**Description Report**

**Type of Survey:** Topographic

**Field No.:** Ph-28 (47)  
**Office No.:** T-9488 thru T-9490

**Locality**

- **State:** Alaska
- **General locality:** Kotzebue Sound
- **Locality:** Eschscholtz Bay

**1948-51**

**Chief of Party:** A.N. Stewart, Chief of Field Party  
H.A. Paton, Bimore Photo. Office  
L.J. Reed, Div. of Photo., Wash., D.C.

**Library & Archives**

**Date:** June 24, 1958
DATA RECORD

T-9488 thru 90

Project No. (II): Ph-28(47) Quadrangle Name (IV): T-9488 = CHURCH ROCK
T-9489 = BUCKLAND RIVER MOUTH
T-9490 = BUCKLAND RIVER MOUTH EAST

Field Office (II): Portland, Oregon
Photogrammetric Office (III): Baltimore, Md
Washington, D.C.

Instructions dated (II) (III):

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

Chief of Party:
Radial Plot = Hubert A. Paton, Chief
Compilations = Louis J. Reed, Chief,
Stereoscopic Mapping Br.

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000
Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III):

Date received in Washington Office (IV): 1953
Date reported to Nautical Chart Branch (IV): 29 April 1953

Applied to Chart No. Date: Date registered (IV): 29 April 1953

Publication Scale (IV):

Geographic Datum (III): NA 1927

Mean sea level except as follows:
Elevations shown as (26) refer to mean high water
Elevations shown as (6) 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, 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.
Areas contoured by various personnel
(Show name within area)

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

Louis Levin and
Orvis N. Dalbey

5% on the Stereoplanigraph
by Morton Keller
DATA RECORD

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

Planetable contouring by (II): None Date:

Completion Surveys by (II): None Date:

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

This compilation was guided by 1948 field inspection of the MHWL on 1947 photographs, and therefore the shoreline is dated 1948. However, for all practical purposes, it could be dated 1951 because the instrument photography was dated 1951.

Projection and Grids ruled by (IV):

Jack Allen on the Reading Ruling Machine Date: 3 Jun 52

Projection and Grids checked by (IV):

Howard D. Wolfe Date: 4 Jun 52

Control plotted by (III):

Albert Queen Date: 3 Jul 52

Control checked by (III):

Ruth Hartley Date: 7 Jul 52

Radial Plot or Stereoscopic:

Ruth Hartley Date: 12 Aug 52

Control extension by (III): Verified by Frank J. Taroza Date: 13 Aug 52

delineation Planimetry

Stereoscopic Instrument compiled

Louis Levin and

and Orvis N. Dalbey

Contours and

Morton Keller

Date: 8 Apr 53

Compiled

Manuscript compiled by (III):

Henri Lucas

Date: 28 May 53

Photogrammetric Office Review by (III):

Louis J. Reed

Date: 5 Jun 53

Elevations on Manuscript checked by (III):

Louis J. Reed

Date: 5 Jun 53
Camera (kind or source) (III): USC&GS 9-lens, model "B", f = 8½ inches.

PHOTOGRAPHS (III)

<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>33811-14</td>
<td>27 Jun 51</td>
<td>1220 - 1223</td>
<td>1:20,000</td>
<td>None - 1 ft.</td>
</tr>
<tr>
<td>33822-25</td>
<td></td>
<td>1232 - 1236</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33875-39</td>
<td></td>
<td>1251 - 1255</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33885-68</td>
<td></td>
<td>1332 - 1335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33876-78</td>
<td></td>
<td>1352 - 1354</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33954-56</td>
<td></td>
<td>1534 - 1537</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tide (III)

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81</td>
</tr>
</tbody>
</table>

Reference Station: Joy cape
Subordinate Station: Kiwalik

Washington Office Review by (IV): B.J. Colner
Final Drafting by (IV): Frank Johnson J-1477
John Fraser J-1478

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): None
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): Recovered: Identified: 3
Number of BMs searched for (II): Recovered: Identified: None
Number of Recoverable Photo Stations established (III): 4
Number of Temporary Photo Hydro Stations established (III): 11

Remarks:

T-9488 = LAND AREA 200m+ SHORELINE 200m-
        60 sq mi 41 miles 28 miles
T-9489 = 62 sq mi 8 miles 11 miles
T-9490 = 81 sq mi 3 miles 16 miles
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 (1949 Naval Petroleum Reserve photography, scale 1:20,000 and 1946 Air-Force TRI-MET photography, scale 1:24,000)
Summary to Accompany T-9488 through T-9490

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.

This project consists of ninety-four topographic quadrangles (T-9402 to T-9434 and T-9436 to T-9496).

T-9488 through T-9490 are surveys of the area containing the southern portion of Elephant Point, Eschscholtz Bay, Spafarief Bay, Buckland River, and Dick Slough.

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 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
RADIAL PLOT REPORT


The area of the three quads of this report was included in the same radial plot with several other quads. The single report for that radial plot is included in the Descriptive Report for quads T-9494-6 combined.
31. Delineation:

Cultural features and contours for the major portion of the area of this report were delineated simultaneously on the Reading Plotter, model "B". One small area on the south end of the junction between T-9488 and T-9489 was cloud-covered on the 9-lens instrument photos, and the area was filled in by single lens compilation on the Stereoplanigraph, AMS single lens coverage of good quality being available. No particular difficulty was encountered in the single lens work, the drainage network being used for horizontal position, and the contours and scattered spot elevations serving to establish the datum plane for contouring. The entire area of all three quads has been delineated.

32. Control:

Refer to the radial plot report included in descriptive report for quads T-9484, 85, and 86 (combined), the areas of which were included in the same plot with the areas of the quads of this report. The layout sketch, page 13, shows no control in T-9490, one in T-9488, and two in T-9489 with only one being held in the plot. This presents a weak control picture which is stated in detail in sub-heading 23, and for this reason the accuracy of the horizontal position of the features established by this radial plot are doubtful. The vertical accuracy has been maintained except in the east third of T-9490 where vertical control was inadequate. The balance of the area contained sufficient elevations to establish a vertical datum for contouring, these elevations consisting of 6 V-stations, 6 peaks including the three triangulation stations, and considerable tide water. The error in computed elevations for Peaks 501 and 503, as reported in the radial plot report, was discovered and the elevations recomputed and used; observations from BUCKLAND were in error because the original elevation for it was in error.

33. Supplemental Data:

a. Elevation Computations: Separate bound volume entitled:

"COMPUTATIONS OF ELEVATIONS AND TABULATION OF VERTICAL CONTROL POINTS FOR SURVEYS T-9482, and T-9484 thru T-9496"

b. Field Inspection Photos:

20675, 20676, 20677, 20678, 20679, 20681, 20682, 20676, 20677

34. Contours and Drainage:

The photographs were of good quality for contouring except for the small cloud area mentioned in side-heading 31, above. The single lens photos covering the cloud area on the 9-lens pictures were also of good quality. No areas of questionable contours remain except where datum may be questionable by virtue of lack of vertical control as stated in sub-heading 32.
35. Shoreline and Alongshore Details:

Shoreline inspection appeared to be adequate. On T-9489 considerable mud flats have been shown as indicated by the field inspector in the mouth of Buckland River, and notes have been used to point out an extensive area of offshore mud areas bare at low tide (but not outlined) as indicated by the field inspector along the south shore of Eschscholtz Bay. No such mud flats appear on T-9488 and T-9490.

36. Offshore Details: None.

37. Landmarks and Aids: None exist - No new ones recommended.

38. Control for Future Surveys:

Four topo and eleven hydro stations were selected and Photo-Identified in the field. They have been positioned by the radial plot and are shown on the manuscripts. They are:

T-9488 = RANT 1948, ROCK 1948, 750, 751, 752, 789, and 790.
T-9489 = ROPE 1948, SCAR 1948, 793, 794, 795, 796, 797, 798.
T-9490 = None.

39. Junctions: All are in agreement.

40. Horizontal and Vertical Accuracy:

Because of the facts stated in side-heading 32, the accuracy of these three quads must/labled doubtful in both respects. However, because of the comparative ease with which the 9-lens instrument photos were rectified, the radial plot and computed elevations would appear to be very good, and for this reason it is felt that the accuracy standards have been met or very nearly so; contours within 25ft and positions within ±mm. It can be stated that the contouring is standard in T-9488, T-9489, and the west 2/3 of T-9490.

46. Comparison with Existing Maps:


47. Comparison with Nautical Charts:

"ARCTIC COAST, Alaska, No 9400, 1:1,587,570, May 1946, 6th edition, last correction date of 27 Nov 50."


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


Submitted by: favored

William D. Harris, Chief, 9-lens Plotting Section

Approved by: favored

Louis J. Reed, Chief, Stereoscopic Mapping Branch
Photogrammetric Engineer
### GEOGRAPHIC NAMES

**Survey No.**

**T-9488, 89, 90**

<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T-9488</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>CHURCH ROCK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>DICK SLough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELEPHANT POINT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>(Point of Land)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESCHSCHOLTZ BAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>SPAFAFIEF BAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td><strong>T-9489</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>BUCKLAND RIVER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>DICK SLough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>ELEPHANT POINT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>IGLOO POINT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>ESCHSCHOLTZ BAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>T-9490</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>BUCKLAND RIVER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>KAU RIVER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Names approved:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/4/53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For titles:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Alaska</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Second Judicial Division</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>Kotzebue Sound</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>
49. Notes for the Hydrographer:

a. Hydro Stations:

T-9488

750 identified on photo 20876 and described as, "Highest part of offshore rock, 6ft, between MHWL and LWL, on a rounding point. Rock is dark colored and is the only offshore rock on the point."
751 on photo 20876 as "Highest part of an oblong white boulder 6ft high at the base of the bluff."
752 on 20877; "15' Pin rock about 650m NE of RANT, 1948, and 140m SW another pin rock, and 300m E sand beach."
789 on 20876; "SW corner of most S'ly of several small ponds between the beach and the bluff."
790 On 20876; "Highest part of tundra-topped ledge with saddle between it and bluff."

T-9489

793 on 20880; "N tip of marsh SE side of mouth of stream"  
794 on 20882; "SE tip of marsh on N side small creek."
795 on 20882; "E gable N' most building in group of four."
796 on 20882; "W tip grass projecting into E end small pond"
797 on 20882; "N tip of marsh."
798 on 20882; "NW tip of marsh."

T-9490 None.

b. Topo Stations:

T-9488

RANT, 1948 on 20877 and 524 card  
ROCK, 1948 on 20876 and 524 card

T-9489

ROPE, 1948 on 20881 and 524 card  
SCAR, 1948 on 20882 and 524 card

T-9490

None
PHOTOGRAMMETRIC OFFICE REVIEW

T. 9488, R. 89, S. 90

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. Description report
38. Field inspection photographs
39. Forms

40. 

Supervisor, Revision Section or Unit

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

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-2673-12
Review Report T-9488 through T-9490
Topographic Maps
December 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

   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. J. Colmer

APPROVED:

[Signature]
L. C. Landis
Chief, Review Branch
Div. of Photogrammetry

[Signature]
Malcolm R. Ball
Chief, Nautical Chart Branch
Division of Charts

[Signature]
[Signature]
Chief, Div. of Photogrammetry
Chief, Div. of Coastal Surveys