### DESCRIPTIVE REPORT

**Type of Survey**: Topographic

**Field No.**: Ph-23(47)

**Office No.**: T-9496

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### LOCALITY

**State**: Alaska

**General locality**: Kotzebee Sound

**Locality**: Candle

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**1948-51**

**CHIEF OF PARTY**

A.N. Stewart, Chief of Field Party

H.A. Paton, Chief Baltimore Photo.

**Office**: LIBRARY & ARCHIVES

**DATE**: January 9, 1958
DATA RECORD

T-9495 and T-9496

Project No. (II): Ph-26(47) Quadrangle Name (IV): T-9495 = GANDLE
T-9496 = CLEM MOUNTAIN

Field Office (II): Portland, Oregon
Photogrammetric Office (III): Baltimore, Md
Radial Plot Hubert A. Paton, Chief
Officer-in-Charge: Washington, D.C.
Compilation Louis J. Reed, Chief
Stereoscopic Mapping Branch

Instructions dated (II) (III):

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

Method of Compilation (III): Reading Plotter

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): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 16 May 1957

Publication Scale (IV):

Geographic Datum (III): NA 1927 (Adjusted)
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.: Adjusted

Plane Coordinates (IV):

State: Zone:

Y= X=

Universal Transverse Mercator Grid, Zone 4, with 2500m interval

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.

Form T- Page 1
Areas contoured by various personnel
(Show name within area)

A = Compiled on the Reading Plotter, model "A", by Clarence E. Misfeldt.

B = Compiled on the Reading Plotter, model "B", by Louis Levin and Orvis N. Dalbey.
DATA RECORD

Field Inspection by (II): A. Newton Stewart                Date: 1948

Planetable contouring by (II): None

Completion Surveys by (II): None

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

This compilation is dated 1948 since it was guided by 1948
field inspection of the MHWL on 1947 photographs. However, for
all practical purposes, because the instrument photography used
was taken in 1951, this compilation could be dated 1951.

Projection and Grids ruled by (IV):

Jack Allen on the Reading Ruling Machine                Date: 4 Jun 52

Projection and Grids checked by (IV):

Howard D. Wolfe                                       Date: 5 Jun 52

Albert Queen                                           Date: 24 Jul 52

Control plotted by (III):

Control checked by (III):

Joseph Steinberg                                      Date: 25 Jul 52

Radial Plot checked by (III):

Ruth Hartley                                            Date: 12 Aug 52

Verified by Frank J. Tarozza                            Date: 13 Aug 52

Stereoscopic Instrument delineation and Contours:

Clarence E. Mifeldt and Orvis N. Dalbey               Date: 26 May 53

Manuscript delineated by (III):

Robert L. Sugden and Henri Lucas

Date: 26 June 53

Photogrammetric Office Review by (III):

Louis J. Reed                                          Date: 27 June 53

Elevations on Manuscript checked by (III):

Louis J. Reed                                          Date: 27 June 53
**PHOTOGRAPHS (III)**

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**Tide (III) 45**

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**Reference Station:** 

| Toy Cape | Kiwalik |

**Washington Office Review by (IV):**

B. J. Colmer

**Final Drafting by (IV):**

John H. Frazier

**Drafting verified for reproduction by (IV):**

**Proof Edit by (IV):**

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

81 sq mi, each quad

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

13 miles on T-9495 (none on T-9496)

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

76+ miles on T-9495 (none on T-9496)

**Control Leveling - Miles (II):**

None

**Number of Triangulation Stations searched for (II):**

Recovered: Identified: 2 (both on T-9495)

**Number of BMs searched for (II):**

None

**Number of Recoverable Photo Stations established (III):**

2 (both on T-9495)

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

2 (both on T-9495)

**Remarks:**

Form T-Page 4
Compiled at 1:20,000 scale, from 1:20,000 scale nine-lens photographs taken July, 1950 and June, 1951. For additional nine-lens photography refer to:

Air-photo Index A-38 (1:20,000 scale, taken September 1947) Air-photo Index B-3 (1:28,000 scale taken Sept. 1947) Air-photo Index B-13 (1:20,000 scale, taken September 1947 and August 1948)

For single-lens photography on which some field work was done refer to:

Air-photo Index A-11 (1:27,500 scale, taken August 1948) Air-photo index A-23 (1:27,500 scale, taken August, 1948, and 1:40,000 scale, August, 1950)

Air-photo Index A-24 (1:27,500 scale, August, 1948) Air-photo Index A-35 (1:40,000 scale, August, 1950)

For photography of other agencies on which some field work was done refer to:

Alaskan WAC 64 Index (1949 Naval Petroleum Reserve photography, scale 1:20,000 and 1946 Air-Force TRI-MET photography, scale 1:24,000)
Summary to Accompany T-9495 and T-9496

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.

There are ninety-four topographic quadrangles (T-9402 to T-9434 and T-9436 to T-9496) in this project.

T-9495 and T-9496 are topographic surveys which contain the Kiwalik River, Jump and Duck Creeks, and the southern portion of Kiwalik Lagoon.

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 of Archives.
FIELD INSPECTION REPORT

2-20: See separate report entitled:

PROJECT REPORT
AERIAL PHOTOGRAPH CONTROL AND INSPECTION
KOTZEBUE SOUND, ALASKA
Project Ph-28(47) July to Sept 1948
A. Newton Stewart, Chief of Party
A single radial plot covered the area of the two quads of this report along with several other quads. A single radial plot report was written for the entire area and this report has been included in the Descriptive Report for quads T-9484 thru T-9486 (combined).
31. Delineation:

The cultural features and contours were delineated simultaneously on the Reading Plotters by areas; see page 2. The entire land area of both quads has been mapped.

32. Control:

The Radial Plot Report, side-heading 23, indicates that horizontal control was inadequate; vertical control was also below requirements. But since the radial plot was made it has been discovered that AMS had just completed a compilation of the area to the south, east, and west of the two quads being reported. Control bridged by AMS for their work was extended north into our area, and it served as additional control, both vertical and horizontal, for our compilation. With this supplement, control was adequate.

33. Supplemental Data:

a. Elevation Computations: Separate volume entitled:

"COMPUTATIONS OF ELEVATIONS AND TABULATION OF VERTICAL CONTROL POINTS FOR SURVEYS T-9432, T-9484 thru T-9496."

b. Field Inspection Photos: 20651, 20871, and 20872.

c. AMS Junction Sheets: BENDLEBEN D1, CANDLE D6 and D5

34. Contours and Drainage:

The photographs were of good quality and no areas of questionable contouring remain.

35. Shoreline and Alongshore Details:

Shoreline appears on T-9495 only. Inspection was adequate. Considerable apparent shoreline has been shown in Kiwalik Lagoon, with grass and mud areas indicated.

36. Offshore Details: Not applicable.

37. Landmarks and Aids:

No aids exist but one landmark was recommended by the field inspector; CLEM MOUNTAIN on T-9496.

38. Control for Future Surveys:

Two topo and three hydro stations were field selected and photo-identified. They have been positioned on T-9495 by the radial plot, as follows: SAGE 1948, WASP 1948, No.654, No.784, and No.786. No such points exist on T-9496.
39. Junctions:

All junctions are in agreement including the south borders of both quads and the west border of T-9495 and the east border of T-9496, where junction was made to recent AMS compilations without alteration to AMS details or contours.

40. Horizontal and Vertical Accuracy:

The inadequacy of control as reported in the Radial Plot Report indicates that this compilation does not meet the requirements for standard accuracy. However, with the additional AMS control (see side-heading 32), the resulting total is adequate, and these two manuscripts meet the accuracy requirements specified for 1:20,000 maps with a 50ft contour interval. The supplemental (25ft) contours delineated are to assist the 50ft contours in portraying the relief of the ground where the spacing is too great, and they must be considered as meeting the same 50ft contour interval standards even though the instrument operator believes they will meet the standards for a 25ft interval. The strength of this compilation is emphasized by the fact that our radial plot and the AMS bridging of control were completed separately without the knowledge of the others operation, and yet details along the junction plotted in almost perfect accord and the contours were equally good. An Engr A on Clem Mountain, the existance of which was unknown to our radial plot people, was plotted during instrument compilation, and it was held to within 0.3mm by our radial plot positioning of the model in which it fell, using AMS photo-identification of the point.

46. Comparison with Existing Maps:


47. Comparison with Nautical Charts:


49. Notes for the Hydrographer: See separate unnumbered page.


Submitted by:  

Approved by:  
Louis J. Reed, Chief  
Stereoscopic Mapping Branch  
Photogrammetric Engineer
49. **Notes for the Hydrographer:**

The following topo and hydro stations were field selected and identified. They have been positioned on the T-9495 manuscript; none exist in the area of T-9496. Positioning was by radial plot.

a. **Topo Stations:**

   SAGE 1948; identified on 20871; described on 524 card
   WASP 1948: " " 20872; " "

b. **Hydro Stations:**

   No. 654: identified and described on photo 20871
   No. 784: " 20872
   No. 786: " 20872

   No. 645  W gable of small cabin.
   No. 784  N tip of small marsh island.
   No. 786  N tip of marsh on SW side of mouth of small creek on SE side of larger creek.
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<th>B</th>
<th>C</th>
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Names approved 2-3-54, L. Heck

For titles:
Alaska
Kotzebue Sound
Second Judicial Division
PHOTOGRAMMETRIC OFFICE REVIEW

T-9495 & 9496

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 ✔
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 alongshore cultural features ✔

ALONGSHORE AREAS
(Nautical Chart Data)

20. Water features ✔
21. Natural ground cover ✔
22. Planetary contours ✔
23. Stereoscopic instrument contours ✔
24. Contours in general ✔
25. Spot elevations ✔
26. Other physical features ✔

PHYSICAL FEATURES

27. Roads ✔
28. Buildings ✔
29. Railroads ✔
30. Other cultural features ✔

CULTURAL FEATURES

31. Boundary lines ✔
32. Public land lines ✔

BOUNDARIES

33. Geographic names ✔
34. Junctions ✔
35. Legibility of the manuscript ✔
36. Discrepancy overlay ✔
37. Descriptive report ✔
38. Field inspection photographs ✔
39. Forms

40. ✔

MISCELLANEOUS

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

M-2673-12
Review Report T-9495 through T-9496
Topographic Maps
February 3, 1954

62. Comparison with Registered Topographic Surveys. - None

63. Comparison with Maps of Other Agencies. -

USGS Alaska Map, Candle 1:250,000 1951 edition
Comparison not feasible due to great difference in scale.

64. Comparison with Contemporary Hydrographic Survey. - None

65. Comparison with Nautical Charts. -

9400 1:1,587,870 June 1950
9402 1:750,000 May 1950
Scale difference precludes a satisfactory comparison.

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:

[Signature]

B. F. Colner

APPROVED

[Signature]

Chief, Review Branch
Div. of Photogrammetry

18 Dec 1957