9754

[redacted]

Diagram Chart No. 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. ..... *Office No.* T-9754

LOCALITY

Territory ~~of~~ Alaska

General locality Beaufort Sea, North Arctic Coast

Locality Cape Simpson, Smith Bay

1951

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE MAY 4, 1955

8-1870-1 (1)

9754 [redacted]

DATA RECORD

T - 9754

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) 12/14/49, 1/27/50, 11/9/50, 11/23/50, (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): 10 June, 1954

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): Point Barrow
Correction figures & NA 1927 now available Jan. 1953

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

The difference between Point Barrow, 1945 Datum and preliminary N.A. 1927 Datum is Lat. plus/~~minus~~ 40 m. and Long. plus/minus 152 m. G.B.W. 8/54 r.c.l.

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

Lat.: Long.: Adjusted / Unadjusted

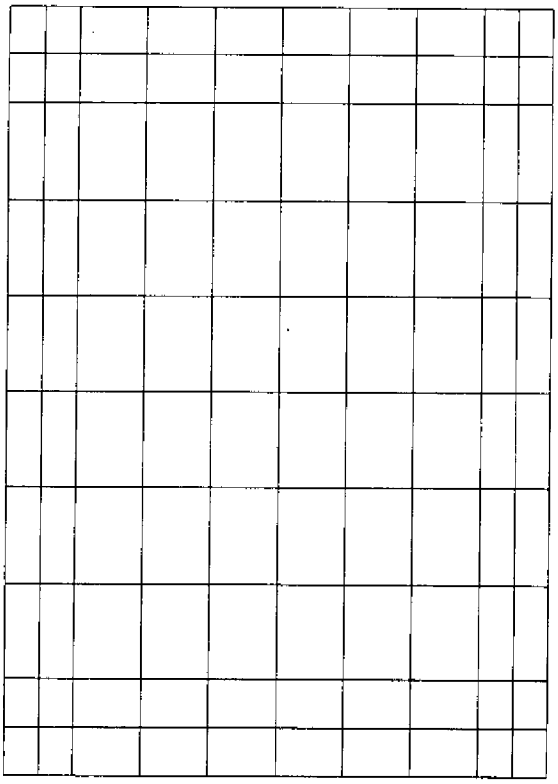
Plane Coordinates (IV): State: Zone:

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.

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): 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): L. L. Graves Date: 3/20/52

Control checked by (III): R. O. Risvold Date: 3/24/52

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): V. Serena - Shoreline Date: 4/25/52
C. C. Wiebe - Interior 8/14/52

Photogrammetric Office Review by (III): J. E. Deal Date: 9/5/52

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
19889 thru 19891	7/20/47	14:11	1:20,000	0.8ft. above M.L.L.W.
19944 thru 19946	7/20/47	15:55	1:20,000	0.7" " " " " "
19972 and 19973	7/20/47	16:46	1:20,000	0.5 " " " " " "

Tide (III)

Ratio of Ranges	Mean Range	Diurnal 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) B. Breene Date: 24 Sept. 1953.

Drafting verified for reproduction by (IV): W.O. Hallum Date: 9-28-53

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 62.3
Shoreline (More than 200 meters to opposite shore) (III): 30.2 Statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 7.1 " "
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:

M-2618-12(4)

Summary to Accompany
Descriptive Report T-9754

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° 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-9754 includes the shoreline and interior of the west side of Smith Bay from Cape Simpson southward to Piasuk River.

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-9754
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-9754
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-9754
Project Ph-29 (47) II

This map manuscript portrays the planimetric details of an area between Cape Simpson and Piasuk River from Smith Bay westerly about 9 miles.

Side headings 31, 32, 33, 34, 35, 36, 37, 38, 40, 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.

39: Junctions:

Satisfactory junctions have heen made on the north with T-9750 and on the west with T-9753. A junction will be made with T- 9760 on the south when the radial plot for that sheet is complete. To the east is Smith Bay.

Approved
Fred A. Riddell
Fred A. Riddell
Officer in Charge
Portland Photogrammetric Office

Respectfully Submitted
J. E. Deal Jr.
J. E. 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-9754

Cape Simpson
Piasuk River (Piasak River)
Smith Bay

Names underlined in red are approved. 1-22-53. L. Heck

Sources:

Nautical Charts No's. 9400, 9425, 9495

Various Aeronautical Charts of Area

Field Inspection Notes

Descriptions of Stations

Review Report T-9754
Planimetric Map
21 January 1953

61. General.-Four oil seeps are delineated on this map manuscript. The field inspection report mentions seeps and says they are indicated on the field photographs. These photographs were not available during review. The description for triangulation station Simpson, 1951 says the station is at the site of an abandoned oil camp. This substantiating evidence induced the reviewer to leave the other three seeps south of a large salt lake on the map.

The triangulation diagram base shows an abandoned cabin at 70° 54'/ 154° 51' in the higher tundra south of station Whale, 1952, but an examination of the photographs does not reveal it.

62. Comparison with Registered Surveys.-There are no earlier surveys in this area.

63. Comparison with Maps of Other Agencies.- None

64. Comparison with Contemporary Hydrographic Surveys.-

H-7920 1:40,000 1951-2

This survey was not available for comparison.

65. Comparison with 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 T-9754 was applied to charts prior to review.

The scale of the chart precludes more than a superficial comparison of shoreline form. No interior detail appears on the chart.

66. Accuracy.-This map manuscript falls in an area of well placed control; the delineation is well accomplished, so that the ~~Nautical~~ National Standards of accuracy are met.

Reviewed by:

Lena T. Stevens

Lena T. Stevens

APPROVED:

L e Lande
Chief, Review Branch
Div. of Photogrammetry

H R Edmonston
Chief, Nautical Chart Branch
Division of Charts

L W Swanson
Chief, Div. of Photogrammetry

3 May 1955

Earl O Hinton
Chief, Div. of Coastal Surveys

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

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.