**U. S. COAST AND GEODETIC SURVEY**
**DEPARTMENT OF COMMERCE**

**DESCRIPTIVE REPORT**

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Planimetric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Office No. T-9766 thru T-9768</td>
</tr>
</tbody>
</table>

**LOCALITY**

<table>
<thead>
<tr>
<th>Territory</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alaska</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General locality</th>
<th>North Arctic Coast</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Locality</th>
<th>Ikipikpu River, Teshekpuk Lake</th>
</tr>
</thead>
</table>

**CHIEF OF PARTY**

Max G. Ricketts, Arctic Party
Fred A. Riddell, Portland, Oregon Photogrammetric Office

**LIBRARY & ARCHIVES**

**DATE**

JUN 20 1955
DATA RECORD

T - 9766 thru 9768

Project No. (II): Ph-29 (47) II Quadrangle Name (IV):

Field Office (II): Arctic Field Party (West Unit) Chief of Party: Max G. Ricketts

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Fred A. Riddell

Instructions dated (II) (III): 1/13/48, 3/8/50, 2/6/51, 3/16/51 (field) Copy filed in Division of
12/14/49, 1/27/50, 11/9/50, 11/23/51 (office) Photogrammetry (IV)

Method of Compilation (III): Graphic

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

Scale Factor (III): None

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

Applied to Chart No. Date: Date registered (IV): 25 June, 1954

Publication Scale (IV):

Geographic Datum (III): Point Barrow

Correction to N.A. 1927 is now available: 2TS, Apr. 1953

Vertical Datum (III): Mean Sea Level

Mean sea level except as follows:
Elevations shown as (2) refer to mean high water
Elevations shown as (3) refer to sounding datum
i.e., mean low water or mean lower low water

The difference between Point Barrow, 1945 Datum and preliminary N.A. 1927 Datum is Lat. plus
40" and Long. minus 15'4" G.W., 8/54 ±4'

Reference Station (III): (See paragraph 12 of Office Instructions Ph-29 (47) dated
14 December 1949)

Lat.: Long.: Adjusted

Plane Coordinates (IV):

State: Zone: Unadjusted

Y = X =

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)
(ii) (iii)
Field inspection by (III): Leo W. Eason II

Date: 2 September 1951

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): Delineated by stereoscopic examination of photographs with the aid of spot locations shown on reverse side of field photographs.

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III): Fred A. Riddell

Date: 9/22/52

Control checked by (III): C. C. Wiebe

Date: 9/26/52

Radial Plot or Stereoscopic Control extension by (III):

James L. Harris

Date: 10/9/52

Stereoscopic Instrument compilation (III):

Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): See reverse Side

Date:

Photogrammetric Office Review by (III): See reverse Side

Date:

Elevations on Manuscript checked by (II) (III):

Date:
Manuscript delineated by:    Date:

T-9766  J.E. Deal & L.L. Graves      1/6/53
T-9767  L.L. Graves                  11/4/52
T-9768  J.E. Deal                     10/13/52

Manuscript reviewed by:    Date:

T-9766  C.C. Wiebe                   1/20/53
T-9767  C.C. Wiebe                   11/27/52
T-9768  J.L. Harris                   10/15/52
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>19934 thru 19941</td>
<td>7/20/47</td>
<td>15:51</td>
<td>1:20,000</td>
<td>0.7 ft. above M.L.L.W.</td>
</tr>
<tr>
<td>20143</td>
<td>7/25/47</td>
<td>14:03</td>
<td>1:20,000</td>
<td>0.1 ft. above M.L.L.W.</td>
</tr>
</tbody>
</table>

Tide (III)

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Diurnal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.6 8.5</td>
<td></td>
</tr>
<tr>
<td>0.1</td>
<td>0.4 0.5</td>
<td></td>
</tr>
</tbody>
</table>

Reference Station: Kodiak, Alaska
Subordinate Station: Point Barrow
Subordinate Station:

Washington Office Review by (IV): [Signature]
Final Drafting by (IV): [Signature]
Drafting verified for reproduction by (IV): [Signature]

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 135
Shoreline (More than 200 meters to opposite shore) (III): 65 Statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 133
Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 3
Number of BMs searched for (II):
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III):

Remarks:
Summary to Accompany
Descriptive Report T-9766 to 68, incl.

Planimetric project Ph-29(47) consists of 76 maps, scale 1:20,000, - 26 in Part I (Jago River, westward to Jones Islands); 43 in Part II (Jones Islands, westward to Point Barrow); 7 in Part III (Canadian boundary, westward to Jago River). Part III was added to the project in 1952.

This project was designed as surveys for new nautical charts at a much larger scale than the present nautical chart, and to furnish bases to the U. S. Geological Survey for projected topographic maps.

When all the map manuscripts in the project have been reviewed, smooth-drafted, reproduced, and registered, a Compilation Report will be filed in the Bureau Archives. This report will discuss the project in its entirety.
FIELD INSPECTION REPORT
Map Manuscripts T-9766 thru T-9768
Project Ph-29 (47) II

Refer to Descriptive Report "Shoreline - Photogrammetric, Alaska, North Arctic Coast, Point Barrow to Cape Halkett, 1951" Max G. Ricketts, Chief of Party.
PHOTOGRAMMETRIC PLOT REPORT
Map Manuscripts T-9766 thru T-9768
Project Ph-29 (47) II

Refer to Photogrammetric Plot Report of the combined radial plot for Map Manuscripts T-9759 thru T-9761 and T-9766 thru T-9768 which is included in the Descriptive Report for T-9759 thru T-9761.
COMPILATION REPORT
Map Manuscripts T-9766 thru T-9768
Project Ph-29 (47) II

These three map manuscripts portray the inshore planimetric
details along the North Arctic Coast west of Teshekpuk Lake in
the vicinity of INPIKPUK RIVER and CHIPP RIVER.

In general Items 31 thru 47 of the Compilation Report for Map
Manuscripts T-9743 thru T-9746 Project Ph-29 (47) II are applicable.
The following exceptions are noted.

31. Delineation:

Drawing of the "Low area or area of Seasonal Inundation"
symbol was discontinued on Nov. 10, 1952 while compilation was in
progress in accordance with instructions contained in letter 71l-
aal dated 31 October 1952 Subject: - "Examination of Map Manu-
scripts T-9747, T-9751, and T-9754." Since that date these areas
have been enclosed with a dashed line in blue acetate ink and
labelled "f1a" as indicated in Topographic Manual Part II, Page 429.

39. Junctions:

Delete references to small projection.

Approved:

Fred A. Riddell
Comdr., USC&G Survey
Officer in Charge

Respectfully submitted:

J. Edward Deal, Jr.
Cartographer
48. Geographic Names List.

The geographic names report, side heading XIV of the field inspection report, was not furnished the compilation office.

The following were from sources listed below:

T-9766

Ikkipuk River

T-9767

Ikkipuk River (East Channel)
Teshekpuk Lake

T-9768

Teshekpuk Lake

Sources:

Nautical Charts Nos. 9400 and 9495
Various Aeronautical Charts of the Area
Field Inspection Notes
Description of Stations

Names Approved
4-17-53
L. Heck
PHOTOGRAMMETRIC OFFICE REVIEW

T - 9766


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. [Signature]

Reviewer

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.

[Signature]

Compiler

[Signature]

Supervisor

43. Remarks:
PHOTOGRAMMETRIC OFFICE REVIEW

T. 9747


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. [Signature] Reviewer

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.

43. Remarks:
PHOTOGRAMMETRIC OFFICE REVIEW


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

Reviewer

Supervisor, Review Section or Unit

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-2623-12
Review Report T-9766 to 68 incl.
Planimetric Maps
17 April 1953

62. Comparison with Registered Surveys: There are no earlier surveys for this area.

63. Comparison with Maps of other Agencies: None

64. Comparison with Contemporary Hydrographic Surveys: These are inland areas in which no hydrographic survey was made.

65. Comparison with Nautical Charts:

94.00  1:1,587,870 @ 70° May 1947 rev. June 1952

The small scale of the chart precludes more than a superficial inspection.

66. Accuracy:

Station Wolf, at the northwest border of T-9767 is the only station used in the radial plot in the area of these three map manuscripts, though both Polar and Teshekpuk fall within the area. Substitute points and measurements for Teshekpuk were furnished on photograph 19934; and during review an attempt to verify the delineated position of shoreline was made by cutting in the substitute points on the manuscript (T-9768). Verification could not be accomplished because neither the angles nor distances provided could be aligned with the plotted position of the triangulation station.

The shoreline of the lake north of the station is about 260 ft. distant on the map manuscript, though the description and the sketch give 205 ft. This could, in part at least, be attributed to change during the interval between photography (1947) and field work (1951).

The map manuscripts are well delineated, but are probably of substandard position accuracy for this scale.

Reviewed by:

Lena T. Stevens

Approved by:

C. L. Hundt
Chief, Review Section
Div. of Photogrammetry

Wallace A. Bruder
Acting Chief, Nautical Chart Branch
Division of Charts

Earl O. Atkeson
Chief, Div. of Coastal Surveys

11 May 1953
HORIZONTAL DATUM ADJUSTMENT
ARCTIC OCEAN AREA, ALASKA

Corrections to Preliminary N.A. 1927 Datum from the various independent horizontal datums on the north coast of Alaska have been determined by the Division of Geodesy, being computed from field positions, allowing for closure in azimuth and length. This procedure was started from adjusted N.A. 1927 Datum stations at about the 63rd Parallel on the Canadian Boundary, followed the 141st Meridian (IBG Datum) to Beaufort Sea (Arctic Ocean), thence westward through the Barter Island 1948, Flaxman Island and Point Barrow 1945 Datums to a connection with adjusted N.A. 1927 Datum in the area of Kotzebue Sound, off Chukchi Sea. The position of the stations in this area is subject to further adjustment after more geodetic field work.

PLANIMETRIC MAPPING PROJECT
Ph-29(47) PART II
Point Barrow to Jones Island, Alaska
T-9743 thru T-9785

T-9743 thru T-9772: Point Barrow 1945 Datum, correction to Preliminary N.A. 1927 Datum in Latitude is +1.30 sec. on all the maps, and in Longitude, ranges from -14.93 sec. on T-9743 to -15.26 sec. on T-9772. These corrections were converted into meters, and stamped on page T-2 of each Descriptive Report, and near the title block of each manuscript and registered cloth-backed map, with the following stamp:

T-9773 thru T-9785: Flaxman Island Datum, correction to Preliminary N.A. 1927 Datum use ranges from -1.26 sec. on T-9777 to -3.00 sec. on T-9782, and in Longitude from plus 8.95 sec. on T-9777 to plus 9.90 sec. on T-9782. These corrections were stamped on page T-2 of each Descriptive Report, and near the title block of each manuscript and cloth-backed registered map, with the exception that the cloth-backed maps have not been completed for T-9777, T-9779 thru 9782, and T-9784 thru 9785. When these maps are completed they should be stamped the same as have been their descriptive reports, with the following stamp:

The difference between Point Barrow Datum and preliminary N.A. 1927 Datum is Lat. plus X.m. and Long. X.m./X.m. minus X.m.

See the Special Report on HORIZONTAL DATUM ADJUSTMENT for Ph-29(47), Parts I, II, & III, filed with the completion report for a project index showing the correction for each map.