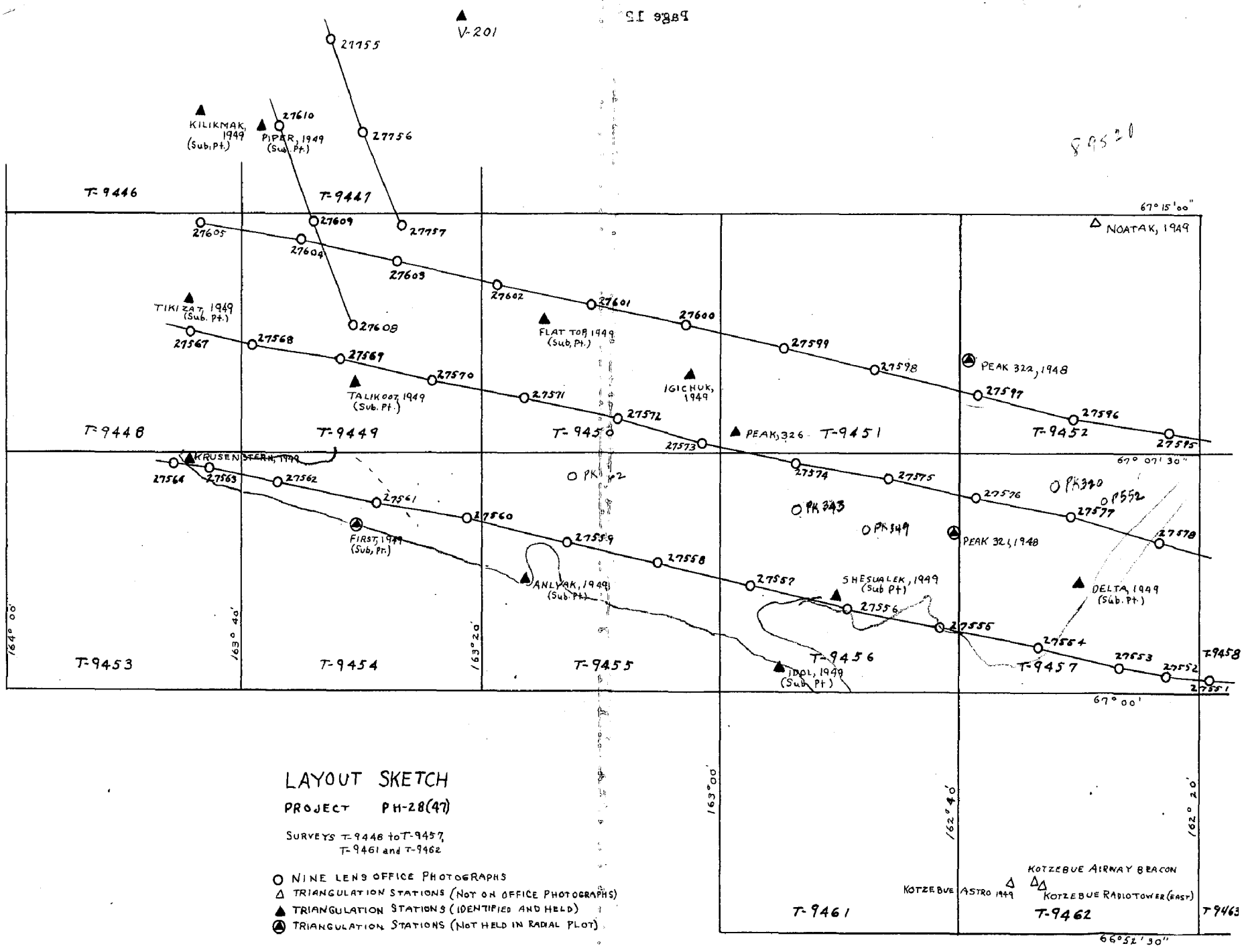
At station FLAT TOP, 1949, the PEAK 337 identified on field photographs was not pricked since it is on the same mountain. Also PEAK 633 and PEAK 634 near this peak have no check on their elevations. Although there is no reason to suspect error in the one observation on each, it is recommended that FLAT TOP, 1949 be used for elevation in this area. There were several observations rejected but in each case two or more observations on the same peak were in close agreement and no further investigation was made beyond checking horizontal angles.

Approved and forwarded
6 April 1951

Hubert A. Paton
Comdr., C&GS
Officer in Charge

Respectfully submitted

Frank J. Tarcza
Cartographic Engineer



LAYOUT SKETCH

PROJECT PH-28(47)

SURVEYS T-9448 to T-9457, T-9461 and T-9462

- ○ NINE LENS OFFICE PHOTOGRAPHS
- △ TRIANGULATION STATIONS (NOT ON OFFICE PHOTOGRAPHS)
- ▲ TRIANGULATION STATIONS (IDENTIFIED AND HELD)
- ⓐ TRIANGULATION STATIONS (NOT HELD IN RADIAL PLOT)

COMPILATION REPORT

31. Delineation:

Contours and cultural features were delineated simultaneously on the Reading Plotter, model A and B. Model A was employed on the western end of the strip of quadrangles (see diagram, page 5), working eastward, while model B started on the east end and worked westward to their meeting point near the middle of T-9455. The entire land area of all five quads of this report has been delineated in this mapping operation.

32. Control:

Refer to side-heading 23 on page 9 of this report where the horizontal control situation for this area is discussed in detail. In brief, horizontal control was considered adequate.

33. Supplemental Data:

a. Graphic Control Surveys: None

b. Hydrographic Surveys: None

c. Plotting Instrument Photos (metal-mounts):

27550 thru 27564 and 27570 thru 27579.

d. Field Inspection Photos:

20571 thru 78, 20750 thru 55, 20764 thru 67, 20819 thru 21, and 20828 thru 20841.

e. Vertical Control Volume: Bound book entitled:

"Tabulation of elevations by surveys and computations of elevations for vertical control stations in the areas of surveys T-9448 thru T-9457, and T-9461 and T-9462."

34. Contours and Drainage:

Photograph quality was very good and no areas of questionable contours exist.

35. Shoreline and Alongshore Details:

Shoreline inspection appeared to be adequate. Shoal lines were office delineated on the plotting instruments.

36. Offshore Details: Not Applicable.

37. Landmarks and Aids: None recommended.

38. Control for Future Surveys:

Seven Topo stations and two Hydro stations are located on the five quads of this report in proper symbol and name. All were positioned by the radial plot either directly or by the sub-station method. Details of this future control may be found on unnumbered page, following, "Notes to the Hydrographer".

39. Junctions:

All junctions are in agreement. Match edges have been transferred to the five quads immediatly north of the five quads of this report for perfect junction when they are compiled at a later date. Common edges between T-9456 and T-9457 agree with T-9461 and T-9462 respectively on the south. No quad sheets exist to the south of T-9453, T-9454, and T-9455. On the east, the match edge of T-9457 is in agreement with T-9458, previously completed. No quad sheet exists to the west of T-9453.

40. Horizontal and Vertical Accuracy: Standard. all contours meet accuracy standards for 50 ft contours; only the 25 ft contour is more accurate since it is considered to meet the accuracy standard for a 25 ft contour.

41. Elevation Data Discrepencies:

Certain errors in field operations resulting in incorrect elevations for mapping use were discovered during the radial plot procedure and are detailed on page 11 of this report. In addition, two others have been discovered during instrument delineation on the 9-lens plotters. Both points are very near sea level images which accounts for the finding of too high elevations for each. Namely, they are ~~triangulation~~ topo station PLUG 1949 and water surface V-1229. In the first case, no elevation has been shown on the manuscript; in the other, the elevation has been lowered from 98 ft to 35 ft and shown as an unchecked instrument elevation.

46. Comparison with Existing Maps:

a. Advance proof of NOATAK, Alaska, USGS, Reconnaisance Topogarphic series, Second Judicial Division, 1: 250,000, 1951 edition.
b. Advance proof of BAIRD MOUNTAINS, same as Noatak above.
c. Compilation copy of ~~TIGARA~~ PT. HOPE, 1: 200,000, USGS.

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 BARROW, CHUCKI 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, 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-9453 thru T-9457

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-9453										1
KOTZEBUE SOUND										2
CAPE KRUSENSTERN										3
										4
T-9454										5
Kotzebue Sound			Kimiroork Hill				(long hill or ridge)			6
Millowcrywlook River										7
Pooktoetut (area)		(Per names report a boggy area)								8
Tookrook River		name means "it floats" = apples to area W. of Kimiroork Hill								9
Sittookooyook River										10
T-9455										11
Aukoolak Lagoon										12
Kotzebue Sound										13
Sittookooyook River										14
Toorrook River		(a small section here)								15
T-9456										16
Kotzebue Sound										17
Napactooktook Mtn										18
Shesualek Village										19
										20
T-9457										21
Kinuk Island										22
Noatak River										23
Noatak River Delta										24
					Names approved 6-12-53 L. Heck					25
										26
										27

Review Report T-9453 through T-9457
Topographic Maps
June 22, 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 1952
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

B. J. Colner

APPROVED:

L C Lande

Chief, Review Section
Div. of Photogrammetry

for Wallace A. Bruder

Chief, Nautical Chart Branch
Division of Charts

W W Swanson

Chief, Div. of Photogrammetry

Aug. 14 '57

Chief, Div. of Coastal Surveys

49. Notes for the Hydrographer:

a. Topo Stations:

T-9453: None

T-9454: CART 1950 - on photo 20831 - see 524 card
ABLE 1950 - on photo 20833 - see 524 card

T-9455: TEAM 1948 - on photo 20835 - see 524 card
ROSE 1948 - on photo 20835 - see 524 card
BIRD 1948 - on photo 20834 - see 524 card

T-9456: OMAR 1948 - on photo 20836 - see 524 card

T-9457: PLUG 1948 - on photo 20839 - see 524 card

b. Hydro Stations:

T-9453: None

T-9454: No.100 - on photo 20833 - no 524 card exists

T-9455: None

T-9456: No.700 - on photo 20837 - no 524 card exists

T-9457: None

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-9453 thru 9457

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 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 ✓

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 ✓

CULTURAL FEATURES

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

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. Chris N. Malley
Reviewer

Louis J. Reed
Supervisor, Review Section, 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