9747

CONFIDENTIAL
FOR OFFICIAL USE ONLY

Diag Cht 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. Ph-29(47)II *Office No.* T-9747

LOCALITY

State Alaska

General locality North Arctic Coast

Locality An interior area west from Dease Inlet and south from Elson Lagoon

19XX 51

CHIEF OF PARTY

Max G. Ricketts, Chief of Party
Fred A. Riddell, Portland, Oregon Photo Office

LIBRARY & ARCHIVES

DATE April 18, 1955

B-1870-1 (1)

9747

FOR OFFICIAL USE ONLY

711-aal

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° 58', longitude 156° 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

T - 9747

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

Field Office (II): Arctic Filed 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) 12/14/49, 1/27/50, 11/9/50, 11/23/51 (office) Copy filed in Division of 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): OCT 10 1952 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 NA 1927 now available. Jan. 1953

The difference between Point Barrow, 1945 Datum and preliminary N.A. 1927 Datum is Lat. plus/~~minus~~ 40m. and Long. ~~plus~~/minus 150m. C.S.W. 8-54. ✓kcl

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

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 Ph-29 (47) dated 14 December, 1949) No form M-2388-12

Lat.: Long.: Adjusted / Unadjusted

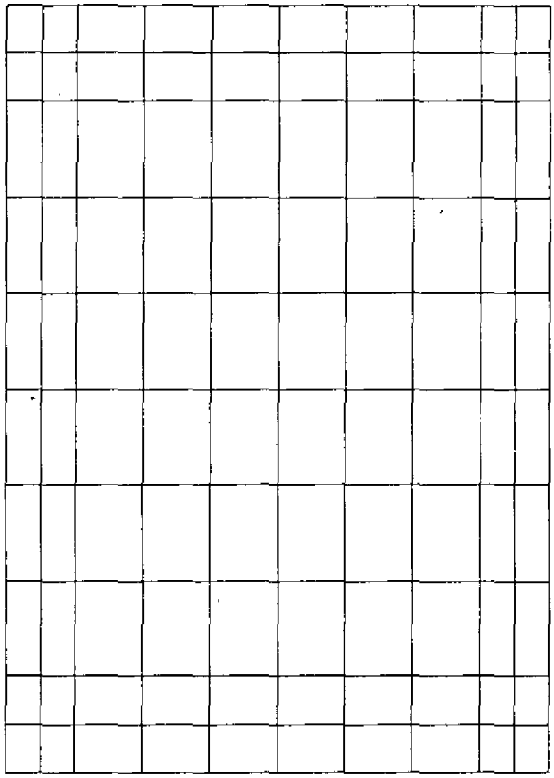
Plane Coordinates (IV): State: Zone:

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.

M-2618-12(4)



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

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): There are no tidal waters. Shoreline of large lakes delineated by office examination of photographs with the aid of 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 Control extension by (III): J. L. Harris & J. E. Deal

Date: 4/9/52

Stereoscopic Instrument compilation (III):

Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): L. L. Graves

Date: 9/16/52

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

Date: 9/26/52

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

Date:

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
19981 thru 19983	7/20/47	16:59	1:20,000	0.45 ft. above M.L.L.W.
19988 thru 19991	7/20/47	17:14	1:20,000	0.40 " " " " " "
20007 and 20008	7/20/47	17:46	1:20,000	0.30 " " " " " "

Tide (III)

Diurnal

Ratio of Ranges	Mean Range	Spring Range
	6.6	8.5
0.1	0.4	0.5

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

Washington Office Review by (IV): Date:

Final Drafting by (IV): A.J. Robinson Date: 8-20-53

Drafting verified for reproduction by (IV): W.O. Hallin Date: 9-9-53

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 68
Shoreline (More than 200 meters to opposite shore) (III): 63 (Shoreline of largest lakes)
Shoreline (Less than 200 meters to opposite shore) (III): None
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): None Recovered: Identified:
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

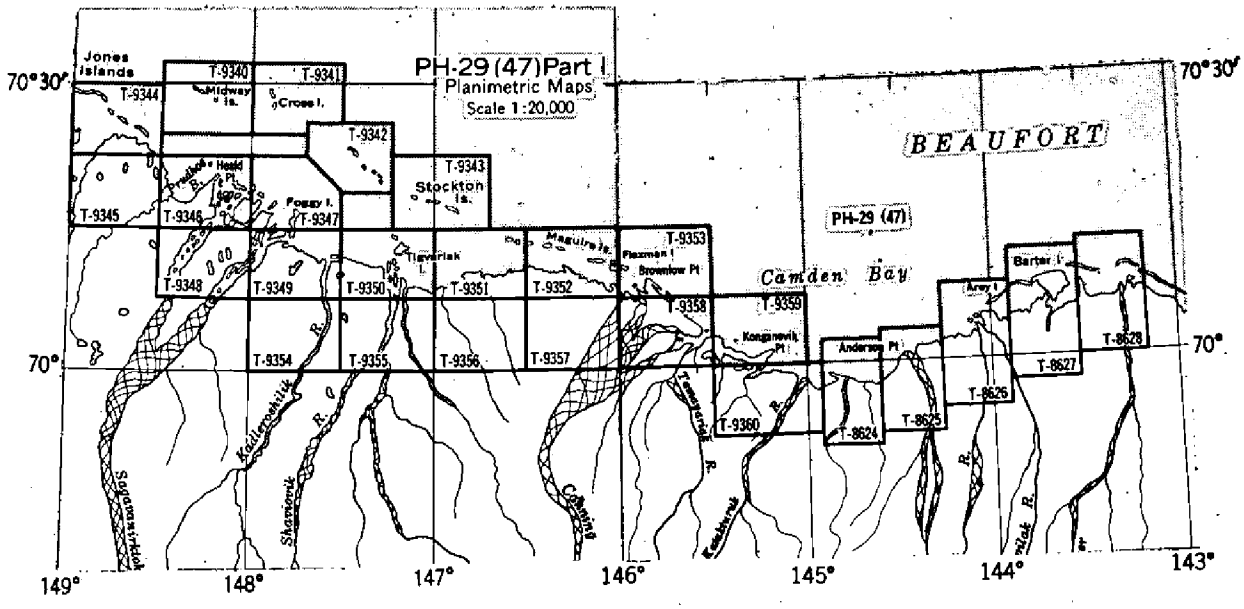
M-2618-12(4)

PLANIMETRIC MAPPING PROJECT PH-29 (47)

Photographs taken July 1947 Scale 1:20,000

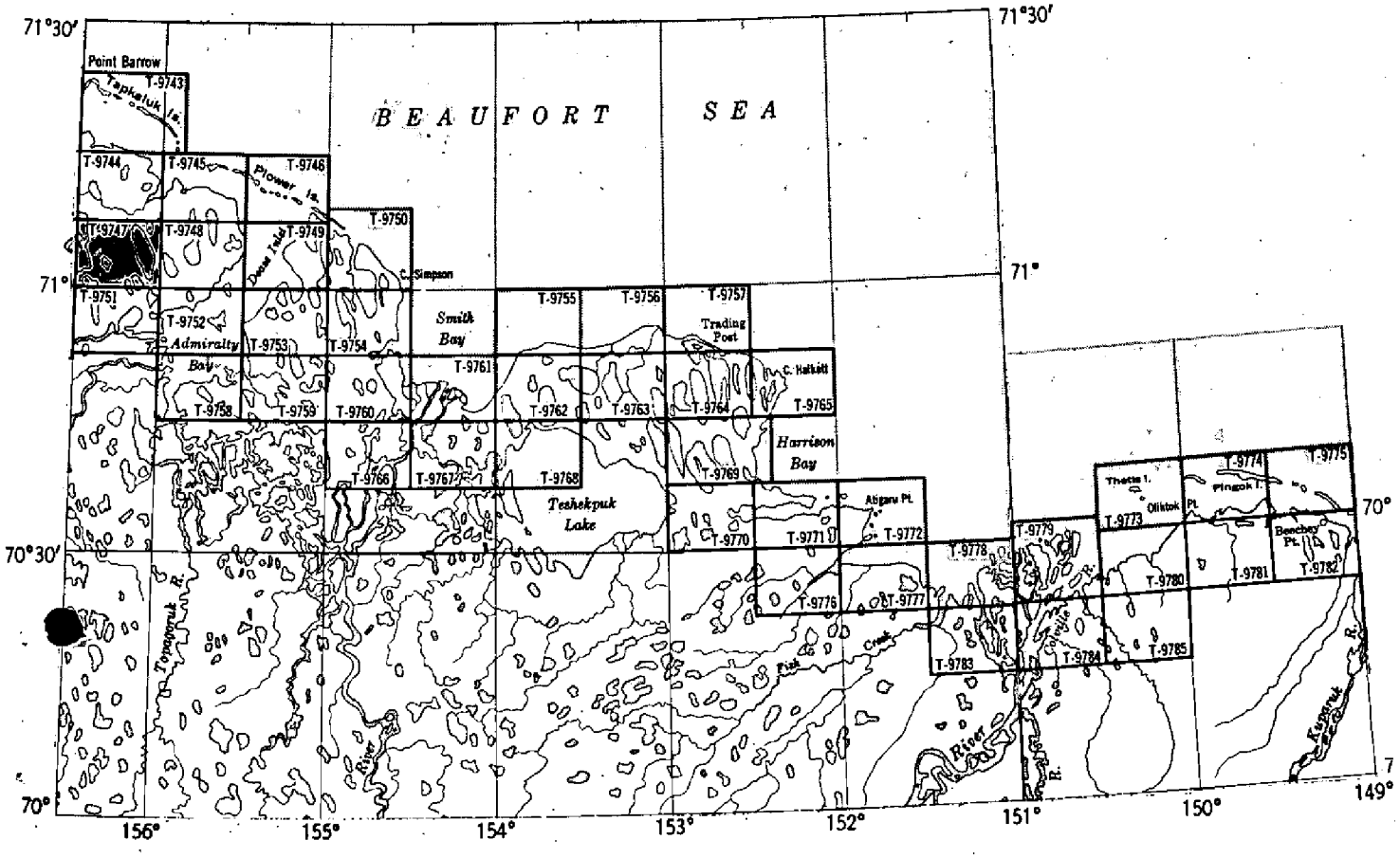
Part I

ALASKA Barter Island to Jones Islands



Part II

ALASKA Jones Islands to Point Barrow



Summary to Accompany
Descriptive Report T-9747

Planimetric project Ph-29(47) consists of 69 maps, scale 1:20,000, 26 in Part I (Barter Island westward to Jones Islands) 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° 10' to 156° 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-9747 is one of the four most westerly maps in the Part II group. It is a delineation of the interior area south of Elson Lagoon and west of Dease Inlet.

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 as a whole, and will list the materials received, with a statement of their disposition.

FIELD INSPECTION REPORT
Map Manuscript T-9747
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-9747
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-9747
Project Ph-29 (47) II

This map manuscript portrays the planimetric details of an interior area approximately nine miles in latitude by eleven miles in longitude beginning about nine miles south of Elson Lagoon and eleven miles west of Dease Inlet.

Side headings 31, 32, 33, 34, 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;

There is no shoreline within the limits of this map manuscript affected by tidal action.

The shoreline of the numerous lakes was delineated by office examination of the photographs with the aid of the stereoscope.

Side headings 36, 37 and 38 are not applicable

39: Junctions:

Satisfactory junctions have heen made on the north, east and south.

This office was not furnished a print of T-9002, no delineation of E. margin Project Ph-27 (47) on the west and a junction with this sheet has not been made.

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
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.

There were no geographic names found in any of the source data listed below for the limits of this map manuscript.

Sources:

Nautical Charts No's. 9400, 9445, 9495

Various Aeronautical Charts of Area

Field Inspection notes.

Review Report T-9747
Planimetric Map
2 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. Comparison with Charts.-

9400 1:1,587,870 at 70° May 1947, rev. June 1952.
No details of any kind are shown on the chart in the area common to this map. T-9747 covers an interior area.

66. Junctions.- T-9747 joins T-9002 (Ph-27-49), but T-9002 is not delineated in the eastern part of its area so that the planimetry along the west margin of T-9747 has no check.

67. Accuracy.-No control falls within the area of T-9747; but control in the area north, east, and southeast falls in a manner to insure the accuracy of the eastern half of T-9747, and the western half is of sufficient accuracy for interior charting purposes. No shoreline along navigable waters occurs in the map area.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

APPROVED

L C Laude
Chief, Review Section
Div. of Photogrammetry

H C Edmonston
Chief, Nautical Chart Branch
Division of Charts

Lyle Swanson
Chief, Div. of Photogrammetry

March 28, 1955

Earl O. Hooton
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.