Form 564
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic
Field No. Ph-27(43) Office No. T-9477, T-9478
T-9475, T-9476

LOCALITY
State Alaska
General locality Kotzebue Sound
Locality Baldwin Peninsula and Nazuruk Channel Areas.

1948-51

CHIEF OF PARTY
A. N. Stewart, Chief of Field Party
H. A. Paton, Chief B'more Photo. Office
E. J. Reed, Div. of Photo. Wash., D.C.

DATE January 22, 1958
DATA RECORD

T-9475, 76, 77, 78

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

Field Office (II): Portland, Oregon  Chief of Party: A. Newton Stewart

Photogrammetric Office (III): Baltimore, Md  Radial Plot: Hubert A. Paton, Chief

Washington, D.C.  Compilation: Louis J. Reed, Chief

Instructions dated (II) (III):

(II) = 21 Apr 46
(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): DEC 16 1952

Date reported to Nautical Chart Branch (IV): DEC 22 1952

Applied to Chart No.  

Date:  

Date registered (IV): 13 May 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 (2) refer to mean high water
Elevations shown as (4) refer to sounding datum
I.e., mean low water or mean lower low water

Reference Station (III):

Lat.:  

Long.: Adjacent

Unadjusted

Plane Coordinates (IV):

State:  

Zone:  

Y=  

X=

MILITARY GRID: Universal Transverse Mercator,
Zone 3 = T-9475
Zone 4 = T-9476, 77, 78.

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)

100% compiled on the Reading Plotter,
model "B" by the team of:

Louis Levin
and
Arthur B. Zimmrli
DATA RECORD

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

Planetary contouring by (II): None  Date:

Completion Surveys by (II): None  Date:

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

This MHWL might be considered as dated 1951 since it was compiled using 1951 photographs, but the compilation was guided by 1948 field indications of the MHWL on 1947 photographs, and therefore it is a 1948 shoreline. *corrected 1951*

Projection and Grids ruled by (IV): Jack Allen on the Reading Ruling Machine  Date: 3 Oct 51

Projection and Grids checked by (IV): Howard D. Wolfe  Date: 4 Oct 51

Control plotted by (III): Ruth Hartley  Date: 11 Dec 51

Control checked by (III): Grover B. Torbert  Date: 11 Dec 51

Radial Plot or Stereoscopic: Ruth Hartley  Verified by Frank J. Tarcza  Date: 17 Jul 52

Control extension by (III): Planimetry Louis Levin and  Date:

Stereoscopic Instrument compilation (III): Contours Arthur B. Zimmerli  Date: 20 Sep 52

Manuscript delineated by (III): Arthur B. Zimmerli  Date: 4 Dec 52

Photogrammetric Office Review by (III): Louis J. Reed  Date: 9 Dec 52

Elevations on Manuscript checked by (II) (III): Louis J. Reed  Date: 9 Dec 52
Camera (kind or source) (III): USG & GS 9-lens camera, model "B", f = 8.25 inches

Instrument PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<td>1325 - 1329</td>
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<td>33903-05</td>
<td>27 Jun 51</td>
<td>1426 - 1428</td>
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<td>33929-33</td>
<td>1453 - 1458</td>
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Tide (III)

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<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
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<tr>
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<td>5.1</td>
<td>2.7</td>
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</tbody>
</table>

Reference Station: Leu Cape Kiwalik
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): B. J. Colmer
Final Drafting by (IV): Pat Lach
Drafting verified for reproduction by (IV):
Proof Edit by (IV):

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): See remarks below
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): None
Number of BMs searched for (II): None
Number of Recoverable Photo Stations established (III): eleven
Number of Temporary Photo Hydro Stations established (III): four

Remarks:

<table>
<thead>
<tr>
<th>T-9475</th>
<th>6 sq mi</th>
<th>200m+ SHORELINE</th>
<th>200m- SHORELINE</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1/3 miles</td>
<td>none</td>
</tr>
<tr>
<td>T-9476</td>
<td>9 sq mi</td>
<td>1.4 miles</td>
<td>none</td>
</tr>
<tr>
<td>T-9477</td>
<td>44 sq mi</td>
<td>1.5 miles</td>
<td>4 miles</td>
</tr>
<tr>
<td>T-9478</td>
<td>29 sq mi</td>
<td>1.6 miles</td>
<td>5 miles</td>
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</table>
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-36 (1:40,000 scale, August, 1950)

For photography of other agencies on which some field work was done refer to:
- Alaskan WAC 64 Index (1945 Naval Petroleum Reserve photography, scale 1:20,000 and 1946 Air-Force TRI-MET photography, scale 1:24,000)
Summary to Accompany T-9475 through T-9478

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-9475 through T-9478 are topographic surveys which contain the lower portion of the Baldwin Peninsula and the mouth of the Nazuruk Channel, and they border on the Kotzebue Sound, Rotham Inlet, and Selawik Lake.

Each map manuscript consists of one sheet, 7 1/2 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-26(47) July to Sept 1948
A. Newton Stewart, Chief of Party
RADIAL PLOT REPORTS

21-30:

The area of the three quads of this report was controlled as the junction area of three separate radial plots, one down the long narrow neck of the Baldwin Peninsula, one of the south portion of the Kobuk River Delta, and the third as the northern portion of the peninsula forming the south shore of Eschscholtz Bay. The first two were laid first and separately, and then both were tied into the third when it was laid.

Therefore, for information concerning the radial plot for the area being reported, see three separate Descriptive Reports each of which contains a Radial Plot Report that is involved, as follows:

Baldwin Peninsula area in combined report T-9466 and T-9467.

Kobuk River Delta area in combined report T-9468 and T-9479.

Elephant Point Area in combined report T-9479 thru 82.
31. **Delineation:**

Contours and cultural features were delineated on the Reading Plotter, model "B", simultaneously, the entire land area of all four quads has been mapped.

32. **Control:**

Horizontal control was adequate for satisfactory radial plots according to heading 23 of both Radial Plot Reports involved. Vertical control was also adequate, more than adequate because the majority of the area is very low, very near sea-level datum, furnishing many points of elevation along the shoreline. One V-station was supplied by the field party, V-1108 on T-9478. An elevation was computed for it following the radial plot and this elevation agreed with the datum of the model in which it fell.

33. **Supplemental Data:**

a. **Elevation Computations:**

"TABULATION OF ELEVATIONS AND COMPUTATION OF ELEVATIONS BY MAP MANUSCRIPTS FOR VERTICAL CONTROL STATIONS IN THE AREA OF MAP MANUSCRIPTS T-9465, T-9468, T-9469, T-9473, T-9474, T-9476, T-9477, and T-9478."

b. **Field Inspection Photographs:**

20564, 20692, 20693, 20694, 20857, 20858, 20859, 20860, 20891, 20892, 20893, and 20894.

34. **Contours and Drainage:**

The photographs were of good quality photographically and no areas of questionable contours are left.

35. **Shoreline and Alongshore Details:**

Shoreline inspection was adequate as an indication of the location of the MHSL relative to the tide stage. A few shoal areas were delineated on T-9477 and T-9478 during instrument operations.

36. **Offshore Details:** Not applicable.

37. **Landmarks and Aids:** None recommended - None exist.

38. **Control for Future Surveys:**

Eleven Topo Stations and four Hydro stations were selected and photo identified in the field. All have been positioned by the radial plot and appear on the manuscripts in proper name and symbol as follows:

(See next page)
33. Control for Future Surveys (continued):

<table>
<thead>
<tr>
<th>TOPO STATIONS</th>
<th>HYDRO STATIONS</th>
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</thead>
<tbody>
<tr>
<td>T-9475 CHAR, 1948</td>
<td>No 765, No 766</td>
</tr>
<tr>
<td>T-9476 BASS 1948, CHOP 1948, EARL 1948, FA ME1948.</td>
<td>No 767, No 768</td>
</tr>
<tr>
<td>T-9477 BASS 1948, SAND 1948.</td>
<td>None</td>
</tr>
<tr>
<td>T-9478 KLOW 1948, PLUM 1948, PRIM 1948, VEST 1948.</td>
<td>None</td>
</tr>
</tbody>
</table>

39. Junctions: All are in agreement – see page 5 for quad numbers.

40. Horizontal and Vertical Accuracy:

These maps have been compiled at a scale of 1:20,000 and they meet the requirements of Map Standards (horizontal) for maps of that scale. The 25ft contour has been delineated throughout and is believed to be accurate to half 25ft. However, these maps have been contoured as 50ft contour interval maps and they are accurate to the degree specified by Map Accuracy Standards for a map of 50ft contour interval.

46. Comparison with Existing Maps: No maps of comparable scale exist, but the following two do cover the same area:

"SELMIK and KOTZEBOE, Alaska, Reconnaissance Topographic Series, Second Judicial Division, USGS, 1:250,000, 1951 Ed."

47. Comparison with Nautical Charts: No charts of comparable scale exist but the following one does cover the area:


48. Geographic Name List: See separate page.

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

50. Compilation Office Review: See separate page, following.

Submitted by

Orvis M. Dalbey
Cartographer-Photogrammetric

Approved by

Lewis J. Food, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer
49. Notes for The Hydrographer:

**T-9475**

a. **Topo Stations:**

CHAR, 1948 - identified on photo 20894 - see 524 card

b. **Hydro Stations:**

No 765 - identified and described on photo 20894;
"SW tip of bluff on NE side of the Nly of two large gullies about 120 meters apart. SW tip of tundra on top of bluff was pricked."

No 766 - identified and described on photo 20892;
"Center of bare spot on face of bluff on N side of gully."

**T-9476**

a. **Topo Stations:**

EARL, 1948 - identified on photo 20892 - see 524 card
FAME, 1948 - identified on photo 20891 - see 524 card
CHOP, 1948 - identified on photo 20564 - see 524 card
BAIT, 1948 - identified on photo 20566 - see 524 card

c. **Hydro Stations:**

No 767 - identified and described on photo 20892;
"NW tip of sharp-pointed bluff on S side of large gully that runs at a SE angle to the shoreline. Base pricked."

No 768 - identified and described on photo 20892;
"Center of large bare patch on bluff about 130 meters S of large gully. A clump of grass is in the center of the patch. Clump of grass picked."

**T-9477**

a. **Topo Stations:**

BASS, 1948 - identified on photo 20857 - see 524 card
SAND, 1948 - identified on photo 20858 - see 524 card

b. **Hydro Stations:** None.

**T-9478**

a, **Topo Stations:**

BLOM, 1948 - identified on photo 20694 - see 524 card
PLUM, 1948 on 20860, PRIM, 1948 on 2-393, VEST, 1948 (20694)
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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</table>

Names approved 11-10-53

L. Heck
PHOTOGRAMMETRIC OFFICE REVIEW

T-9475, 76, 77, 78

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 alongshore cultural features

PHYSICAL FEATURES
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

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. Review

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-9475 through T-9478
Topographic Maps
November 10, 1953

62. Comparison with Registered Topographic Surveys.— None

63. Comparison with Maps of Other Agencies.—

USGS Alaska Map, Selawik 1:250,000 1951 edition
" " " Kotzebue " " "

Comparison not feasible 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

Scale difference precludes satisfactory comparison.

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:

E. J. Colmer

APPROVED

Chief, Review Branch
Div. of Photogrammetry

Chief, Div. of Photogrammetry
8 January 1958

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Coastal Surveys