
Form 504
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Topographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Ph-23 (47)</td>
</tr>
<tr>
<td>Office No.</td>
<td>T-9436</td>
</tr>
<tr>
<td></td>
<td>T-9437</td>
</tr>
<tr>
<td></td>
<td>T-9438</td>
</tr>
</tbody>
</table>

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
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 = MULK Rivera Ahvenuk Mt

Field Office (II): Kotzebue Sound, Alaska
Photogrammetric Office (III): Baltimore, Md
Washington, D.C.

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 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 (2) refer to mean high water
Elevations shown as (1) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III):
Lat.: Long.: 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)

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</table>

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 dTH 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 compiled by (III):

Frank J. Tarcza

Date: 31 Aug 51

Stereoscopic Instrument compiled (III):

delineation by: Planimetry Louis Levin and Contours Orvis N. Dalbey

Date: 6 Mar 52

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>27619</td>
<td>thru</td>
<td>12:17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27624</td>
<td></td>
<td>12:20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and</td>
<td>22 Jul 50</td>
<td>12:22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27742</td>
<td>thru</td>
<td>14:58</td>
<td>1:20,000</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15:00</td>
<td></td>
<td>appreciable tide</td>
</tr>
<tr>
<td>27747</td>
<td></td>
<td>15:03</td>
<td></td>
<td></td>
</tr>
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</table>

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: Icy Cape
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): B. J. Colner
F. Johnson
R. Hopkins - T. 9438
J. H. Frýdor - T. 9437

Final Drafting by (IV): J. H. Frýdor - T. 9437

Drafting verified for reproduction by (IV): W. J. Hall

Proof Edit by (IV):

Date: 15 July 1953
Date: 6-1-52
Date: May 31, 1956
Date: 5-17-56
Date: 7-24-56

Land Area (Sq. Statute Miles) (III): See below under Remarks
Shoreline (More than 200 meters to opposite shore) (III):
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II):
Number of BMs searched for (II):
Number of Recoverable Photo Stations established (III): Three
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

<table>
<thead>
<tr>
<th>AREA</th>
<th>SHORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-9438 = 50 sq.mi.</td>
<td>None</td>
</tr>
<tr>
<td>T-9337 = 74 &quot;</td>
<td>16 mi</td>
</tr>
<tr>
<td>T-9436+ = 23 &quot;</td>
<td>9 mi</td>
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</table>
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, are topographic surveys and twenty-two (T-9402 to T-9436) are planimetric and T-9436 through T-9438.

T-9436 through T-9438 are topographic surveys falling in about the middle of the project. These quadrangles contain the Asickpun, Kivalina, Oakpiscoorook, 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

Lorne J., Chief
Stereoetric Mapping Section
Photogrammetric Engineer.
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 page 9, next.
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-9436 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:

20638, 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 scalelevel were defensibly altered in the three years lapse of time. The instrument operators noted this while using this field inspection during compilation, but were convinced that change had taken place, and therefore they delineated exactly as they saw it. This applies to approximate MLW 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,

47. Comparison with Nautical Charts:

a. ARCTIC COAST, Alaska, No. 9400, 1:1,587,870, May 1946

b. Provisional Chart, CAPE PRINCE OF WALES TO POINT
BORROW, CHUCKCHI SEA, Alaska-Arctic Coast, No 9402,

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:

[Signature]
Orvis NL Dalbey,
Cartographer-Photogrammetric

Approved and Forwarded by:

[Signature]
Lewis J. Reed, Chief
Stereoescopic Mapping Section
Photogrammetric Engineer.
<table>
<thead>
<tr>
<th>T-9436</th>
<th>ARCTIC OCEAN</th>
<th>Do not use in addition to Chukchi Sea.</th>
<th>1</th>
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<tbody>
<tr>
<td></td>
<td>ASICKPUN MT</td>
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<td>2</td>
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<tr>
<td></td>
<td>ASICKPUN RIVER</td>
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<td>CHUKCHI SEA</td>
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<td>KIVALINA LAGOON</td>
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<td>OAKPISBOOCH RIVER</td>
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<td>7</td>
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<td>T-9437</td>
<td>ITTIVYAK PASS</td>
<td>Company Mountain</td>
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<td>KISIMEKTOOK MT</td>
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<td>KIVALINA LAGOON</td>
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<td>KIVALINA RIVER</td>
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<td>SIROUKEH K MT</td>
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<td>WULIK RIVER</td>
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<td>T-9438</td>
<td>AHVENUK MT</td>
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<td>KILLI MT</td>
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<td>KIVALINA RIVER</td>
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<td>IMIGROOK RIVER</td>
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<td>ITTIVYAK PASS</td>
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<td>WULIK RIVER</td>
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Names approved 7-15-53
L. Hack
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
   94.02  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 hydro-
  graphic surveys and the construction of nautical charts.

Reviewed by:

E. T. Colmer
B. J. Colmer

APPROVED

L. A. Lande
Chief, Review Branch
Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

W. H. Will
Chief, Div. of Coastal Surveys

Chief, Div. of Photogrammetry
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


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  □

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

BOUNDARIES
31. Boundary lines  □  32. Public land lines  □

MISCELLANEOUS
40. □  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  □

Louis J. Reed, Chief
Stereoeccopic Mapping Section
Photogrammetry Engineer

43. Remarks:  □