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[redacted]

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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-9755 thru T-9757

LOCALITY

State Alaska

General locality Beaufort Sea (North Arctic Coast)

Locality Esook, Drew Point

1947 - 51

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE May 6, 1955

B-1870-1 (1)

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DATA RECORD

T - 9755 to T-9757 Incl.

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, 11/23/51(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): JUL 17 1952 Date reported to Nautical Chart Branch (IV): JUL 28 1952

Applied to Chart No. Date: Date registered (IV): 25 June, 1954

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

Geographic Datum (III): Point Barrow

Correction figures to NA 1927 are now available. LTS, Feb. 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 153 m. G.B.W. 8/54 ✓ l.c.l.

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

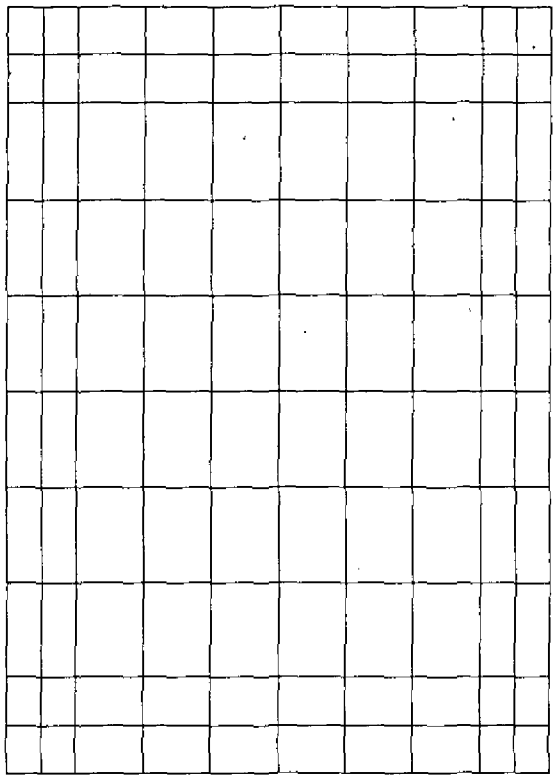
Lat.: Long.: Adjusted Unadjusted

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.



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

DATA RECORD

Field Inspection by (II): Leo W. Eason II 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): 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): C.C. Wiebe, R.A. Davidson, R.H. Barron Date: 2-7-52

Control checked by (III): R.A. Davidson and R.H. Barron Date: 2-7-52

Radial Plot or Stereoscopic Control extension by (III): J.L. Harris & J.E. Deal Date: 2-13-52

Stereoscopic Instrument compilation (III):
Planimetry Date:
Contours Date:

Manuscript delineated by (III): See reverse side Date:

Photogrammetric Office Review by (III): See reverse side Date:

Elevations on Manuscript checked by (II) (III): R.H. Barron Date: 7-1-52

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
19908	7/20/47	14:47	1:20,000	0.8' above M.L.L.W.
20061 to 20068 Incl.	7/25/47	10:42	1:20,000	0.06' above M.L.L.W.
20085	7/25/47	11:33	1:20,000	0.02' above M.L.L.W.

Tide (III)

		Ratio of Ranges	Mean Range	Diurnal ~~Spring~~ Range
Reference Station:	Kodiak, Alaska		6.6	8.5
Subordinate Station:	Point Barrow	0.1	0.4	0.5
Subordinate Station:				

Washington Office Review by (IV): Lena T. Stevens Date: 2 Feb. 1953

Final Drafting by (IV): 9757 - A.J. Robinson - 56 - 55 - W.P. TAYLOR Date: 10-5-53 9-14-53

Drafting verified for reproduction by (IV): [signature] Date: 9-22-53

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): 43

Shoreline (More than 200 meters to opposite shore) (III): 77

Shoreline (Less than 200 meters to opposite shore) (III): 14

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):

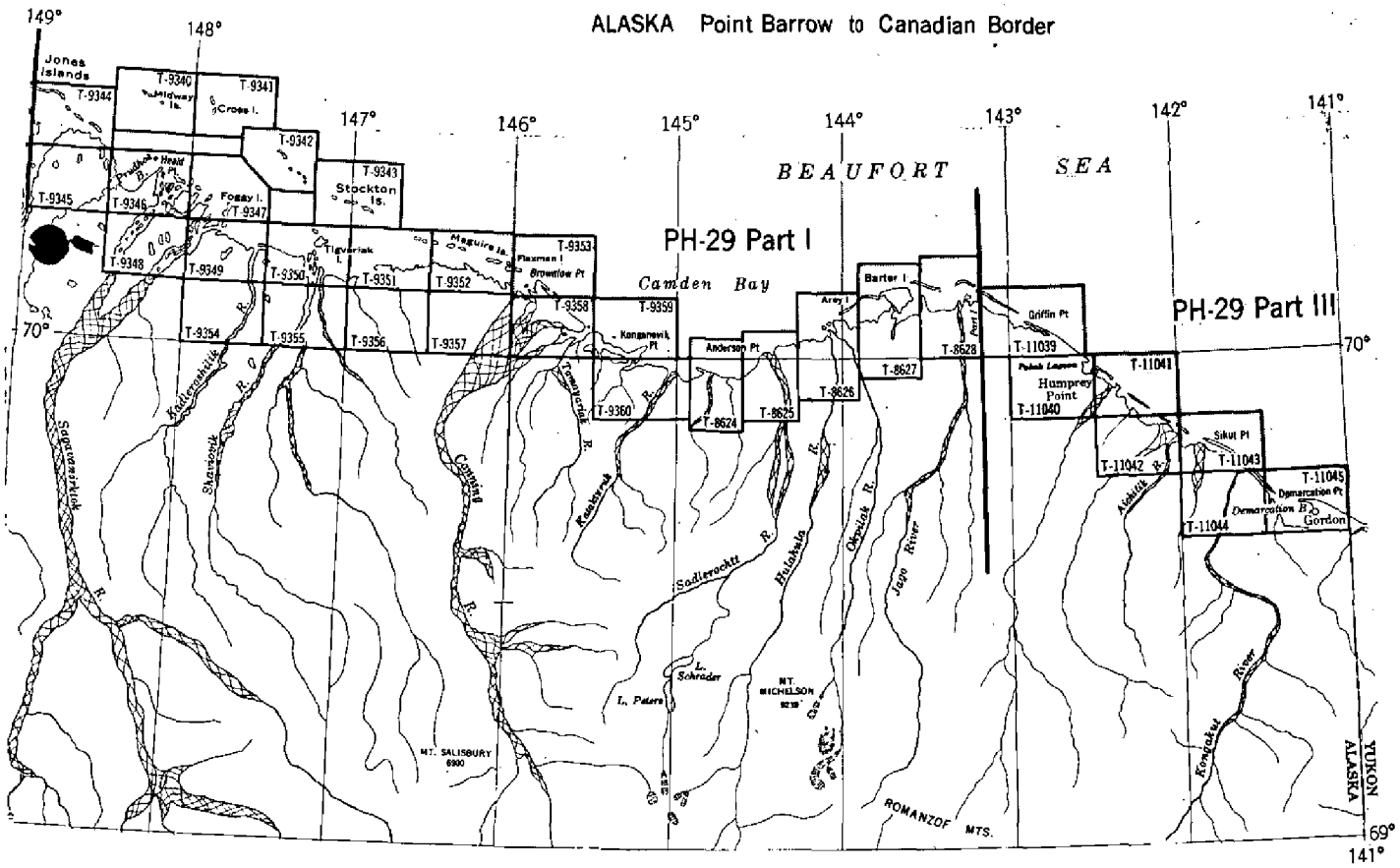
Number of Temporary Photo Hydro Stations established (III):

Remarks:

M-2618-12(4)

PLANIMETRIC MAPPING PROJECT PH-29 I-II-III

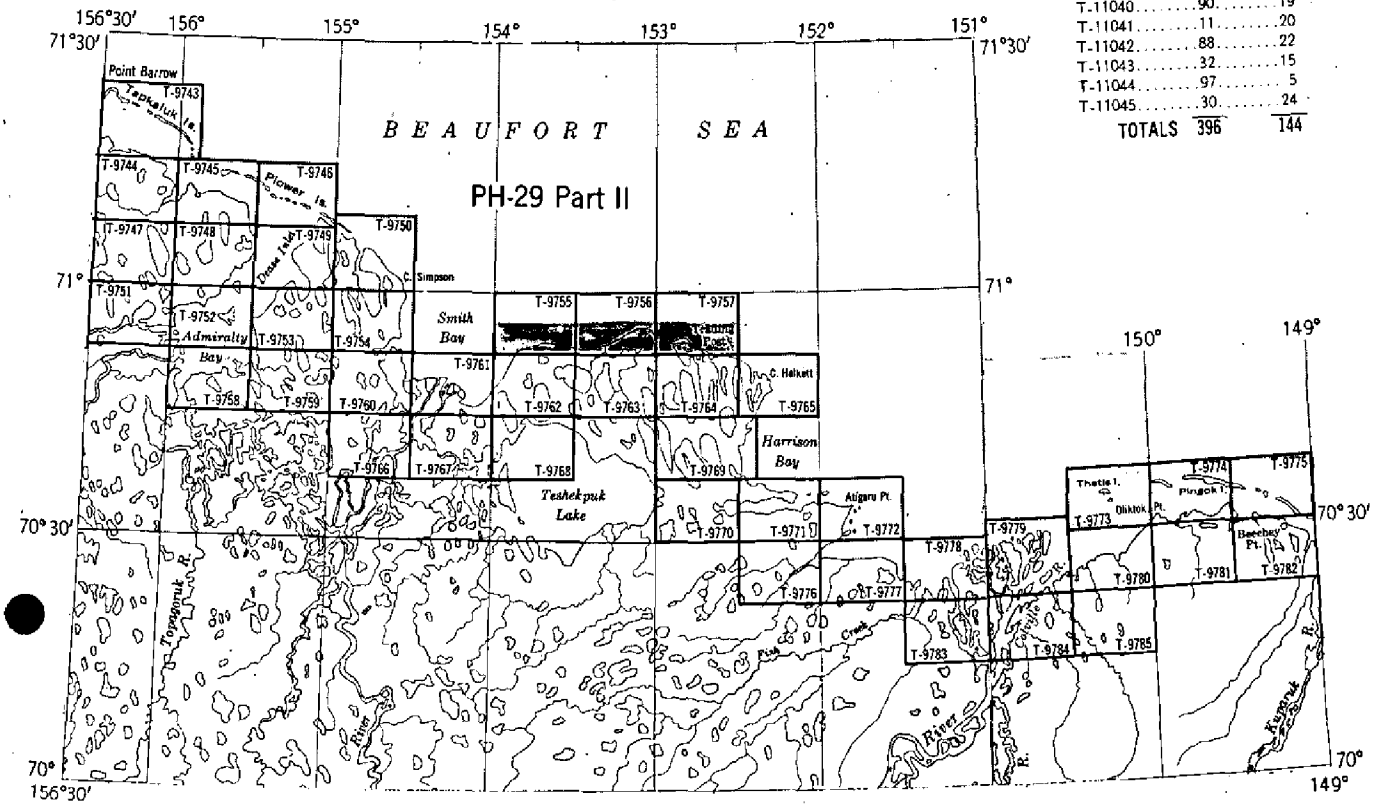
ALASKA Point Barrow to Canadian Border



PH-29 Part III

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.	Sq. Miles Area	Lin. Miles Shoreline
T-11039	48	39
T-11040	90	19
T-11041	11	20
T-11042	88	22
T-11043	32	15
T-11044	97	5
T-11045	30	24
TOTALS	396	144



Photographs taken July 1947 Scale 1:20,000

Summary to Accompany
Descriptive Report T-9755 to 57 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.

Manuscripts T-9755 to 57 inc. includes the shoreline of Beaufort Sea from Smith Bay eastward to the vicinity of Pitt Point.

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 Manuscripts Nos. T-9755 to T-9757 Incl.
Project Ph-29(47) II

Refer to Descriptive Report.

Shoreline - Photogrammetric
Alaska
North Arctic Coast
Point Barrow to Cape Halkett
1951
Chief of Party: Max G. Ricketts

To be filed in Archives with Completion Report

PHOTOGRAMMETRIC PLOT REPORT
Map Manuscripts Nos. T-9755 to T-9757 and T-9762 to T-9765
Project Ph-29(47) II

This radial plot covers an area approximately 9 miles wide along the shore of Beaufort Sea, North Arctic Coast, Alaska from Smith Bay to Cape Halkett and comprises Map Manuscripts Nos. T-9755 to T-9757 and T-9762 to T-9765. The methods used and the results obtained are in general similar to those described in the combined Photogrammetric Plot Report for T-9773 to T-9775 and T-9778 to T-9785 which is included in the Descriptive Report for T-9773 to T-9775.

References in the above report pertaining to offshore barrier islands are not applicable to this radial plot.

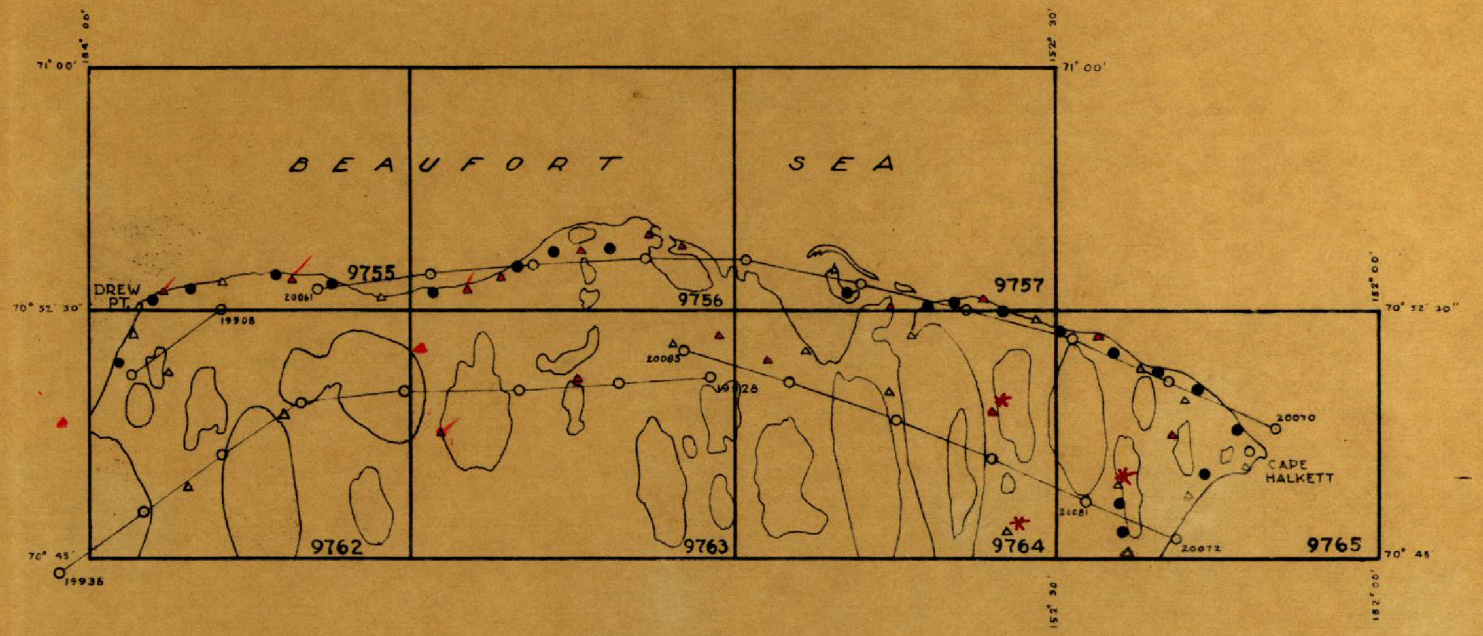
Photograph coverage was complete except for the extreme south part of T-9763.

Approved:

Fred A. Riddell
Officer in Charge
Portland Photogrammetric Office

Respectfully submitted:

J. Edward Deal, Jr.
Cartographer



▲ Horizontal Control used
● Topographic Stations
○ 1947 Nine Lens Photographs

* Recovered in 1952 & tied into 1952 control (G-9565) which has been corrected to NA 1927 (LTS. Feb. 1953)

PH-29 (47)
ARCTIC COAST OF ALASKA

COMPILATION REPORT
Map Manuscripts Nos. T-9755 to T-9757
Project Ph-29(47) II

These three map manuscripts include the planimetric details along the shore of the Beaufort Sea, north Arctic Coast, Alaska from Drew Point to Esook. There are no offshore barrier islands in this area and the character of the planimetry of the mainland is similar to areas previously compiled for this project.

Side headings 32, 34, 35, 36, 39, 40, 46, and 47 of the Descriptive Report for T-9773 to T-9775 and of the Descriptive Report for T-9778 to T-9785 are in general applicable except for remarks pertaining to offshore barrier islands.

33. Supplemental data.

There were no supplemental data.

35. Shoreline and alongshore details.

An exception to remarks contained in side heading 35 of the above references is:

> Sketches made in the field and shown on the reverse side of the field photographs gave detailed delineation of the mean high-water line at numerous places.

37. Landmarks and aids.

The special report referred to in paragraph "A" side heading IX of the field inspection report was not furnished this office. L 315 (1951)

38. Control for future surveys.

Not applicable. Refer to side headings XI and XIV of the field inspection report.

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 referred to in Side Heading XIII of the field inspection report was not furnished this office. The following names were obtained from sources listed below.

T-9755

Beaufort Sea
Drew Point
Smith Bay

T-9756

Beaufort Sea
Pitt Point (Per project names report correct position = 153° 09'
Kokruagarok (campsite)
Kolovik (Abandoned)

T-9757

Beaufort Sea
Esook (abandoned) ~~village~~)
Pogik Point
Pogik Bay

Sources

Nautical Charts Nos. 9400 and 9495
Various aeronautical charts
Field Inspection Notes
Descriptions of Stations

Names underlined in red are approved. 2-2-53
L. Heck

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:

H-7921 1:40,000 1951 (Kolorik to Cape Simpson)

This survey was returned to the field for additional work during the 1952 season.

H-7922 1:40,000 1951-52 (Esook to Kolorik)

No shoreline is shown on either of these surveys.

Offshore from Kokruakrok campsite (T-9756) a submerged sandbar (70° 55' 18"/ 153° 03') is indicated by soundings. Photograph 20064 affords evidence of its existence, but it was not added to T-9756. The descriptive report for H-7922 says that the area between the coast and this bar furnishes safe anchorage for small craft.

Within the limits of T-9757 the hydrographic survey records two areas of minus soundings and a covered sandbar:

1. -0½ at 70° 54' 25"/ 152° 59' 20"
2. -1 at 70° 52' 50"/ 152° 31' 03"
3. A sandbar which covers about 4 feet at 70° 54' 08"/ 152° 41'

They were not transferred to T-9757.

Two landmark areas fall ~~on~~ in this group ~~T-9757~~; the group of buildings belonging to Howard Leavitt at Kolovik, on T-9756 and the buildings at the abandoned trading post Esook. on T-9757 They are labeled on H-7922.

65. Comparison with Nautical Charts:

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

No record is attached to the descriptive report to indicate that these map manuscripts have been applied to charts prior to review.

The small scale of the chart affords little basis for for comparison of detail.

66. Accuracy: These three map manuscripts fall within a well controlled area. They are well delineated and meet the National Map Accuracy requirements.

Reviewed by:

Lena T. Stevens

Lena T. Stevens

Approved by:

L C Lande

Chief, Review Section
Div. of Photogrammetry

F R Edmonston

Chief, Nautical Chart Branch
Div. of Charts GFU

L W Swanson

Chief, Div. of Photogrammetry
3 May 1955 MBR

Earl O. Heaton JB

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.