9776 9777 Ph-29 (47) II

9776 9777

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) II Office No. T-9776 and T-9777

LOCALITY

Territory Alaska

General locality North Arctic Coast

Locality Harrison Bay

1952

CHIEF OF PARTY

Max G. Ricketts, Arctic Party
Fred A. Riddell, Portland, Oregon
Portland Photogrammetric Office

LIBRARY & ARCHIVES

DATE JUN 28 1955

B-1870-1 (1)

DATA RECORD

T- 9776 and T-9777

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

Field Office (II): Arctic Field Party Chief of Party: Max G. Ricketts

Photogrammetric Office (III): Officer-in-Charge:

Instructions dated (II) (III): 1/13/48, 3/8/50, 2/6/51, 2/1/52 and 2/15/52 (Field) 12/14/49, 1/27/50, 11/9/50 and 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): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 7 Jan. 1955

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

Geographic Datum (III): ~~Point Barrow 1945~~ Flaxman Island ~~1911~~

Vertical Datum (III): Mean ~~Sea Level~~ H W

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

Correction figures to N.A. 1927 available.

Jan. 1953 The difference between Flaxman Island Datum and preliminary N.A. 1927 Datum is Lat. ~~plus~~/minus 39 m. and Long. plus/~~minus~~ 93 m. G.B.W. 9-54 v l.c.l.

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

Lat.: Long.: Adjusted Unadjusted

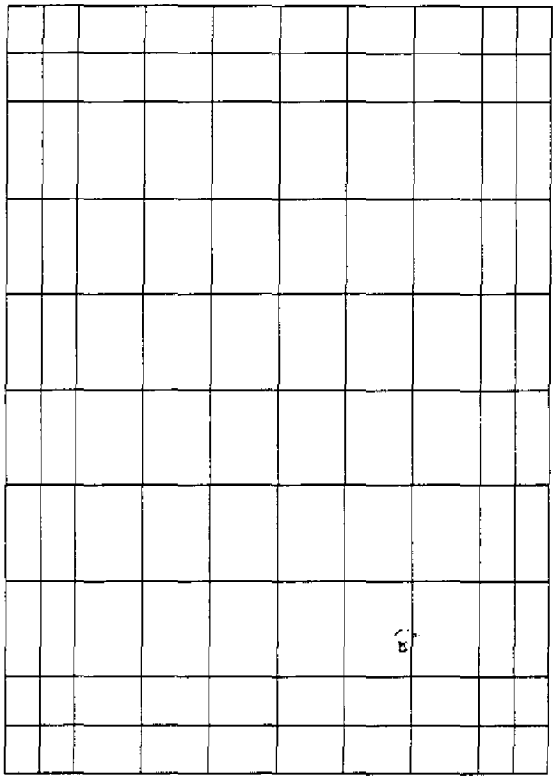
Plane Coordinates (IV): State: Zone:

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)

DATA RECORD

Field Inspection by (II): L. W. Eason II — Date: 27 July 1952 to 28 August 1952

Planetable contouring by (II): — Date:

Completion Surveys by (II): L. W. Eason II (Supplemental Control) — Date: 7 May 1952, 28 August 1952, 23 April 1952

Mean High Water Location (III) (State date and method of location): By stereoscopic examination of the photographs at the Portland Photogrammetric Office in 1950 on photographs taken in 1947.

Projection and Grids ruled by (IV): — Date:

Projection and Grids checked by (IV): — Date:

Control plotted by (III): Gordon R. Combs — Date: 9 February 1953

Control checked by (III): James L. Harris — Date: 26 February 1953

Radial Plot or Stereoscopic Control extension by (III): James L. Harris and J. E. Deal — Date: 20 March 1953

Stereoscopic Instrument compilation (III): Planimetry — Date:

Contours — Date:

Manuscript delineated by (III): T-9776: James L. Harris — Date: 31 August 1953
T-9777: Carita C. Wiebe — 28 August 1953

Photogrammetric Office Review by (III): J. E. Deal T-9776 — Date: 8 Sept. 1953
J. E. Deal T-9777 — 18 Sept. 1953

Elevations on Manuscript checked by (II) (III): J. E. Deal — Date: same as above

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
19919 thru 19921	7/20/47	15:20	1:20,000	0.7 ft. above M.L.L.W.
20132 thru 20137	7/25/47	13:30	1:20,000	0.3 ft. above M.L.L.W.

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, Alaska
Subordinate Station:

Washington Office Review by (IV): Lina T. Hansen Date: 30 Oct. 1953

Final Drafting by (IV): Robinson A.T. T-9776 Robinson A.T. T-9777 Date: 2/5-14/54 3/5-23/54

Drafting verified for reproduction by (IV): Wm. A. Hallum T-9776 T-9777 Date: 3-11-54 4-1-54

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 112
Shoreline (More than 200 meters to opposite shore) (III): 25 statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 19 statute miles
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): Recovered: 8 Identified: 8
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)

Summary to Accompany T-9776 - 77, Incl.

Planimetric project Ph-29(47) consists of 76 maps, scale 1:20,000; 26 in Part I (Barter Island westward to Jones Islands); 43 in Part II (Jones Islands westward to Point Barrow); and 7 in Part III (U.S.-Can. Boundary westward to Barter Island).

This project was designed as surveys for new nautical charts at a much larger scale than the present regional chart, and to furnish bases to the U. S. Geological Survey for projected topographic maps.

T-9776-77 includes the coast of Beaufort Sea from about three miles south of Atigaru Point eastward to the vicinity of Fish Creek.

When all the maps 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 regarding their disposition.

FIELD INSPECTION REPORT

Map Manuscripts T-9776 thru T-9777

Project Ph-29(47)II

Refer to Descriptive Report:

Shoreline - Photogrammetric

Alaska

North Arctic Coast

Cape Halkett to Colville River

1952

Chief of Party: Max G. Ricketts

PHOTOGRAMMETRIC PLOT REPORT

Map Manuscripts T-9776 and T-9777

Project Ph-29(47)II

Refer to Photogrammetric Plot Report T--9769 thru T-9772, T-9776 and T-9777 which is included in the Descriptive Report for T-9769 thru T-9772.

COMPILATION REPORT

Map Manuscripts T-9776 and T-9777

Project Ph-29 (47) II

These two map manuscripts portray the shoreline and planimetric details approximately seven miles interior of a portion of Harrison Bay (North Arctic Coast, Alaska) between Colville River and a point 2.5 miles south of Atigaru Point.

In general Items 31 thru 47 of the Compilation Report for Map Manuscripts T-9743 thru T-9746, Project Ph-29 (47) II are applicable. Exceptions are noted in the following paragraphs.

31. Delineation:

The southwest portion of T-9776 could not be compiled because of insufficient photograph coverage.

35: Shoreline and alongshore details:

There was no field inspection of the mean high-water line at any place in the area of these two map manuscripts. This interpretation was made by stereoscopic study of the photographs aided by experience gained when compiling similar areas in this project where some data on the mean high-water line was obtained by field inspection.

39. Junctions:

Refer to Item 39 Junctions: of the Descriptive Report for T-9769 thru T-9772.

The planimetry in T-9778 ~~west of Longitude 152° 20'~~ has been revised in order to make a satisfactory junction with T-9777.

Approved:

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

Respectfully submitted:

J. Edward Deal Jr.

J. Edward Deal, Jr.
Cartographer

48. Geographic Names:

The geographic names Report listed under Item XIV of the field report "Shoreline - Photogrammetric, Alaska, North Arctic Coast, Cape Halkett to Colville River 1952", was not furnished the Photogrammetric Office.

Names shown on the map manuscripts were obtained from the nautical chart, various other maps and descriptions of stations are are shown for location purposes only.

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9776 and T-9777

1. Projection and grids ✓ 2. Title ✓ 3. Manuscript numbers ✓ 4. Manuscript size ✓

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ✓ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ✓ 7. Photo hydro stations N 8. Bench marks N 9. Plotting of sextant fixes N 10. Photogrammetric plot report ✓ 11. Detail points —

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line ✓ 14. Rocks, shoals, etc. ✓ 15. Bridges N 16. Aids to navigation N 17. Landmarks N 18. Other alongshore physical features ✓ 19. Other alongshore cultural features ✓

PHYSICAL FEATURES

20. Water features ✓ 21. Natural ground cover ✓ 22. Planetable contours N 23. Stereoscopic instrument contours N 24. Contours in general N 25. Spot elevations ✓ 26. Other physical features ✓

CULTURAL FEATURES

27. Roads N 28. Buildings ✓ 29. Railroads N 30. Other cultural features ✓

BOUNDARIES

31. Boundary lines N 32. Public land lines N

MISCELLANEOUS

33. Geographic names ✓ 34. Junctions ✓ 35. Legibility of the manuscript ✓ 36. Discrepancy overlay N 37. Descriptive Report ✓ 38. Field inspection photographs ✓ 39. Forms ✓

40. _____ (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:

M-2623-12

GEOGRAPHIC NAMES

Survey No.

Name on Survey	A	B	C	D	E	F	G	H	K	
	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		
Alaska		(for title)								1
Arctic Coast										2
										3
Harrison Bay		(T-9777)							BGN	4
Kalikpik River		(both sheets)								5
Atigaru Point		(for title T-9776)					on sht T-9772			6
										7
										8
				Names approved				10-30-53 L-Heck		9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

APPROVED

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

H. M. Edmonston
Chief, Nautical Chart Branch
Division of Charts GFJ

L. W. Swanson
Chief, Div. of Photogrammetry

Earl O. Heaton
Chief, Div. of Coastal Surveys

June 24, 1953

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: K.B.W. 1-11-55

The difference between Flaxman Island 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.

T-9776 } applied to Cl. 9403 then Cl. 9469. Well. abn. 1953
T-9777 }