Diag. Cht. No. 9400

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESRIPTIVE REPORT

Type of Survey Planimetric
T-9778 to
Field No. Ph-29 (47) 11 Office No. T-9785 Incl.

LOCALITY

Territory
State 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.

O. 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


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): 6-30-52  Date reported to Nautical Chart Branch (IV): 7-8-52

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. L.S. 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 (28) refer to mean high water
Elevations shown as (2) 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.: Adjusted

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. 94m. and Long. plus/minus 46m.

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. 98m. and Long. plus/minus 93m.

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. 100m. and Long. plus/minus 75m.

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. 102m. and Long. plus/minus 79m.

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. 108m. and Long. plus/minus 93m.

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. 98m. and Long. plus/minus 50m.

The difference between Ditto Datum and preliminary N.A. 1927 Datum is Lat. 100m. and Long. plus/minus 63m.
Areas contoured by various personnel
(Show name within area)
(II) (III)
DATA RECORD

Field inspection by (II): Cornelius A.J. Pauw 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


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

Control extension by (III): Date:

Stereoscopic Instrument compilation (III): Date:

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): Date:
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<th>Interior</th>
<th>Date</th>
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<td>1/30/52</td>
<td>J.L. Harris</td>
<td>5/20/52</td>
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<tr>
<td>T-9779</td>
<td>2/5/52</td>
<td>L.L. Graves</td>
<td>6/5/52</td>
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<td>T-9780</td>
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<td>C.C. Wiebe</td>
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<td>R.A. Davidson</td>
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PHOTOGRAPHS (III)

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<th>Time</th>
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<th>Stage of Tide</th>
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<td>13:24</td>
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Tide (III)

Reference Station: Kodiak, Alaska
Subordinate Station: Flagman Island, Alaska

Diurnal

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<th>Ratio of Ranges</th>
<th>Mean Range</th>
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<td>0.1</td>
<td>0.5</td>
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Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Date: 25 Mar. 1954

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, Kuperuk River to Fish Creek", CS-320 (1951), Max G. Ricketts, Chief of Party.
PHOTOGRAMMETRIC PLOT REPORT
Map Manuscripts Nos. T-9778 to T-9785 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-9785 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 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:  

Respectfully submitted

Fred A. Riddell  
Officer in Charge  
Portland Photogrammetric Office

J. Edward Deal Jr.  
Cartographer

* T-9778 was returned to Portland (8-10-51) 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-9770
- Colville River (West Branch)
- Fish Creek (East Branch)
- Katuk River Channel
- Harrison Bay
- Tamaynayak Channel

T-9779
- Beaufort Sea
- Milne Road
- Colville River
- Elakto Beach Channel
- Kupigruk
- Tolktovut Point
- Tamaynayak Channel

T-9780
- Anachik I
- Anachik Lake

T-9781
- Thetis Mound
- Umgakak River
- Jones Mound

Sources

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

Names approved
3-23-53
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
Tamayak Channel

T-9779
Beaufort Sea
Colville River
Miluveach River
Elaktoeak Channel
Harrison Bay
Sakoonawg River
Kupigruak Channel
Tsilaktooyut Point
Tamayak Channel

T-9780
Colville River (Main Channel)
Anachkik Island
Anachilk Lake
Kalubik Creek
Kupigruak Channel
Nigaliknut Island
Nueksat Island

T-9781
Thetis Mound
Ugnuravik River
Jones Mound

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

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

T-9784
Anajuk Point
Colville River
Kupigruak Channel
Kachemach Mound
Kachemach River
Miluveach River
Nechelik Channel
Nanuk Narivanga Lake
Pikonik Mound
Sakoonawg River
Tamayak Channel

T-9785
Miluveach 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-9778 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

ALONGSHORE AREAS
(Nautical Chart Data)

PHYSICAL FEATURES

CULTURAL FEATURES

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

MISCELLANEOUS
40. Dan H. Bartol X
Reviewer

J. Edward Deal Jr.
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.—

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:

[Signature]
Lena T. Stevens

APPROVED

[Signature]
L. S. Lande
Chief, Review Section
Div. of Photogrammetry

[Signature]
H. E. Duke
Chief, Nautical Chart Branch
Division of Charts &

[Signature]
Earl O. I. Sioux
Chief, Div. of Coastal Surveys

[Signature]
June 27, 1957
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 84th Meridian (IBC Datum) to Beaufort Sea (Arctic Ocean), thence westward through the Barter Island 1945, 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.

PLANE METRIC 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 1°41.30 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 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-9784-9785. 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. cheat/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.9178 \{ applied to Cldt. 9403 from Cldt. 9469. HEL. Apr. 55 \}
T.9179
T.9180 \{ applied to Cldt. 9403 from Cldt. 9470. HEL. Apr. 55 \}
T.9181
T.9182

T.9784 \{ examined and compared to Cldt. 9403. No important differences. HEL. Oct. 55 \}
T.9785