U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Topographic

Field No.: FH-284(47); Office No.: T-9420

LOCALITY

State: Alaska
General locality: Kotzebue Sound, North
Locality: Point Hope Area

1950

CHIEF OF PARTY:
L. G. Taylor, Chief of Field Party
L. J. Reed, Div. of Photo., Wash., D.C.

DATE: March 10, 1958
DATA RECORD

T-9419 and T-9420

Project No. (II): Ph-28(47)  Quadrangle Name (IV): T-9419 = MARRYAT INLET
T-9420 = KUKPUK RIVER

Field Office (II): Kotzebue Sound, Alaska  Chief of Party: Lorne G. Taylor
Photogrammetric Office (III): Baltimore, Md. (Racial Plot)  Hubert A. Paton
Washington, D.C. (Compilation)  Louis J. Reed, Chief,
Stereo-Mapping Sect.

Instructions dated (II) (III):

(II) = 21 Apr 43
(III) = 23 Oct 50

Method of Compilation (III): Reading Plotter, model "B"

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): JUL 15 1952
Date reported to Nautical Chart Branch (IV): JUL 21 1952

Applied to Chart No.  

Date:  

Date registered (IV): 7 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 (6) 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:  

X=  

Y=  

MILITARY GRID = Universal Transverse Mercator, Zone 3, with 2500 meter 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)

100% compiled on the Reading Plotter, model "B", by Louis Levin assisted by Arthur B. Zimmerli as student operator.

100% compiled on the Reading Plotter, model "B", by the team of 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 date 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 field photographs.

Projection and Grids ruled by (IV):  Theodore L. Janson on the Reading Ruling Machine  Date:  7 Mar 51

Projection and Grids checked by (IV):  Howard D. Wolfe  Date:  6 Jul 51

Control plotted by (III):  Albert Queen  Date:  8 Oct 51

Control checked by (III):  Frank J. Tarcza  Date:  17 Oct 51

Radial Plot and Control extension by (III):  I- Frank J. Tarcza  Date:  26 Oct 51

II- Elmer L. Williams  Aug 53

Delineation by:  Planimetry & Louis Levin  Date:  27 May 52

Stereoscopic Instrument controls (III):  Contours

Compiled:  I- David F. Romero  Date:  10 Jun 52

II- Robert L. Sugden  21 Dec 53

Photogrammetric Office Review by (III):  Louis J. Reed  Date:  11 Jul 52

23 Nov 53

Elevations on Manuscript checked by (III):  Louis J. Reed  Date:  11 Jul 52

23 Nov 53
Camera (kind or source) (II): USC&GS 9-lens model "B", f=5.25 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>27727</td>
<td>22 Jul 50</td>
<td>14:42</td>
<td>1:20,000</td>
<td>None appreciable tide</td>
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<td>14:43</td>
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<td>27637</td>
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<td>27638</td>
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<td>27640</td>
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<td>12:38</td>
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\[ \begin{align*}
37914 - 17 & = 7:55 \\
37926 - 27 & = 8:10 \\
22724 - 26 & = 12:35
\end{align*} \]

* Mr Disney of Tides and Currents states that no tide exists in this area, for all practical purposes.

**Tide (III)**

<table>
<thead>
<tr>
<th>Diurnal Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
<th>Date</th>
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<td>4/25/54</td>
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</table>

Reference Station: Icy Cape
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): B. J. Colner
P. Lach 7-9419
Final Drafting by (IV): F. Johnson 7-9420
Drafting verified for reproduction by (IV):
W. O. Halleck

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): T-9419 = 11.29 mi
Shoreline (More than 200 meters to opposite shore) (III): T-9419 = 38 mi; T-9420 = 6 mi
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): Recovered: Identified:
Number of BMs searched for (II): None
Number of Recoverable Photo Stations established (III): T-9419 = none; T-9420 = 4
Number of Temporary Photo Stations established (III): T-9419 = 2; T-9420 = 1

Remarks:
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-9419 and T-9420

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-9419 and T-9420 are topographic surveys which contain the area in the vicinity of Marryat Inlet and the mouth of Kukpuk River.

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 REPORTS

2-20.

PART I: All of T-9419 except the NE tip, and only that portion of T-9420 south of the Kukpuk River, are covered by 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

PART II:

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer.
21-30. **PART I** (Area south of the Kukpuk River):

Refer to Radial Plot Report beginning on page 8 of the Descriptive Report for quads T-9421 thru T-9429. The area of the two quads of this report is included in the area covered by that report.

**PART II** (Area north of the Kukpuk River):

The Radial Plot Report covering this portion of the area of the two quads of this report, is to be found in the Descriptive Report for quads T-9417 and T-9418, a combined report.
PART I (Area south of the Kukpuk River):

31. Delineation:

Contours and cultural features were delineated simultaneously on the Reading Plotter, model "B". Only the land area south of the river is covered in this part, and it has been delineated in its entirety.

32. Control:

For details, see side-heading 23 of the Radial Plot Report. In general, both types of control were adequate. Both were established and identified in the field; the vertical control being mostly datum at the identified MHHWL and elevations on inland peaks and water surfaces.

33. Supplemental Data:

a. Plotting Instrument Photos: (metal-mounts)
27637, 638, 639, 640, 727, and 728.

b. Field Inspection Photos:
20604, 5, 22711, 13, 14, 15, 17, 18, 27639, 42, 27720, 2, 3, 7.
and one single lens photo, 8-1-50-0 No.1919 (w/ratio)

c. Vertical Control Brochure:
"TABULATION OF ELEVATIONS AND COMPUTATIONS OF ELEVATIONS BY MAP MANUSCRIPTS FOR VERTICAL CONTROL STATIONS IN THE AREA OF MAP MANUSCRIPTS T-9419-T-9427!

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. It was used as a guide during instrument delineation. Inspection on the single lens photo was transferred directly to the manuscript from a ratioed enlargement of it; it was of the area on the north shore of Point Hope. No MHHWL exists on T-9420 in Part I.

36. Offshore Details: None exist.

37. Landmarks and Aids:

No aids exist and no landmarks were recommended.

38. Control for Future Surveys: See side-heading 49.
39. Junctions:

All junctions are in agreement since all adjoining quads have been compiled simultaneously with the two quads of this report. Refer to page 5, MAP LAYOUT SKETCH.

40. Horizontal and Vertical Accuracy:

Both maps are considered to meet the requirements set up by National Map Accuracy Standards. Map scale is 1:20,000 and the contour interval is 50ft. The 25ft contour is more accurate due to its nearness to shoreline datum.

46. Comparison with Existing Maps:

"ALASKA RECONNAISSANCE TOPOGRAPHIC SERIES, SECOND JUDICIAL DIVISION, (TIGARA), 1:250,000, USGS, 1951 edition."

47. Comparison with Nautical Charts:


b. Provisional chart, CAPE PRINCE OF WALES TO POINT BORROW, CHUKCHI SEA, Alaska-Arctic Coast, No.9402, 1:750,000, May 1950, 1st edition.

48. Geographic Name List: See separate numbered page, following.

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


Submitted By:

[Signature]
Orvis N. Dalley
Cartographer-Photogrammetric

Approved and Forwarded by:

[Signature]
Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer
COMPILATION REPORT

PART II (Area north of the Kukpuk River) October 1953

31. Delineation:

The land area of Part II was compiled completely from
delineation on the Reading Plotter, model "B".

32. Control:

The Radial Plot Report states that horizontal control was
adequate. Vertical control, also adequate, consisted of datum
elevation at the MHHWL, and field established elevations on
inland peaks and water surfaces.

33. Supplemental Data:

a. Plotting instrument photos: 22724, 25, 26, 37914, 15, 16, 17, 26, 27.
c. Vertical Control brochure: Same as for Part I.

34. Contours and Drainage:

Photograph quality was very good and no areas of
questionable contours remain.

35. Shoreline and Alongshore Details:

Inspection was adequate; it was used as a guide during
instrument operation and compilation. No low-water or shoal
lines were located, field or office.

36. Offshore Details: None exist.

37. Landmarks and Aids:

No aids exist and no landmarks were recommended.

38. Control for Future Surveys:

T-9420: Topo Sta GABE 1950, and Hydro stations 156, 7, 8, 9.

39. Junctions:

All junctions, (see page 4) are in agreement.

40. Horizontal and Vertical Accuracy:

Both quads meet map accuracy standards for maps of 1:20,000
with 50ft contours. 25ft supplementals are to be considered as
meeting 50ft standards; they were drawn to better picture areas
where the 50ft contours were separated too far to show it.
46. **Comparison with Existing Maps**: See Part I

47. **Comparison with Nautical Charts**: See Part I

48. **Geographic Name List**:
   Original list, page 13, has been completed.

49. **Notes for the Hydrographer**:
   See separate un-numbered page.

50. **Compilation Office Review**:
   See page 15, Part II.

Submitted by:

Orvis N. Dalbey, Chief,
Nine-lens Plotting Section

Approved and Forwarded by:

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer
49. Notes for The Hydrographer:

PART I:

a. Photo-Hydro Stations: None

b. Photo-topo Stations:

T-9419 = BAIL 1950 identified on photo 27642
" " = CARD 1950 " " 27639
T-9420 = None.

PART II:

a. Photo-hydro stations

T-9419 = none
T-9420 = No. 156 identified on photo 22724
No. 157 " " " 22724
No. 158 " " " 22725
No. 159 " " " 22725

b. Photo-topo stations:

T-9419 = See Part I above.
T-9420 = GABE 1950, identified on photo 22724

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer
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<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
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According to Project Names Report, the name Tuckfield on U.S.G.S. "Point Hope" should be deleted (T-9419).

Names approved 4-14-54. L. Heck

Approved names applied to manuscript 4/15/54

John M. Deal
PHOTOGRAMMETRIC OFFICE REVIEW (PART I + II)

T. 9419 and 9420

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.  

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:  

Superintendent, Bureau of Reclamation
Inland Navigation Section
62. **Comparison with Registered Topographic Surveys.** - None

63. **Comparison with Maps of Other Agencies.**

   USGS Alaska Map, Point Hope 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
    hydrographic surveys and the construction of nautical charts.

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Reviewed by:

[Signature]

B. J. Colner

APPROVED

[Signature]

Chief, Review Branch
Div. of Photogrammetry

[Signature]

Chief, Nautical Chart Branch
Division of Charts

[Signature]

Chief, Div. of Photogrammetry

[Signature]

Chief, Div. of Coastal Surveys