

9403

Diag. Cht. No. 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. Ph-28(47) Office No. T-9403

LOCALITY

State Territory of Alaska

General locality Chukchi River

Locality Koocheok River

194448-50

CHIEF OF PARTY

R. A. Earle, Chief of Field Party

C. W. Clark, Portland Photo. Office

LIBRARY & ARCHIVES

DATE February 26, 1957

9403

DATA RECORD

T -9403

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

Field Office (II): Point Lay, Alaska

Chief of Party: R.A. Earle

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge: Charles W. Clark

Instructions dated (II) (III): 9 November 1950 (Office)

Copy filed in Division of
Photogrammetry (IV)

Supplemental
Instructions { 4 February 1948 }
Project CS-320 { 15 February 1949 } (Field)
 { 8 March 1950 }

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): 6-7-51

Date reported to Nautical Chart Branch (IV): JUN 13 1951

Applied to Chart No.

Date:

Date registered (IV): 9 Oct 1956

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): Point Barrow

Vertical Datum (III): Mean Sea Level

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 Point Barrow, 1945 Datum *
and preliminary N.A. 1927 Datum is Lat. plus/minus
40 m. and Long. plus/minus 164 m.

Reference Station (III): JUDGE, 1950

Lat.: 69° 14' 25.264" 782.9 m Long.: 162° 59' 53.957" 593.1 m Adjusted
(1076.4 m) (66.4 m) Unadjusted X

Plane Coordinates (IV):

State:

Zone:

Y=

X=

* The difference between Preliminary NA 27 Datum and the NA 27
Datum (adjusted) positions are within plotting tolerance.
Therefore, the compilation can be used without applying any
additional Datum correction. *hch.*

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.

* The difference between Preliminary NA 1927 Datum and the
Adjusted 1927 Datum at Reference Sta. JUDGE, 1950 is as follows:
Preliminary N.A. 1927 Datum ϕ 69° 14' 830.0 m λ 162° 59' 429.2 m
Adjusted N.A. 1927 Datum ϕ 69° 14' 821.4 m λ 162° 59' 429.3 m
p 677 Vol II Form T- Page 1 McAlinden 2/11/58 M-2618-12(4)

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

DATA RECORD

Field Inspection by (II): David M. Whipp

Date: Early July 1950

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): There is only the narrow stream bed of the Koocheek River within the limits of this map and its high water line was located by office examination of the photographs.

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III):

Roy A. Davidson

Date: 1/3/51

Control checked by (III):

Ree H. Barron

Date: 1/3/51

Radial Plot or Stereoscopic
Control extension by (III):

Roy A. Davidson & J.E. Deal

Date: 1/15/51

Stereoscopic Instrument compilation (III):

Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): C.C. Wiebe

Date: 4/16/51

Photogrammetric Office Review by (III): Ree H. Barron

Date: 5/3/51

Elevations on Manuscript
checked by (II) (III):

Date:

Camera (kind or source) (III): U.S.C. & G.S. 9-lens focal length 8.25 inches

Number		Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
22791 to 22793 Incl.		7/23/48	15:00 (150° W)	1:20,000	0.65 ft. above M.L.L.W.

Tide (III)

Reference Station: Kodiak, Alaska (Time Meridian 165° W)
 Subordinate Station: Point Barrow, Alaska (Time Meridian 150° W)
 Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
1.0	6.6	8.5
0.1	0.4	0.5

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 45.6

Shoreline (More than 200 meters to opposite shore) (III): None

Shoreline (Less than 200 meters to opposite shore) (III): 6.6

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 1 Recovered: 1 Identified: 1

Number of BMs searched for (II): Recovered: Identified:

Number of Recoverable Photo Stations established (III): None

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

Remarks:

ALASKA, Chukchi Sea, C. Beaufort to Atanic



Summary to Accompany T-9403

Ph-42(49) is that part of continuing project CS-320 (which includes the whole Arctic Coast of Alaska) extending from $69^{\circ} 07\frac{1}{2}'$ to $70^{\circ} 49\frac{1}{2}'$; i.e., from the north limit of Ph-28(47) to the south limit of Ph-27(47).

Ph-42(49) has 17 maps: T-9361-69; T-9371-75; and T-9402 and T-9403, the latter two being additions to the original southern limits. T-9403 covers the interior area drained by Koocheok River, between Kasegaluk Lagoon and Omalik Lagoon.

Field work was accomplished in 1950. It included establishment of control and some interior interpretative notes on the nine-lens photographs (July 1948).

After all the maps in the project have been reviewed, reproduced, and registered, a Completion Report will be written and filed in the Bureau Library under the project number. This report will include a brief text describing the project; any important correspondence; copies of the various instructions and special reports; statistical data; and a list of the data or reports not bound with the Completion Report, but filed elsewhere.

FIELD INSPECTION REPORT
Map Manuscript No. T-9403
Project Ph-28(47)

Refer to Special Report "Photogrammetric Control - Station
Identification Kasegaluk Lagoon to Cape Beaufort, Arctic Coast of
Alaska, Project CS-320 (1950)", R.A. Earle, Chief of Party.

PHOTOGRAMMETRIC PLOT REPORT
Map Manuscript No. T-9403
Project Ph-28(47)

Refer to the combined photogrammetric plot report for T-9375 (revision), T-9402 and T-9403 which is included with the descriptive report for T-9402.

COMPILATION REPORT
Map Manuscript No. T-9403
Project Ph-28(47)

31 to 34 Incl:

Refer to Compilation Report for T-9402 Project Ph-28(47).

35: SHORELINE AND ALONGSHORE DETAILS:

Only the narrow stream bed of the Koocheek River falls within the area of this map manuscript. The shorelines for this river were delineated by office examination of the photographs.

36 through 40 Incl, 46 and 47:

Refer to Compilation Report for T-9402 Project Ph-28(47).

Approved:

Charles W. Clark
Charles W. Clark
Officer-in-Charge

Respectfully submitted:

J. Edward Deal, Jr.
J. Edward Deal, Jr.
Cartographer

T-9403

48: GEOGRAPHIC NAMES:

From the description of triangulation station "Koocheok":

Koocheok River

Note: The geographic names report referred to in side heading 18: Geographic Names, of the Special Report entitled "Photogrammetric Control - Station Identification, Kasegaluk Lagoon to Cape Beaufort, Arctic Coast of Alaska" Project CS-320, (1950) was not furnished the photogrammetric office.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9403

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. Rec H. Barron
ReviewerJ. Edward Deal Jr.
Supervisor, Review Section or Unit

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:

Review Report T-9403
Planimetric Map
14 October 1953

61. General.--This map manuscript was delineated on Point Barrow datum; but in order to use the control in this map area in the radial plot for the project to the south, all the stations were also plotted on the N.A. 1927 datum (correction figures). The N.A. 1927 positions have been left on the map manuscript, using the dashed-line symbol, to afford ready translation from one datum to the other.

62. Comparison with Registered Surveys.-- No earlier surveys of the area have been made.

63. Comparison with Maps of Other Agencies.--

USGS Point Lay, Alaska (Recon) 1:250,000 1951
Astronomic Datum

The small scale of the quadrangle precludes more than the observation that drainage and large ponds are in general agreement.

64. Comparison with Contemporary Hydrographic Surveys.--Not applicable. This is an interior area.

65. Comparison with Charts.--

9400 1:1,587,870 at 70° ed. May 1947, Rev. June 1952

There is no interior detail on the chart in the area of T-9403.

66. Accuracy.--Because no control was used in the delineated area, the map is only of interior charting accuracy.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

APPROVED

L. C. Landy
Chief, Review Branch
Div. of Photogrammetry

Lee Surman
Chief, Div. of Photogrammetry

rs 24.57

Max B. Ketchum
Chief, Nautical Chart Branch
Division of Charts

S. B. Small
Chief, Div. of Coastal Surveys

HORIZONTAL DATUM ADJUSTMENT

CHUKCHI SEA, ALASKA

Corrections to Preliminary N.A. 1927 Datum from the various independent horizontal datums on the coast of the Arctic Ocean and Chukchi Sea in Alaska have been determined by the Division of Geodesy, being computed from field positions, allowing for closure in azimuth and length. This procedure was started at adjusted N.A. 1927 Datum stations at about the 63rd Parallel on the Canadian Boundary, following the 141st Meridian (IBC Datum) to the Arctic Ocean, thence westward through the Barter Island and Flaxman Island Datums, and southwestward through the Point Barrow 1945 Datum, to a connection with N.A. 1927 Field Datum in the area of Kotzebue Sound off Chukchi Sea. The position of the stations in this area is subject to further adjustment after more geodetic field work.

PLANIMETRIC MAPPING PROJECT

Ph-42(49)

Cape Beaufort to Atanik

T-9361 through T-9369
and

T-9371 through T-9375, T-9402 & T-9403

The correction from Point Barrow 1945 Datum to Preliminary N.A. 1927 Datum was computed for each map by multiplying the correction in seconds to the value of one second in latitude and longitude at the latitude of the reference station of each map. This correction was recorded with the following stamp:

The difference between Pt. Barrow, 1945 Datum
and preliminary N.A. 1927 Datum is Lat. plus/minus
40 m. and Long. plus/minus * m.

*The value of one second in meters
varies from 11.030 m. (T-9402) to
10.276 m. (T-9361).

in the Descriptive Report on the first page of the data record, and on each manuscript near the title block.

See the Special Report on Corrections from the Point Barrow 1945 Datum to Preliminary N.A. 1927 Datum, filed with the completion report for Ph-42(49) for a Project Index showing the correction for each map in this project.

Applied to Arctic Chart No. 16 6/14/51 Before Rev. Char R. Willmann
" " " " " 9455 Mar '58 after " R.K.D.