Form 804
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: (Arctic Coast)
Locality: Nuvoak Creek

19450

CHIEF OF PARTY
Herbert A. Paton, Chief of Party
Charles W. Clark, Portland, Oregon Photogrammetric Office

LIBRARY & ARCHIVES

DATE: February 21, 1955
DATA RECORD

T-8624 (Revision)

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


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

Supplemental Instructions

Instructions dated (II) (III):
- 4 Feb. 1948 field
- 15 Feb. 1949 Project C.S. 320
- 5 Mar. 1950
- 14 Dec. 1949 Office
- 9 Nov. 1950

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 18 1959 Date reported to Nautical Chart Branch (IV):

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

Publication Scale (IV):

Geographic Datum (III): Barter Island 1927 (Flexman Island projection also, in order to plot Flexman Island datum control (1958)), and to tie this map manuscript to those on the west.

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

Vertical Datum (III): Water (Ice Surface)

Mean sea level except as follows:
Elevations shown as (2) refer to mean high water
Elevations shown as (3) refer to sounding datum i.e., mean low water or mean lower low water

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

Lat.: Unadjusted
Long.: Adjusted

Plane Coordinates (IV):

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)
(I) (II) (III)
DATA RECORD

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

Planetary 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): L.B. Elrod  
Date: 3/15/51

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

Radial Plot or Stereoscopic  Dale Fisher  
Control extension by (III):

Stereoscopic Instrument compilation (III):  
Planimetry  
Contours  
Date:

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

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

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
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<tr>
<td>20165 thru 20167</td>
<td>7/29/47</td>
<td>12:51</td>
<td>1:20,000</td>
<td>0.6 ft. above M.L.L.W.</td>
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<td>20179 thru 20181</td>
<td>7/29/47</td>
<td>12:52</td>
<td>1:20,000</td>
<td>0.5 ft. above M.L.L.W.</td>
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</tbody>
</table>

Tide (III)

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

Washington Office Review by (IV): L.T. Stevens
Final Drafting by (IV):
Drafting verified for reproduction by (IV):

Proof Edit by (IV):

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 Levelling - 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 C.A.D.E.N. M.A.Y, and it is assumed that Forms 524 have been submitted by the Arctic Party.
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 (Besuafort 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 for 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,

This report forms a part of the project Completion Report
which is filed in the Bureau Archives under 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 Saligocheit 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. 125 meters north
Longitude: -- " " " " " -- 290 " 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 on 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 templates 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 templates.

The templates 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  
Chief of Party

Respectfully submitted:  
Dale Fisher  
Ensign U.S.C. & G.S.
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 over-
lay 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 photo-
graph by the field party.

Kytt, 1948 (Sub. Pt. "A") was the only field identi-
fied 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 
trimetrogon plot.

Submitted by: S. G. Blankenbaker

Approved:

L. C. Lande
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.
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  
Chief of Party

Respectfully submitted:  
J. Edward Deal, Jr.  
Cartographer
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR Y-COORDINATE</th>
<th>LONGITUDE OR X-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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<td>ARCLIGHT 1948</td>
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<td>69 59 32.05</td>
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<td></td>
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<td>114 51 31.42</td>
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<td>333.3 (303.2)</td>
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<td>STATION</td>
<td>SOURCE OF INFORMATION</td>
<td>LATITUDE OR Y-COORDINATE</td>
<td>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</td>
<td>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</td>
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<td>(n.m. &amp; n.d.)</td>
<td>Barter I, 1948</td>
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<td>BELL 1948</td>
<td>M-2500 -11</td>
<td>69 58</td>
<td>1001.6 (857.8)</td>
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<tr>
<td>PIN 1948</td>
<td>Alaskan No. 89</td>
<td>69 57 57.41</td>
<td>1779.1 (80.8)</td>
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<tr>
<td>PIN 1948</td>
<td>FREPQ</td>
<td>69 57</td>
<td>1782.8 (76.6)</td>
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</table>
48. GEOGRAPHIC NAMES LIST:

- Camden Bay
- Collinson Point
- Ekalookliuyak Creek
- Nuvoak Creek
- Simpson Cove

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

Names approved

9-26-51

A. L. G.
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 alongshore cultural features

PHYSICAL FEATURES
20. Water features
21. Natural ground cover
22. Planetary 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. Reviewer
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

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

The hydrographic station Ric 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 (9450TZ/G-8699) on the Flaxman Island datum. Bell, Lot and All have been also computed on the Barter Island datum (9450TZ/G-7630).

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:


The scale of N.C. 9400 is not comparable because of the large

66. Accuracy:

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:

[Signature]
Lena T. Stevens

Approved by:

[Signature]
L. J. LaDue 7 Jan. 1949
Chief, Review Section
Div. of Photogrammetry

[Signature]
W. B. McVicker
Chief, Nautical Chart Branch
Division of Charts

[Signature]
Chief, Div. of Photogrammetry
10 Feb. 1949

[Signature]
Earl O. Hatfield
Chief, Div. of Coastal Surveys
Control to be smooth-drafted on T-8624

<table>
<thead>
<tr>
<th>Triangulation</th>
<th>Topographic</th>
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<tr>
<td>Arclight 1948</td>
<td>Ric 1950</td>
</tr>
<tr>
<td>Pin 1948</td>
<td>Nat 1950</td>
</tr>
<tr>
<td>Collinson 1950</td>
<td>Wreck 1950</td>
</tr>
<tr>
<td>Maybell 1950</td>
<td>Key 1950</td>
</tr>
<tr>
<td>Nuvuak 1950</td>
<td>Bel 1950</td>
</tr>
<tr>
<td>Kovan 1950</td>
<td>Lot 1950</td>
</tr>
<tr>
<td>Dome 1950</td>
<td>All 1950</td>
</tr>
<tr>
<td>Camden 1950</td>
<td></td>
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<tr>
<td>Middle 1950</td>
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<tr>
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<tr>
<td>Aug. 9</td>
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<tr>
<td>3/50</td>
<td>9403</td>
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<td>Apr. 55</td>
<td>9403</td>
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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.