Diag. Cht. No. 9400

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric
Field No. Ph-29 (47) Office No. T-9785 Incl.

LOCALITY

Territory Alaska
General locality Beaufort Sea (Arctic Coast)
Locality North Arctic Coast from Sakonowyak
River to Harrison Bay

19451

CHIEF OF PARTY
Max C. Ricketts, Field
Fred A. Riddell, Portland, Ore., Photo.

LIBRARY & ARCHIVES

DATE JUNE 28, 1955
25 July 1952

To: Comdr. Fred A. Riddell
U. S. Coast and Geodetic Survey
Swan Island Postal Station
Portland 18, Oregon

Subject: Inspection of the compilation of planimetric map manuscript T-9778, Project Ph-29(47)

The subject map manuscript has been received and inspected in this office. This map appears to be very well prepared and the enclosed reproduced copies are easily legible. However, the placement of the name Harrison Bay will be shifted on the map manuscript to a more appropriate place in the bay and the name Beaufort Sea will be added to the map manuscript.

C. S. Reading
Chief, Div. of Photogrammetry
DATA RECORD

T-9778 to T-9785 Incl.

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

Field Office (II): Arctic Field Party (East 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): G-50.52 Date reported to Nautical Chart Branch (IV): 7-8-I52
Applied to Chart No. Date: Date registered (IV): 7 Jan. 1955

Publication Scale (IV):
Geographic Datum (III): Flaxman Island 1912
Correction figures to NA. 1927 are now available. LTS. Nov. 1953
See reverse side of this page. G. B. W. Sept. 1954
Vertical Datum (III): Mean-sea level
Mean sea level except as follows:
Elevations shown as (a) refer to mean high water
Elevations shown as (b) refer to sounding datum
i.e., mean low water or mean lower low water

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

Plane Coordinates (IV):
State: Zone:
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.
The difference between FLAXMAN ISLAND Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 76m. and Long. plus/minus 94m. \[ \text{vlcl.} \]

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 63m. and Long. plus/minus 98m. \[ \text{vlcl.} \]

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 75m. and Long. plus/minus 100m. \[ \text{vlcl.} \]

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 79m. and Long. plus/minus 102m. \[ \text{vlcl.} \]

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 93m. and Long. plus/minus 103m. \[ \text{vlcl.} \]

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 50m. and Long. plus/minus 98m. \[ \text{vlcl.} \]

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 63m. and Long. plus/minus 100m. \[ \text{vlcl.} \]

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. minus/plus 67m. and Long. plus/minus 101m. \[ \text{vlcl.} \]
Areas contoured by various personnel
(Show name within area)
(II) (III)
DATA RECORD

Field inspection by (II): Cornelius A.J. Fauw
Date: Field season 1951

Planetable contouring by (II):
Date:

Completion Surveys by (II):
Date:

Mean High Water Location (III) (State date and method of location): Location for the most part determined by stereoscopic examination of the photographs.

Projection and Grids ruled by (IV):
Date:

Projection and Grids checked by (IV):
Date:

Control plotted by (III): Roy A. Davidson, J.L. Harris & R.H. Barron Date: 1-11-52 to 1-15-52

Control checked by (III): Roy A. Davidson, J.L. Harris & R.H. Barron Date: 1-11-52 to 1-15-52

Radial Plot: J.L. Harris & J.E. Deal
Date: 1-22-52

Control extension by (III):

Stereoscopic Instrument compilation (III):

Contours

Manuscript delineated by (III): See reverse side
Date:

Photogrammetric Office Review by (III): See reverse side
Date:

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

Form T-Page 3
<table>
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<th>Date</th>
<th>Interior</th>
<th>Date</th>
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<td>L.L. Graves</td>
<td>1/30/52</td>
<td>J.L. Harris</td>
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<tr>
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<td>R.A. Davidson</td>
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<td>J.L. Harris</td>
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<td>1/30/52</td>
<td>C.C. Wiebe</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>T-9783</td>
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<td>T-9785</td>
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PHOTOGRAPHS (iii)

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<th>Time</th>
<th>Scale</th>
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<td>0.15 above M.L.L.W.</td>
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<td>12:07</td>
<td>1:20,000</td>
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<td>13:12</td>
<td>1:20,000</td>
<td>0.08 above M.L.L.W.</td>
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<td>20128 to 20133 Incl.</td>
<td>7/25/47</td>
<td>13:24</td>
<td>1:20,000</td>
<td>0.10 above M.L.L.W.</td>
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Tide (iii)

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<th>Ratio of Ranges</th>
<th>Mean Sea Level Range</th>
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<td>6.6</td>
<td>8.5</td>
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<tr>
<td>0.1</td>
<td>0.5</td>
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<td>0.7</td>
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Reference Station: Kodiak, Alaska
Subordinate Station: Flaxman Island, Alaska
Subordinate Station:

Washington Office Review by (iv):

Final Drafting by (iv):

Drafting verified for reproduction by (iv):

Proof Edit by (iv):

Land Area (Sq. Statute Miles) (iii): 526.3
Shoreline (More than 200 meters to opposite shore) (iii): 310.3 statute miles
Shoreline (Less than 200 meters to opposite shore) (iii): 216.0

Control Leveling - Miles (ii):

Number of Triangulation Stations searched for (ii):
Recovered:
Identified:

Number of BMs searched for (ii):
Recovered:
Identified:

Number of Recoverable Photo Stations established (iii):

Number of Temporary Photo Hydro Stations established (iii):

Remarks:
Summary to Accompany Descriptive Report T-9778 to 85, inc.

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 Completion Report will be filed in the Bureau Archives. This report will discuss the project in its entirety.
FIELD INSPECTION REPORT
Map Manuscript T-9778 to T-9785 Incl.
Project Ph-29(47) II

Refer to Field Inspection Report "Arctic North Coast of Alaska, Kuparuk River to Fish Creek", CS-320 (1951), Max G. Ricketts, Chief of Party.
PHOTOMETRIC PLOT REPORT
Map Manuscripts Nos. T-9778 to T-9735 Incl.
Project Ph-29(47) II

These eight map manuscripts are part of a combined radial plot comprising Map manuscripts Nos. T-9773 to T-9775 Incl. and T-9778 to T-9735 Incl.

The Photogrammetric Plot Report is included with the Descriptive Report for T-9773 to T-9775 Incl. (1951).
31. Delineation.

Graphic methods were used for the compilation of these map manuscripts.

The field inspection data were not as complete as is usually desired but in general the data were adequate and enabled the compiler to satisfactorily interpret the photographic detail in the interior areas. Assistance was given to the personnel of this office in this part of the work by Lt. (j.g.) Dale E. Fisher who served several assignments in the field with the North Arctic Coast party, and who was assigned to the Portland Photogrammetric Office while the compilation work on this project was in progress.

For the most part the location of the mean high-water line was not definitely indicated by the field inspection party and it was determined in the office by stereoscopic examination of the photographs.

Side headings 32, 34, 35, 36, 37, 38, 39, 40, 46, and 47 of the Compilation Report for T-9773 to T-9775 Incl. are in general applicable to T-9778 to T-9785 Incl.

33. Supplemental Data.

None were furnished for the areas of these eight map manuscripts.

Approved: 

[Signature]
Fred A. Riddell
Officer in Charge
Portland Photogrammetric Office

Respectfully submitted

[Signature]
J. Edward Deal Jr.
Cartographer

* T-9778 was returned to Portland (6-10-62) after review.
The original delineation was revised at its junction with the survey on the west (T-9777) which was part of another radial plot.
48. Geographic Names List.

The geographic names report mentioned in side heading 18 of the field inspection report was not furnished the compilation office. The following names were from sources listed below:

**T-9776**
- Colville River (West Branch)
- Fish Creek (East Branch)
- Fish Creek (East Branch)
- Harrison Bay
- Tamayak Channel

**T-9779**
- Beaufort Sea
- Milne River
- Colville River
- Fish Creek Channel
- Eeaktooch Channel
- Sakoonya River
- Toloktovit Point
- Tamayak Channel

**T-9780**
- Milne River
- Milne River
- Colville River
- Kalukik Creek
- Kupigrua
- Nikoliknut
- Nichols Island (shift application to per north report)

**T-9781**
- Thetis Mound
- Unguvarik River
- Kupigrua
- Jones Mound

Sources
- Nautical Chart No. 9400
- Various Aeronautical Charts of area
- Field Inspection Notes
- Descriptions of stations

Names approved
3-12-53
L. Heck

The numerous changes in the above names are based on the 1951 Project Names Report.
GEOGRAPHIC NAMES

T-9778
Colville River
Fish Creek
Tingmeachsiovik River
Harrison Bay
Tamayvak Channel

T-9779
Beaufort Sea
Colville River
Miyueach River
Elaktoyevak Channel
Harrison Bay
Sakoonaw River
Kupigrvak Channel
Tolakotiyut Point
Tamayvak Channel

T-9780
Colville River (Main Channel)
Anachkik Island
Anachlik Lake
Kalubik Creek
Kupigrvak Channel
Nigalikmut Island
Nuekshat Island

T-9781
Thetis Mound
Ugnuravik River
Jones Mound

T-9782
Beachey Point
Cottle Island
Jones Islands
Long Island
Beachey Mound
Sakonowyak River

T-9783
Fish Creek
Tingmeachsiovik River
Harrison Bay
Nechelik Channel
Nanuk Narivanga Lake
Sakoonaw River
Ublutuoch River

T-9784
Anajuk Point
Colville River
Kupigrvak Channel
Kachemach Mound
Kachemach River
Miyueach River
Nechelik Channel
Nanuk Narivanga Lake
Pikoni Mound
Sakoonaw River
Tamayvak Channel

T-9785
Miluuech River
Kalubik Creek

These names are based on the 1951 Project Names Report.
Names approved:
Signed: L. Heck
3-23-53
PHOTOGRAMMETRIC OFFICE REVIEW
T. 9776 to T-9785 Incl.


CONTROL STATIONS
5. Horizontal control stations of third-order or higher accuracy X 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) X 7. Photo hydro stations X 8. Bench marks X

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

BOUNDARIES
31. Boundary lines X 32. Public land lines X

MISCELLANEOUS
40. [Signatures]
Reviewer
Supervisor, Review Section or Unit

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:
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.**—

- T-9778 and T-9779 fall within the area of the 1952 hydrographic surveys which are not available for comparison.

- **T-9780:**
  - H-9718 1:20,000, 1951, East arm Colville R - Spy Id.

- **T-9781:**
  - H-9717 1:20,000, 1951, Pingok Id to Thetis Id.

- **T-9782:**
  - H-9716 1:20,000, 1951, Cottle Id. to Pingok Id.

- **T-9783, 84, 85:** are inland surveys.

There is no conflict between the hydrographic surveys and the topographic surveys.

65. **Comparison with Nautical Charts.**—

- **9400** 1:1,587,870 at 70°, May 1947, rev. June 1952

The small scale of the chart affords little basis for comparison.

66. **Accuracy.**—The delineation complies with project instructions and meets Bureau standards.

Reviewed by:

Lena T. Stevens

APPROVED

L. Scarfe

Chief, Review Section
Div. of Photogrammetry

June 21, 1957

Carl O. Knapton

Chief, Div. of Photogrammetry

Chief, Div. of Coastal Surveys
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 Ikst Meridian (IBC 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 Kotschue Sound, off Chukchi Sea. The position of the stations in this area is subject to further adjustment after more geodetic field work.

PLANE 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 -14.73 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 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 -1.00 sec. on T-9782, and in latitude from plus 0.95 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-9784-9785. When these maps are completed they should be stamped the same as have been their descriptive reports with the following stamp:

The difference between Flaxman Island Datum
and preliminary N.A. 1927 Datum is Lat. east/minus X m. and Long. plus/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.
T-9778} applied to Ch. 9403 thru Ch. 9465. Hel., Apr. 55
T-9779 T-9780 T-9782
T-9781} applied to Ch. 9403 thru Ch. 9470. Hel., Apr. 55
T-9780 T-9781 T-9782
T-9784 T-9786} Examined & compared to Ch. 9403. No important differences. FEB 1955