

8624

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-8624(Revision)

LOCALITY

State Alaska

General locality Camden Bay, Beaufort Sea
(Arctic Coast)

Locality Nuvoak Creek

1950

CHIEF OF PARTY

Hurbert A. Paton, Chief of Party

Charles W. Clark, Portland, Oregon Photogrammetric
Office

LIBRARY & ARCHIVES

DATE February 21, 1955

8624



DATA RECORD

T-8624 (Revision)

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

Field Office (II): Tigvariak Island, Alaska Chief of Party: R.A. Earle

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: Charles W. Clark

Supplemental Instructions

Instructions dated (II) (III): 4 Feb. 1948 Field Copy filed in Division of
15 Feb. 1949 Project C.S.320 Photogrammetry (IV)
8 Mar. 1950

14 Dec. 1949 Office
9 Nov. 1950

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 16 1951 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Barter Island Date registered (IV): 21 Dec 1953 (Div. Photog.)

The difference between Barter Datum (Preliminary) and preliminary N.A. 1927 Datum is: Lat. plus/minus 40"
and Long. plus/minus 217 m. v.l.c.r.

Publication Scale (IV): Barter Island

Publication date (IV):
Planimetry: Mean High Water

Geographic Datum (III): N.A. 1927 (Flaxman Island
projection also, in order to plot Flaxman Island
datum control (1950), and to tie this map manuscript
to those on the west.

Vertical Datum (III): Water (Ice Surface) *
Elev. Triangulation
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

* Difference between "level of sea ice" and
mean sea level was not obtained.
Assumed to be 1 foot.

Reference Station (III): (See sub-heading 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.

Not Applicable

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

DATA RECORD

Field Inspection by (II): Hubert A. Paton, Chief of Party Date: Summer 1948

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): Spot located in field on field photographs and this location used to delineate the mean high water line on office photographs, by use of stereoscope, and then compiled.

Projection and Grids ruled by (IV): Date:

Projection and Grids checked by (IV): Date:

Control plotted by (III): M.B. Elrod Date: 3/15/51

Control checked by (III): Dale Fisher Date: 4/19/51

Radial Plot or Stereoscopic Dale Fisher Date: 5/18/51
Control extension by (III):

Stereoscopic Instrument compilation (III): Planimetry Date:

Contours Date:

Manuscript delineated by (III): C.C. Wiebe Date: 6/6/51

Photogrammetric Office Review by (III): R.H. Barron Date: 6/13/51

Elevations on Manuscript Date:
checked by (II) (III):

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
20165 thru 20167	7/29/47	12:31	1:20,000	0.6 ft. above M.L.L.W.
20179 thru 20181	7/29/47	12:52	1:20,000	0.5 ft. above M.L.L.W.

Tide (III)

Reference Station: Kodiak, Alaska
 Subordinate Station: Flaxman Island, Alaska
 Subordinate Station:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
	6.6	8.5
0.1	0.5	0.7

Washington Office Review by (IV): L. T. Stevens

Date: 9-25-51

Final Drafting by (IV): *W. P. Taylor*

Date: 7-16-53

Drafting verified for reproduction by (IV): *W. M. Hall*

Date: 7-13-53

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 42

Shoreline (More than 200 meters to opposite shore) (III): 13

Shoreline (Less than 200 meters to opposite shore) (III): 2

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): 7*

Number of Temporary Photo Hydro Stations established (III): None

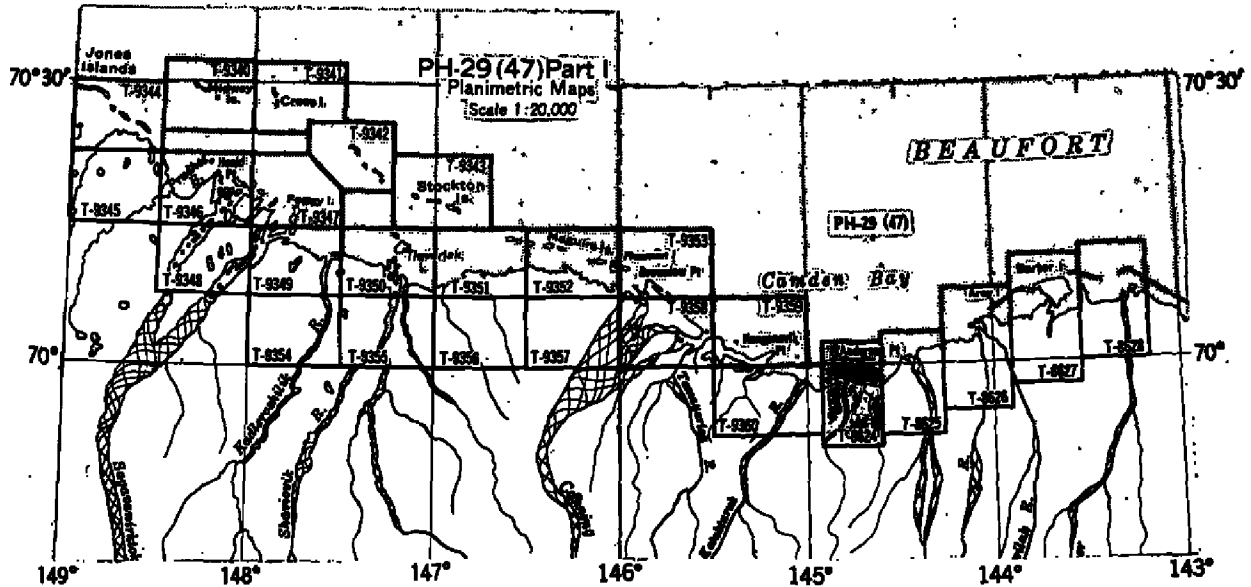
Remarks:

*Positions for the above recoverable topographic stations are listed under Geographic Positions Accession #G-8699, page 2, field Computations CAMDEN BAY, and it is assumed that Forms 524 have been submitted by the Arctic Party.

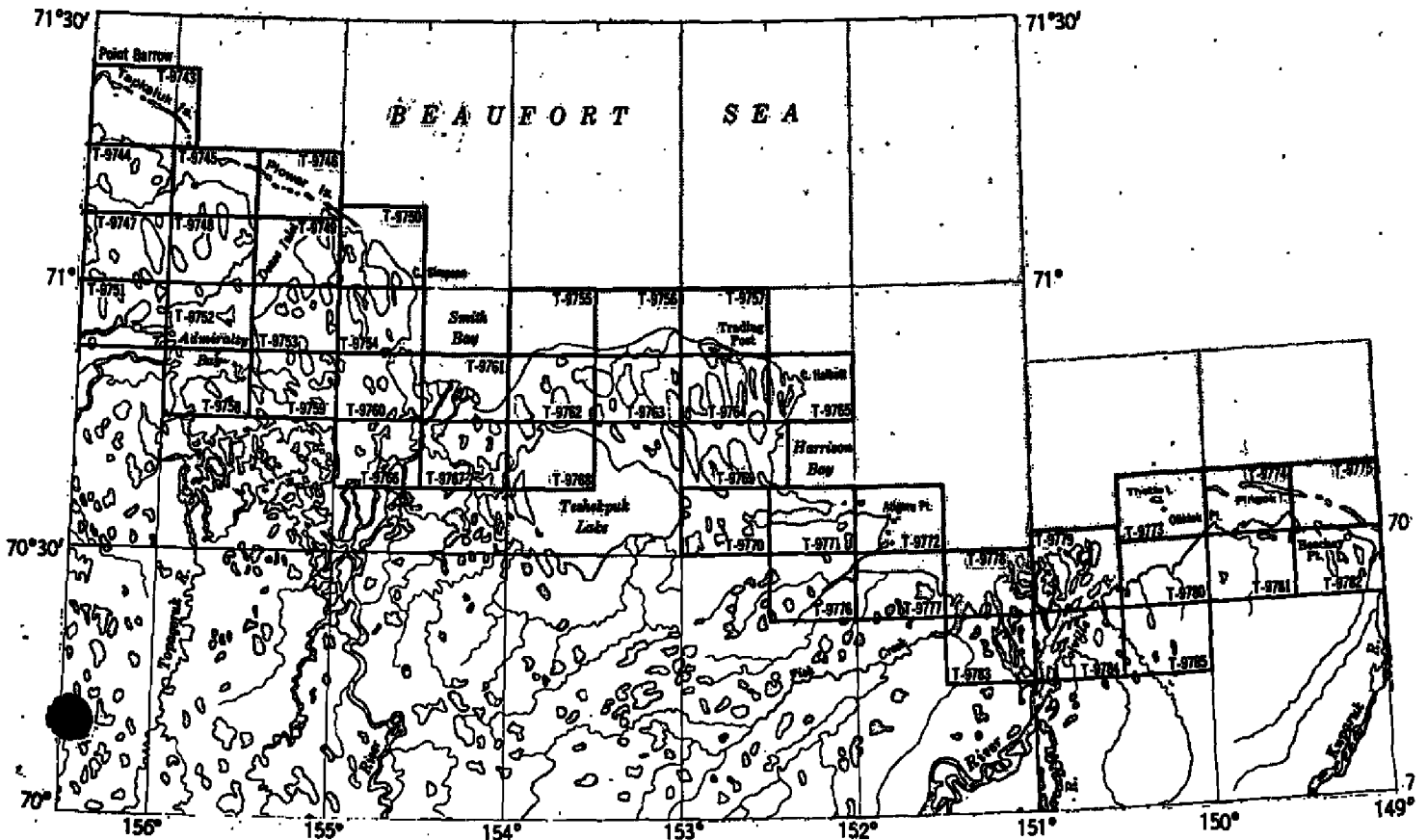
PLANIMETRIC MAPPING PROJECT PH-29(47)

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 T-8624

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-8624 is one of the Part I group. It includes a portion of the Camden Bay shoreline and NUVOAK and EKALOOK-LIURAK Creeks.

* * * * *

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 Manuscripts T-8624-T-8628

Report of Photograph Inspection Barter Island, Alaska,
Project CS-320. Hubert A. Paton, 1948.

This report forms a part of the project Completion Report
which is filed in the Bureau Archives under project Ph-29 (47)

PHOTOGRAMMETRIC PLOT REPORT
 T-8624 and T-8625(Revision)
 Project Ph-29(47)

21: AREA COVERED:

The area of this plot covers a strip of land approximately 8 miles wide along the shoreline of Beaufort Sea from Simpson Cove to a point about 5 miles east of the Saligochit River. It includes the areas of map manuscripts T-8624 and T-8625.

22: METHOD:

A radial plot for T-8624(1948) and T-8625(1948) was previously completed in the Washington Office in January 1949 using horizontal control stations identified by the 1948 Arctic Field Party. The horizontal control station positions for this plot were on the Barter Island Datum except for a few which were given on both the Barter Island and Flaxman Island Datums.

The difference between the two datums is:

Latitude:--From Flaxman Is. to Barter Is.--approx. ^{126.4}125 meters north
 Longitude:- " " " " " " -- ~~---~~ ²⁹⁰340.3 " west

Due to the absence of inshore horizontal control stations in the original radial plot, it was desired to lay a new radial plot and incorporate several new inshore stations located and identified ~~in~~ⁱⁿ 1950. The positions of the 1950 control stations were furnished on the Flaxman Island Datum.

Because of the difference in datums, this office was furnished two new map manuscripts for this work on each of which were ruled projections based on both the Flaxman Island Datum (shown with red ink) and the Barter Island Datum (shown with black ink). It was therefore possible to plot the position of any station in the area on whichever datum the station position was published.

It was decided to use the same pass points as were used for the original radial plot so the control stations identified in 1950 were transferred to the photographs used in the original radial plot. New templates were drawn on sheets of .005" clear acetate using Calibration Templet #21682 dated September 1948, for the correction of paper distortion and transforming errors.

Pass points falling at the east limits of T-9360, which were located during the running of a combined radial plot to the west of T-8624, were transferred to the west portion of T-8624 for use in making a junction.

The templets were oriented directly on the two map manuscripts which were joined together with cellulose tape.

The results obtained from the first attempt to run this plot were not considered satisfactory. An investigation of the pricking and transferring of horizontal control stations, conjugate centers, and pass points in the original radial plot was made using stereoscopic methods recently introduced to this office by Mr. Wm. D. Harris of the Washington Office. Many points were found to be erroneously pricked. These were corrected on the photographs and templets.

The templets were again oriented and very satisfactory results obtained. All horizontal control stations were held to, including KYT, 1948 (Sub. Pt. "A"), which is listed as not being held by 0.8 mm in the original photogrammetric plot report.

The results of this radial plot when compared with the original radial plot revealed several changes, most of which were in the interior area of T-8624.

23: ADEQUACY OF CONTROL:

The horizontal control stations identified in 1948 and 1950 were adequate.

24: SUPPLEMENTAL DATA:

There were no supplemental data furnished for the area.

25: PHOTOGRAPHY:

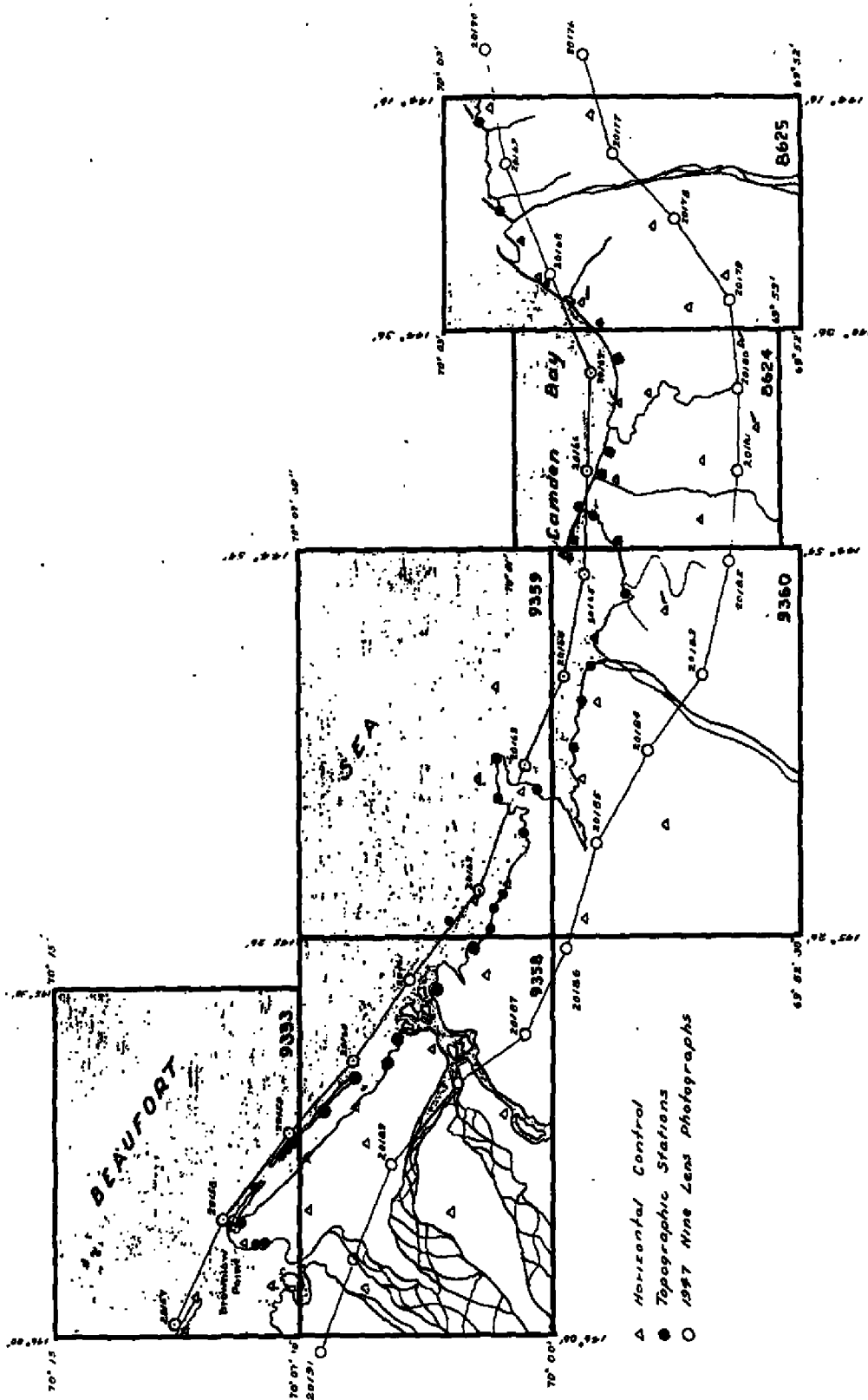
The photography was adequate.

Approved:

Charles W. Clark
Charles W. Clark
Chief of Party

Respectfully submitted:

Dale Fisher
Dale Fisher
Ensign U.S.C. & G.S.



PH-29 (47)
ARCTIC COAST OF ALASKA

Photogrammetric Plot Report
Surveys T-8624 to T-8628 Incl.

21. Area Covered:

This nine-lens plot in conjunction with a tri-metrogon plot covers the area of surveys T-8624 to T-8628 inclusive. These surveys extend along the Arctic Coast from Simpson Cove, 144°55', to Martin Point, 143°10'. See sketch included in the Descriptive Report concerning areas covered by the plots. The tri-metrogon plot report is included in the Descriptive Report for T-8628.

22. Method:

The following nine-lens photographs were used in the plot: Nos. 20165 through 20170, 20173 through 20181, and 20239 through 20243. The photographs were printed on positype paper. Master Template No. 21682 was used in preparing the templates.

Substitute points were identified on the field photographs for all of the control stations used in the plot with the exception of Mars, 1948 and Arclight, 1948. Arclight, 1948 was pricked direct using an acetate overlay in locating the point on office photographs. Mars, 1948 was identified in the office. The station is on the highest point of a small hill outlined on a photograph by the field party.

Kyt, 1948 (Sub. Pt. "A") was the only field identified station not held in the plot. Its radial plot position falls within 0.8 mm of its plotted position.

23. Adequacy of Control:

The control was adequate in regard to density. However, the field identified stations were all located on shore near the shoreline or on spits or islands near the shoreline.

The stations New, 1948 and Red, 1948 fall on only two photographs near the azimuths. These stations control the eastern end of the nine-lens plot where it joins the tri-metrogon plot.

Submitted by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved:

L. C. Lande

143.70
70°12'

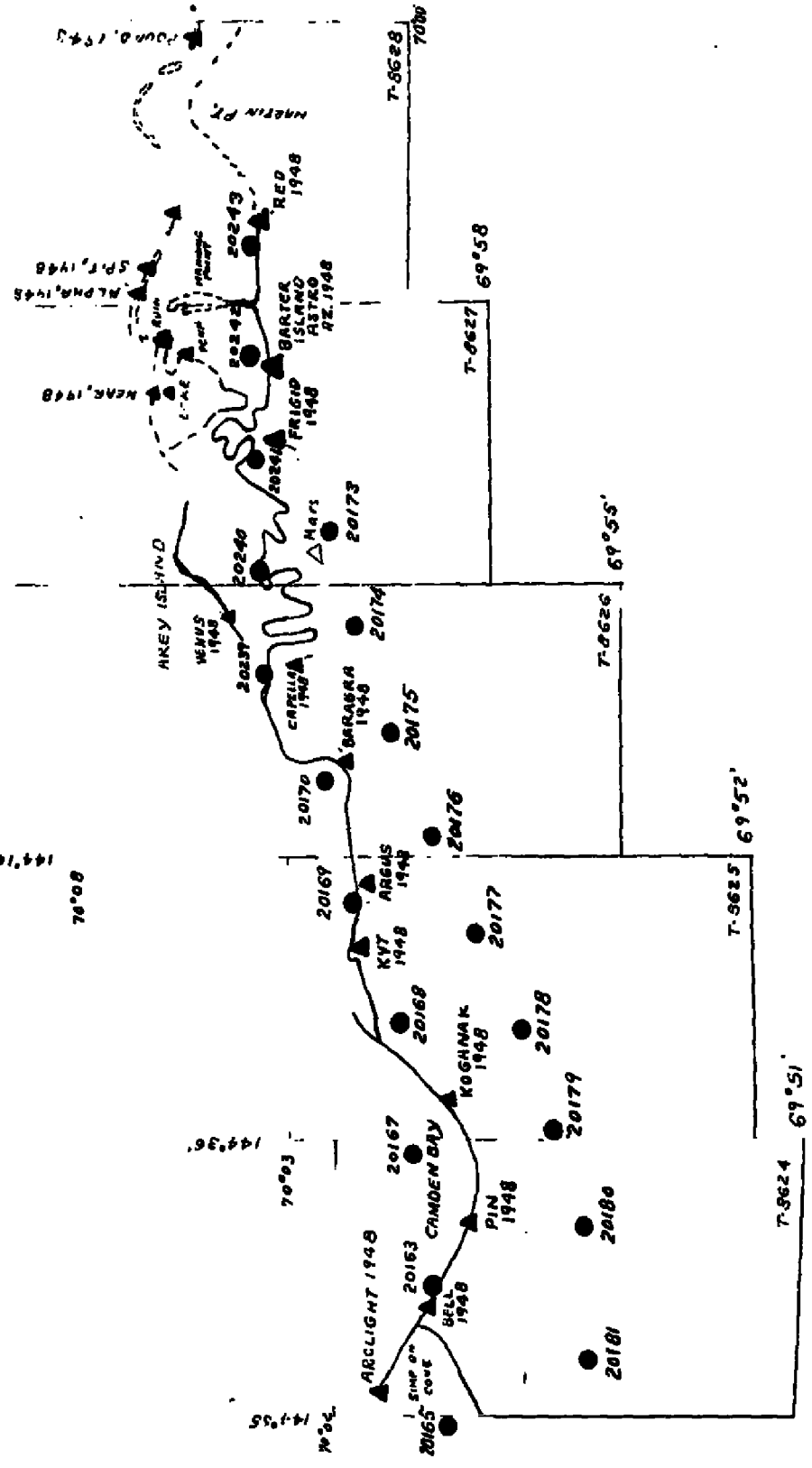
143.32

143.54
70°11'

144.16
70°08'

144.36
70°03'

144.55
70°04'



Ph 29 (47)
 BARTER ISLAND AREA
 SIMPSON COVE TO MARTIN PT.
 dashed line area compiled
 from timex photographs

FIELD INSPECTION REPORT
Map Manuscript T-8624
Project Ph-29(47)

Refer to:

FIELD INSPECTION REPORT
Brownlow Point to Camden Bay
Arctic North Coast of Alaska
Project CS-320
1950
R. A. Earle, Chief of Party

*Filed in Archives with
Completion Report.*

COMPILATION REPORT
Map Manuscript T-8624 (Revision)
Project Ph-29(47)

31: DELINEATION:

The results of a revision radial plot for T-8624 and T-8625 indicated numerous minor changes in planimetric detail for these sheets, especially in the interior area of T-8624.

Because of the accuracy of the revision radial plot, and since new map manuscripts had been furnished for the area, it was decided to make an entirely new compilation for each of these sheets.

Paragraphs 2, 3, and 4 of side heading 31: "Delineation" of the Descriptive Report for T-9358(1950)(Revision) are applicable to T-8624.

Side headings 32 to 37 incl. of the Descriptive Report for T-9358 (Revision) are applicable to T-8624.

38: CONTROL FOR FUTURE SURVEYS:

Not applicable to the compilation work. There are seven recoverable topographic stations plotted on the map manuscript which were located by the 1950 Arctic Party.

Side headings 39, 40, 46, and 47 of the Descriptive Report for T-9358 (Revision) are applicable to T-8624.

Approved:

Charles W. Clark
Charles W. Clark
Chief of Party

Respectfully submitted:

J. Edward Deal Jr.
J. Edward Deal, Jr.
Cartographer

MAP T-8624 PROJECT NO Ph-29 (4.7) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
ARC LIGHT 1948	GTZ G 7630	Barter I. 1948	69 59 32.05 114 54 31.42	993.2 (866.2) 333.3 (303.2)			

MAP T 8624 PROJECT NO. Ph-29(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)
(n.m. & n.d.) BELL 1948	Alias No. 89 Pre1 GP	Barter I. 1948	69 58	33.03	1023.6	(835.8)			
			144 47	31.10	330.3	(306.9)			
Sub. Pt. "a" BELL 1948	M-2500 -11	"	69 58		1001.6	(857.8)			
			144 47		364.5	(272.8)			
PIN 1948 (n.m. & n.d.)	Alias No. 89 Pre1 GP	"	69 57	57.41	1779.1	(80.8)			
			144 41	19.35	205.6	(431.9)			
SUB. PT. "2" PIN 1948	M-2500 -11	"	69 57		1782.8	(76.6)			
			144 41		2.4	(635.1)			

48: GEOGRAPHIC NAMES LIST:

- Camden Bay
- Collinson Point
- Ekalookliurak Creek
- *Nuvoak Creek
- Simpson Cove

*Nuvoak Creek is referred to in the description of triangulation station NUVUAK, 1950, as NUVUAK RIVER.

Names approved

9-26-51

A. J. W.

PHOTOGRAMMETRIC OFFICE REVIEW

T. 8624 (Revision)

- 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
- 8. Bench marks
- 9. Plotting of sextant fixes
- 10. Photogrammetric plot report
- 11. Detail points

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

- 27. Roads
- 28. Buildings
- 29. Railroads
- 30. Other cultural features

BOUNDARIES

- 31. Boundary lines
- 32. Public land lines

MISCELLANEOUS

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

40. Rev. H. Barron J. Edward Deal Jr.
 Reviewer 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:

REVIEW REPORT T-8624
Planimetric Map
25 September 1951

62. Comparison with Registered Topographic Surveys:

No earlier surveys have been made for this area.

63. Comparison with Maps of Other Agencies:

None

64. Comparison with Contemporary Hydrographic Surveys:

H-7659 1:20,000 1948 (ARN-2348) Barter Island Datum

65. The shoreline of the hydrographic sheet is that of the original compilation (Jan. 1949) so that there are small differences.

The hydrographic station Rio on H-7659 is a topographic station Ric. 1950 on T-8624. Hydrographic stations Nat, Wreck, Key and triangulation stations Bell, Lot and All have become topographic (1950) stations on T-8624. They have received field computations (945GTZ/G-8699) on the Flaxman Island datum. Bell, Lot and All have been also computed on the Barter Island datum (945GTZ/G-7630). *Referenced on Review H-7659*

The hydrographic station Lux on the spit forming the northern boundary of Simpson Cove is not on T-8624. It was probably not recovered, the area being particularly subject to storm or tide action.

Hydrographic station Hut appears on T-8624 as a planimetric feature only. It was used as point "C" in the position notes for station Bel, 1950 (Vol. 3 p. 18 (of 5), Horizontal Directions, Arctic Coast, Barter Island, August 1948.

65. Comparison with Nautical Charts:

9400 1:1,587,870 (at 70°00') ed. May 1947, rev. Nov. 1950.

66. Accuracy: *The scale of N.C. 9400 is not comparable because of the large difference in scale R.C.K.*

This map manuscript meets the National Standards of Map Accuracy.

67. Geographic Names:

The names in this project are from "Geographic Names Report, Alaska Arctic Coast, Demarcation Point to Cross Island, Project CS-320" submitted by the hydrographic party (no signature) Sept. 1948. Supplementary and Additional Names, same area, was submitted October 1949.

Reviewed by:

Lena T. Stevens
Lena T. Stevens

Approved by:

L. C. Laude 7 Jan 1953
Chief, Review Section
Div. of Photogrammetry

J. C. Edmundson
Chief, Nautical Chart Branch
Division of Charts '67

W. L. Swann
Chief, Div. of Photogrammetry
10 Feb. 1955

Carl O. Heston
Chief, Div. of Coastal Surveys

See signature of one submitted
by H. ... 11-5-53 (no. 1) 1250
12-5-53 3-31-52

Control to be smooth-drafted on T-8624

Triangulation

Arclight	1948
Pin	1948
Collinson	1950
Maybell	1950
Nuvuak	1950
Kovan	1950
Dome	1950
Camden	1950
Middle	1950

Topographic

Ric	1950
Nat	1950
Wreck	1950
Key	1950
Bel	1950
Lot	1950
All	1950

NAUTICAL CHARTS BRANCH

SURVEY NO. 8624

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
Aug. 9	9400	Picagari	Three Arctic Coast Ch't #8. Before After Verification and Review
3/50	9403	Bungone	Applied thru Ch #8 and direct Before After Verification and Review
Apr 55	9403	H. MacEwen	Before After Verification and Review Three Ch't 9475
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.