

9751

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-9751

LOCALITY

State Alaska

General locality North Arctic Coast

Locality West of Admiralty Bay and North of Inaru River

1945

CHIEF OF PARTY

Max G. Ricketts, Chief of Party

Fred A. Riddell, Portland, Oregon Photo-
grammetric Office

LIBRARY & ARCHIVES

DATE May 5, 1955

B-1870-1 (1)

9751

31 October 1952

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

Subject: Examination of map manuscripts T-9747, T-9751,
and T-9754

The drawings are excellent and provide good reproduction copies and the manuscripts seem to be complete in every respect.

Referring to the lake at latitude $70^{\circ} 58'$, longitude $156^{\circ} 16'$ on T-9751, should not the grass in water be shown by the same symbol, outside the shoreline, as used at the southwest corner of T-9747 and in the central part of T-9751.

The symbolization of marsh and "low tundra" or low ground areas on these manuscripts is excellent, but I believe that this can be done more cheaply by stickup in the Washington Office. Consequently, on future manuscripts these areas may be outlined with a blue dash line as called for in Section 5431D of the Manual. This will relieve your office of a rather considerable amount of drafting which we can handle by stickup methods.

O. S. Reading,
Chief, Div. of Photogrammetry

DATA RECORD

Page 2

T - 9751

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): 1:20000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

OCT 10 1952

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

OCT 22 1952

Applied to Chart No.

Date:

Date registered (IV): 19 July, 1954

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): Point Barrow

*Correction figures to N.A. 1927
are now available*

LTS. Jan. 1953

*The difference between Point Barrow, 1945 Datum
and preliminary N.A. 1927 Datum is Lat. plus/minus
40 m. and Long. plus/minus 151 m. G.B.W. 8/54*

Vertical Datum (III): *High Water* Mean Sea Level

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

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

Lat.:

Long.:

Adjusted

Unadjusted

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.

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Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): Leo W. Eason II

Date: 2nd Sept. 1951

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): Mean high-water line of Inaru River, tide water inlets, and shoreline of interior lakes delineated by office examination of photographs with the aid of the stereoscope.

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III): None

Date:

Control checked by (III): None

Date:

Radial Plot or Stereoscopic J. L. Harris & J. E. Deal
Control extension by (III):

Date: 4/9/52

Stereoscopic Instrument compilation (III):
Planimetry
Contours

Date:

Date:

Manuscript delineated by (III): Carita C. Wiebe

Date: 9/24/52

Photogrammetric Office Review by (III): J. E. Deal

Date: 9/30/52

Elevations on Manuscript None
checked by (II) (III):

Date:

Camera (kind or source) (III): U.S.C. & G.S. 9 lens - focal length 8.25 inches

Page 5

Number
20005 thru 20007

Date
7/20/47

PHOTOGRAPHS (III)

Time
17:44

Scale
1:20000

Stage of Tide
0.3 ft. above M.L.L.W.

Tide (III)

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

| Diurnal | | |
|--------------------|---------------|-----------------|
| Ratio of Ranges | Mean Range | Spring Range |
| | 6.6 | 8.5 |
| 0.1 | 0.4 | 0.5 |
| | | |

Washington Office Review by (IV): *Lena T. Stevens*

Date: 14 Jan. 1953

Final Drafting by (IV): *Buene*

Date: 10 Sept 1953

Drafting verified for reproduction by (IV): *W.D. Hallin*

Date: 9-24-53

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 41.0

Shoreline (More than 200 meters to opposite shore) (III): 73.9 (includes largest lakes)

Shoreline (Less than 200 meters to opposite shore) (III): none

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):

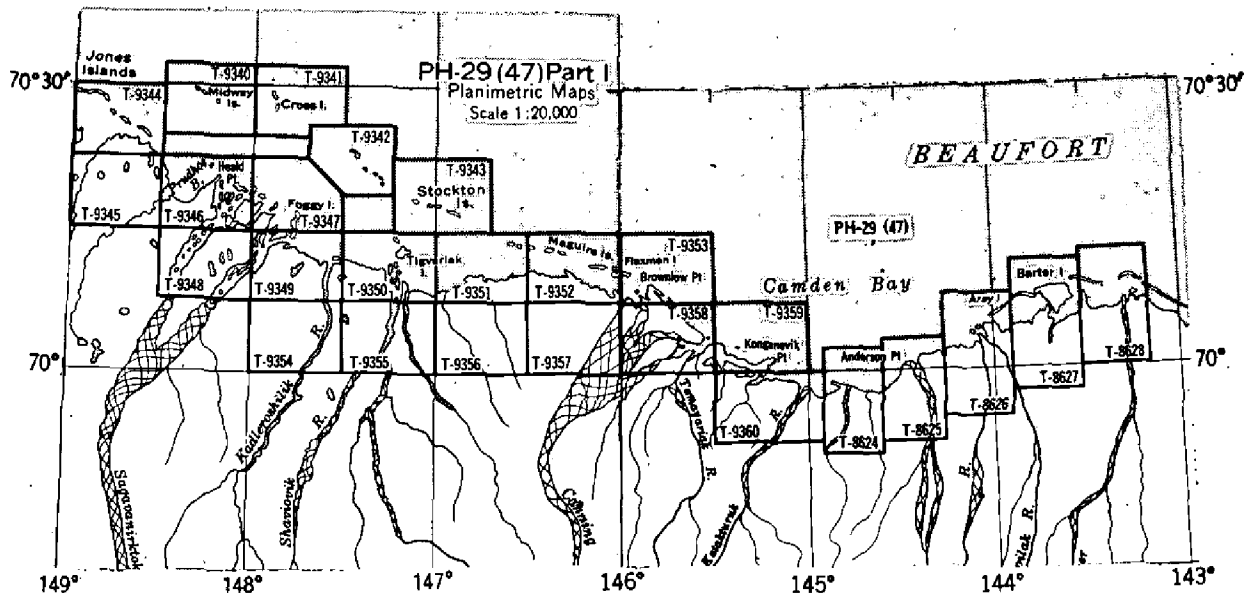
Number of Temporary Photo Hydro Stations established (III):

Remarks:

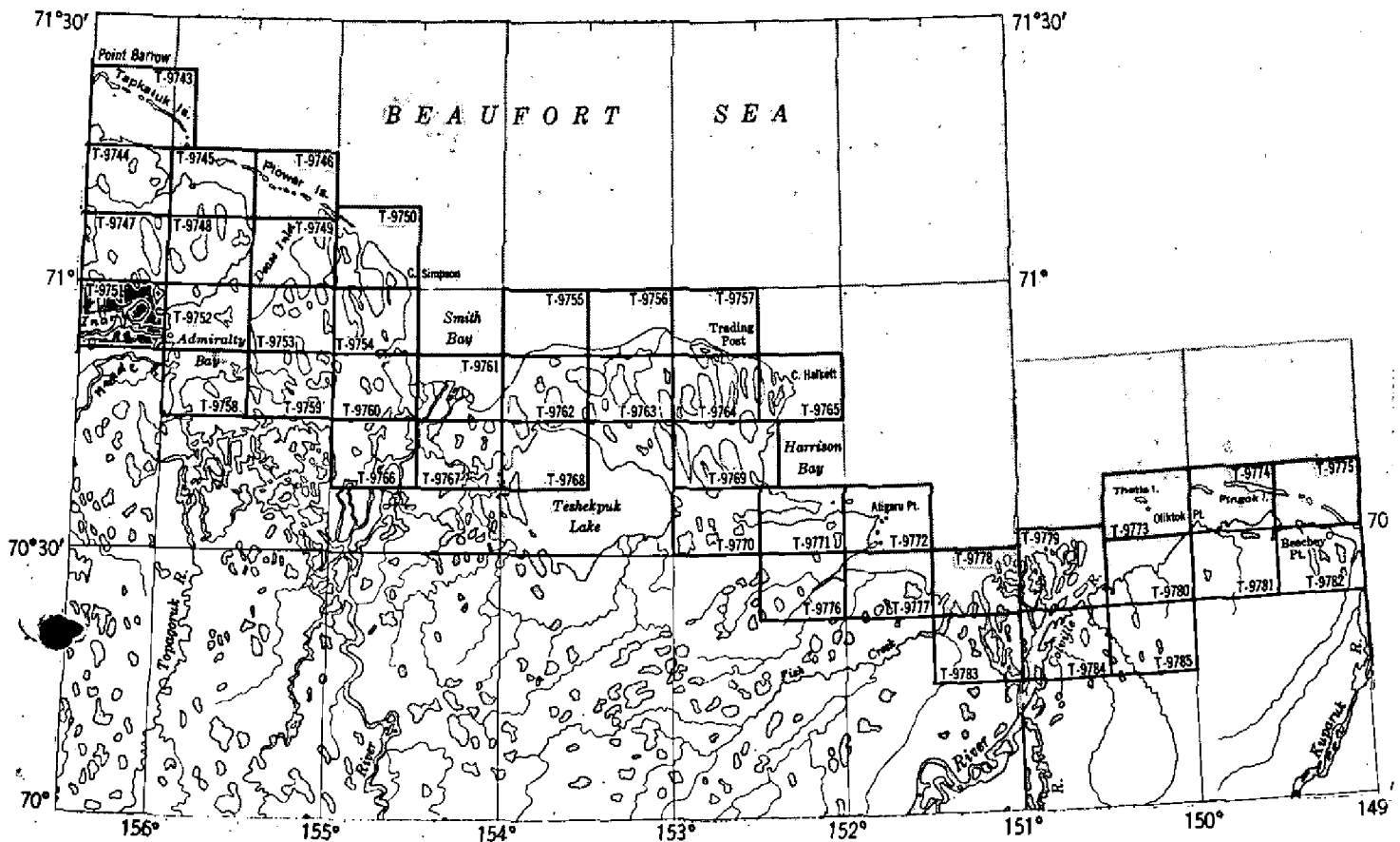
PLANIMETRIC MAPPING PROJECT PH-29 (47)

Photographs taken July 1947 Scale 1:20,000

Part I ALASKA Barter Island to Jones Islands



Part II ALASKA Jones Islands to Point Barrow



Summary to Accompany
Descriptive Report T-9751

Planimetric project Ph-29(47) consists of 69 maps, scale 1:20,000, - 26 in Part I (Barter Island westward to Jones Island) and 43 in Part II (Jones Islands westward to Point Barrow). The project covers that part of the Arctic Ocean coastal area (Beaufort Sea) which extends from $143^{\circ} 10'$ to $156^{\circ} 30'$ west longitude.

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.

T-9751 is one of the four most westerly maps in the Part II group. It is a delineation of the interior area west of Admiralty Bay.

When all the map manuscripts in this project have been reviewed, smooth-drafted, reproduced, and registered, a Completion Report will be filed in the Bureau Archives. This report will describe the project in its entirety.

FIELD INSPECTION REPORT
Map Manuscript T-9751
Project Ph-29 (47) II

Refer to Descriptive Report "Shoreline - Photogrammetric, North
Arctic Coast, Point Barrow to Cape Halkett, (1951)" Max G.
Ricketts, Chief of Party.

To be filed in Archives with Completion Report

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscript T-9751

Project Ph-29 (47) II

Refer to the Combined Photogrammetric Plot Report for T-9743 thru T-9754 and T-9758 which is included in the Descriptive Report for T-9743 thru T-9746, Project Ph-29 (47) II, (1951)

COMPILATION REPORT
Map Manuscript T-9751
Project Ph-29 (47) II

This map manuscript portrays the planimetric details of an area approximately four miles in latitude north from the Inaru River and eleven miles in longitude beginning just west of Admiralty Bay.

Side headings 31, 32, 33, 34, 36, 37, 38, 46 and 47 of the Descriptive Report for T-9743 thru T-9746 are in general applicable except for remarks pertaining to offshore barrier islands and to mean high-water and low-water lines.

35: Shoreline and alongshore details:

The mean high-water line of the Inaru River and of the several tidal inlets was delineated by office examination of the photographs with the aid of the stereoscope as was also the shoreline of the interior lakes.

Approximate low-water lines have been detailed where they were believed visible on the photographs

39: Junctions:

Satisfactory junctions have been made on the north and east.

To the west the planimetry of T-9006, Project Ph-27 (47) has not been completed to the junction with T-9751 and no junction could be made.

There is no contemporary survey to the south.

40: Horizontal and vertical accuracy:

There are no horizontal control stations within the limits of this map manuscript and the planimetric features have been detailed solely from pass points located during the running of the radial plot.

Vertical accuracy is not applicable.

Approved:

Fred A. Riddell

Fred A. Riddell
Officer in Charge
Portland Photogrammetric Office

Respectfully Submitted:

J. Edward Deal, Jr.

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:

Admiralty Bay
Inaru River

Sources:

Nautical Charts No's. 9400, 9445, 9495

Various Aeronautical Charts of Area

Field Inspection Notes

Descriptions of Stations

GEOGRAPHIC NAMES

Survey No.

Name on Survey

On Chart No.
On previous survey No.
On U. S. quadrangle Maps
From local information
On local Maps
P. O. Guide or Map
Rand McNally Atlas
U. S. Light List

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|----------------------|--|--|--|--|--|--|--|--|--|--|----|
| <u>Alaska</u> | | | | | | | | | | | 1 |
| <u>Arctic Coast</u> | | | | | | | | | | | 2 |
| <u>Admiralty Bay</u> | | | | | | | | | | | 3 |
| <u>Inaru River</u> | | | | | | | | | | | 4 |
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Names underlined in red
are approved. 1-14-53

L. Heck

Review Report T-9751
Planimetric Map
14 January 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.- None
This is an interior area.

65. Nautical Charts.-

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

No record is attached to the descriptive report to indicate that this map manuscript has been applied to charts prior to review.

No details are shown on the chart in the area covered by T-9751, which is for the interior west of Admiralty Bay.

66. Accuracy.- Though no control falls within the area of T-9751, an arc of control north, northeast, and east in adjacent map areas insures the accuracy of the eastern half of T-9751 and makes the western half fully adequate for interior charting purposes.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

APPROVED

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

W. D. Swanson
Chief, Div. of Photogrammetry *WDS*

3 May 1955

H. E. Edmonston
Chief, Nautical Chart Branch
Division of Charts *GES*

Carl O. Heaton
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 141st 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 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-9784-9785. 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 1945 Datum
and preliminary N.A. 1927 Datum is Lat. plus/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.