U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: TOPOGRAPHIC
Field No.: Ph-06 (46) Office No.: T-9242

LOCALITY
State: ALASKA
General locality: BRISTOL BAY AREA
Locality: SUMMIT ISLAND

1947-48

CHIEF OF PARTY
A.N. Stewart, Chief of Field Party.
C.W. Clark, Portland Photogrammetric Office

LIBRARY & ARCHIVES
DATE: May 22 - 1953
DATA RECORD

T-9242

Project No. (II): Ph-8B(46)    Quadrangle Name (IV): SUMMIT ISLAND

Field Office (II):    Chief of Party: A. Newton Stewart
Photogrammetric Office (III): Portland, Oregon    Officer-in-Charge: Charles W. Clark
Washington, D.C.    Louis J. Reed, Chief,

Instructions dated (II) (III):

II = 25 Apr 47 and 21 Apr 48
III = 19 Mar 48 and 4 Feb 49

Method of Compilation (III): Reading Plotter

Manuscript Scale (III): 1:20,000    Stereoscopic Plotting Instrument Scale (III): 1:20,000

Scale Factor (III): 1:1

Date received in Washington Office (IV):         Date reported to Nautical Chart Branch (IV):  OCT 29 1951

Applied to Chart No.    Date:    Date registered (IV): 3-11-53

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

Geographic Datum (III): NA 1927

The difference between Unadjusted Datum and N.A. 1927 Datum is Lat. plus 69 m. and Long. minus 69 m.

Reference Station (III):

Lat.: Long.:  

Plane Coordinates (IV):

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)

100% by Clarence E. Misfeldt on the Reading Plotter (model A) with Robert L. Sugden assisting as student operator.
DATA RECORD

Field Inspection by (II):  A. Newton Stewart  Date: 1947-1948

Planelate contouring by (II):  None  Date:  

Completion Surveys by (II):  None  Date:  

Mean High Water Location (III) (State date and method of location):
MHWL is dated 1947 since it was photo-identified during that year. It has been compiled on the Reading Plotter using this field identification as a guide.

Projection and Grids ruled by (IV):  Theodore L. Janson on the Reading Ruling Machine  Date: 18 Oct 50

Projection and Grids checked by (IV):  Harland R. Cravat  Date: 20 Oct 50

Control plotted by (III):  C.C. Wiebe  Date: 28 Dec 50

Control checked by (III):  H. B. Elrod  Date: 28 Dec 50

Radial Plot or Stereoscopic Control extension by (III):
James L. Harris & Roy A. Davidson  Date: 4 Jun 51

Delineation (III):  Stereoscopic Instrument

Planimetry and Contours (III):  Clarence E. Misfeldt  Date: 25 Sep 51

Compiled Manuscript (III):  Henri Lucas  Date: 16 Oct 51

Photogrammetric Office Review by (III):  Louis J. Reed  Date: 19 Oct 51

Elevations on Manuscript checked by (III):
Louis J. Reed  Date: 19 Oct 51

Form T-Page 3
Camera (kind or source) (III): USC&GS 9-lens, model B, f = 8.25 inches.

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>23198C</td>
<td>1 Sep 48</td>
<td>13:05</td>
<td>20,000</td>
<td>3 ft above MLLW</td>
</tr>
<tr>
<td>23199A</td>
<td>13 Aug 50</td>
<td>clock stopped</td>
<td>20,000</td>
<td>unknown</td>
</tr>
</tbody>
</table>

Tide (III)

Reference Station: Nushagak Bay
Subordinate Station: *Black Rock, Walrus Islands

Washington Office Review by (IV): Gordon B. Willey
Final Drafting by (IV): E. Hunter
Drafting verified for reproduction by (IV): S. Dean
Proof Edit by (IV): W.A. Hellman

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>15' 20'</td>
<td>6' 10'</td>
<td></td>
</tr>
</tbody>
</table>

Date: 6-11-53
Date: 8-52
Date: 8-28-52
Date: 10-27-52

Land Area (Sq. Statute Miles) (III): 4 sq mi
Shoreline (More than 200 meters to opposite shore) (III): 13 miles
Shoreline (Less than 200 meters to opposite shore) (III): none
Control Leveling - Miles (II): none
Number of Triangulation Stations searched for (II): Recovered: Identified: 1
Number of BMs searched for (II): none
Number of Recoverable Photo Stations established (III): six
Number of Temporary Photo Hydro Stations established (III): twenty

Remarks:

* 1951 predictions used for better tide value.
Ph-8(46) is a topographic map project consisting of 45 maps extending from Nushagak Peninsula to Cape Newenham and north to Goodnews Bay, including the offshore islands, along the northern shore of Bristol Bay, Alaska. Ph-8(46)A consists of 23 planimetric maps covering the area from Eggeik Bay to Nushagak Bay including Kvichak Bay, Alaska. Ph-8(46)B consists of 2 shoreline surveys. The hydrography has not been completed in the area of the topographic maps.

T-9242 covers Summit Island and the tip of the first peninsula northwest of Right Hand Point, extending from Latitude 58°-15' to 58°-52.5'-50" and from Longitude 160°-00' to 160°-20', at a scale of 1:20,000. Planimetry and contours were delineated on the Reading Plotter using photographs taken in 1948 and 1950. The field inspection, consisting of the identification of control, selection of topographic and hydrographic station sites, establishment of vertical control and partial shoreline inspection, was accomplished in 1947 and 1948.

A cloth-backed lithographic print of this map at the compilation scale and the descriptive report will be registered in the Bureau Archives. These Maps will not be published. The vinylite manuscript and a copy of the Descriptive Report will be filed in the Division of Photogrammetry.
2-19:

Refer to project reports entitled:

a. PROJECT REPORT
AERIAL PHOTOGRAPH CONTROL AND INSPECTION
BRISTOL BAY, ALASKA
Project Ph-3(46) May to July 1948
A. Newton Stewart, Chief of Party
Library No. 172

b. PROJECT REPORT
AERIAL PHOTOGRAPH CONTROL AND INSPECTION
BRISTOL BAY?, ALASKA
Project Ph-8(46) May to Sept 1947
A. Newton Stewart, Chief of Party
Library No. 134

Reports filed in Division of Photogrammetry
General files Library.
RADIAL PLOT REPORT

See descriptive report to accompany manuscript T-9237 wherein the radial plot report covers the area of the quadrangle of this report as well.
COMPILATION REPORT

31. Delineation:

All contours and cultural features have been delineated simultaneously on the Reading Plotter, model A. Photo coverage was complete and shoreline inspection was adequate. The land area within this quad has been completely mapped.

32. Control:

Horizontal control was not as adequate as desired; it is discussed in the Radial Plot report accompanying the full report on T-9237. The land area of this report, T-9242, is small and is a small portion of the plot area itself, and is considered to be adequately controlled.

Vertical control was also considered to be adequate. It was furnished primarily by sea-level at the shoreline, but peak elevations were also available for use.

33. Supplemental Data:


b. Field Inspection Photos: 18089 and 18090.

c. Graphic Control Surveys: None

d. Hydrographic Surveys: None

e. Computation Reference:
The Portland Photogrammetric Office compiled and bound into one 70-page volume all their vertical control computations following the completion of Plot E. It is entitled: COMPUTATION & TABULATION OF VERTICAL CONTROL IN THE AREA OF RADIAL PLOT "E", Project Ph-8B, including T-9038, T-9044, T-9045, T-9054, T-9055, T-9228, T-9231, T-9237, and T-9242.

34. Contours and Drainage:

The photograph quality of the instrument photos was satisfactory for contouring use and no areas of question-able contours remain.

35. Shoreline and Alongshore Details:

Instrument photos were exposed at lower tide than the field inspection photos and for this reason the compiler was able to map a good many details that were underwater to the field inspector. Most of the foul areas are instrument located.
36. Offshore Details:

Included in side-heading 35, above.

37. Landmarks and Aids:

None recommended by field party.

38. Control for Future Surveys:

a. Photo-hydro Stations:

A total of 20 such signal points have been selected by the field man and have been located on the map by the radial plot where they may be recognized by proper name and symbol. 17 of these stations are on Summit Island and the other 3 are on the mainland.

b. Photo-topo Stations:

Six have been positioned by the radial plot, three on Summit Island and three on the mainland opposite. They are shown in proper symbol and name. All six were field selected, marked, and photo-identified. Form 524 for all 6 stations on file in Div. Photogr. general files.

39. Junctions:

Only the north edge of this quad has a land-match and the edge has been transferred to the quad to the north to assure a perfect junction when that quad, T-9237, is compiled in the near future.

40. Horizontal and Vertical Accuracy:

Horizontal accuracy is standard. All contours meet accuracy standards set for 50ft contouring.

46 & 47. Comparison with Existing Maps and Nautical Charts:

None exist.

48. Geographic Name List: See separate numbered page, following.

49. Notes for the Hydrographer: A separate unnumbered page follows.


Submitted by:

Orvis N. Dalbey, Cartographer-Photogrammetric

Approved and Forwarded by:

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer
49: Notes for the Hydrographer:

(a) Photo Hydrographic Stations:

<table>
<thead>
<tr>
<th>Signal No.</th>
<th>Photo No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>18090</td>
<td>A rock outcrop at the top of the bluff fronting the beach. The station is about 85' above the beach.</td>
</tr>
<tr>
<td>13</td>
<td>18090</td>
<td>The face of the rock at the point.</td>
</tr>
<tr>
<td>14</td>
<td>18090</td>
<td>a 2' x 4' rock atop a rock ledge making out into a point and slanting on down into the water.</td>
</tr>
<tr>
<td>41</td>
<td>18089</td>
<td>On the W shore of the island, 2000' N of the S end. It is the high point of a large isolated rock just off the third point from the S end.</td>
</tr>
<tr>
<td>42</td>
<td>18089</td>
<td>3000' N of the S end of the island, on the W shore. It is just off the fourth projection from the S end. It is the highest point of an isolated mass of rock.</td>
</tr>
<tr>
<td>43</td>
<td>18089</td>
<td>On the W shore of the island, it is a 4' x 7' rock on the HWL just S and around the point from the S end of the beach.</td>
</tr>
<tr>
<td>44</td>
<td>18089</td>
<td>On the W shore at the end of the first jutting of rock 600' N of the N end of the beach. The station is the extreme end of the finger.</td>
</tr>
<tr>
<td>45</td>
<td>18089</td>
<td>On the W shore of the island near the center of the first cove N of the beach (same approx. size). It is the southerly of 2 pinnacles projecting about 18'.</td>
</tr>
<tr>
<td>46</td>
<td>18089</td>
<td>Off the W shore about 500' and just southerly from the mass of rock lying off the NW side of the island. It is a prominent isolated rock -- could be covered at high water.</td>
</tr>
<tr>
<td>47</td>
<td>18089</td>
<td>Off the NW side of the shore about 60', 1600' NE of the large mass offshore and 2100' SW from the elongation of the shore. SE and NW on the N end of the island. Station is a lone rock.</td>
</tr>
<tr>
<td>Signal No.</td>
<td>Photo No.</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>48</td>
<td>18089</td>
<td>On the N end of the island, 2200' westerly from the small beach on the extreme end, it is an isolated rock 40' offshore.</td>
</tr>
<tr>
<td>49</td>
<td>18089</td>
<td>On the NE corner of the island, 900' easterly and S of the N end of the island (of the small beach there) it is an isolated rock just offshore.</td>
</tr>
<tr>
<td>50</td>
<td>18089</td>
<td>On the E shore of the island 1500' northerly from the N end of the northern of 2 beaches on the E side. It is the rock face of a finger of rock about 22' high.</td>
</tr>
<tr>
<td>51</td>
<td>18089</td>
<td>On the E shore of the island, near the center of the low ground in the center of the island. It is the biggest rock of the point seen to the southward from the N beach.</td>
</tr>
<tr>
<td>52</td>
<td>18089</td>
<td>On the E shore of the island, 190' S of the N end of the southern of 2 beaches. It is a 4'x 4' boulder near the high water line.</td>
</tr>
<tr>
<td>53</td>
<td>18089</td>
<td>On the E shore of the island 1500' SE of the S end of the S beach. It is an isolated mass of rock 12' above HWL.</td>
</tr>
<tr>
<td>54</td>
<td>18089</td>
<td>On the E shore of the island about 4/5 of a mi. N of the S end. It is the second point N of the S end, very prominent.</td>
</tr>
<tr>
<td>55</td>
<td>18089</td>
<td>On the E shore of the island at about the S end. It is a prominent point on the SE corner.</td>
</tr>
<tr>
<td>56</td>
<td>18089</td>
<td>About 4/5 of a mi. from the S end of the island. It is a rocky knob on the highest part of a saddle. The saddle is between the 2 high parts of the island.</td>
</tr>
<tr>
<td>57</td>
<td>18089</td>
<td>On the SE corner of the island on the high ridge as it breaks rapidly downward. It is the southernmost rocky point.</td>
</tr>
</tbody>
</table>

(b) Recoverable Topographic Stations

<table>
<thead>
<tr>
<th>Station</th>
<th>Photo</th>
<th>Station</th>
<th>Photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>APEX 1947</td>
<td>18090</td>
<td>ROPE 1947</td>
<td>18089</td>
</tr>
<tr>
<td>MILK 1947</td>
<td>18090</td>
<td>RUST 1947</td>
<td>18089</td>
</tr>
<tr>
<td>PLUG 1947</td>
<td>18089</td>
<td>VBAR 1947</td>
<td>18090</td>
</tr>
</tbody>
</table>
PHOTOGRAMMETRIC OFFICE REVIEW
T. 9242

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.  

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  

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

43. Remarks:

H.2624-12
62. **Comparison with Registered Topographic Surveys:**
   None.

63. **Comparison with Maps of Other Agencies:**
   None.

64. **Comparison with Contemporary Hydrographic Surveys:**
   None.

65. **Comparison with Nautical Charts:**
   Chart 8802 1:1,023,188 Scale 17th Edition (1944) 51-6/11
   No discrepancies are to be noted.

66. **Adequacy of Manuscript:**
   This topographic map complies with Bureau standards and with project instructions.

Reviewed by:

\[Signature\]
Gordon B. Willey

Approved:

\[Signature\]
Chief, Review Section
Division of Photogrammetry

\[Signature\]
Chief, Nautical Chart Branch
Division of Charts

\[Signature\]
Chief, Div. of Photogrammetry

\[Signature\]
Chief, Div. of Coastal Surveys
The subject maps were radial plotted on unadjusted (Field) datum which was subsequently adjusted to the North American 1927 datum by the Division of Geodesy. The datum correction has been computed for each sheet, and stamped into the Descriptive Report on page 1, and on the manuscripts and registered cloth-backed copies near the title block. However, as the title block of each clothback sheet contains the note, "1927 North American Datum", it was necessary to stamp the word, "(Unadjusted)" beside this datum note in the title block of each sheet.

See the special report, Horizontal Control Datum, Ph-8(46), Ph-8A(46), and Ph-8B(46), filed with the Completion Report for the project for details and lists of the maps, reports, and registration copies marked with this adjustment. The following is a list of the maps in the projects:

<table>
<thead>
<tr>
<th>Ph-8(46), TOPOGRAPHIC</th>
<th>Ph-8A(46), PLANIMETRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-9038 thru T-9040</td>
<td>T-9041 thru T-9043</td>
</tr>
<tr>
<td>9041, &quot; 9047</td>
<td>9058, &quot; 9053</td>
</tr>
<tr>
<td>9051, &quot; 9057</td>
<td>9066, &quot; 9069</td>
</tr>
<tr>
<td>9065, 9065, 9070</td>
<td></td>
</tr>
<tr>
<td>9071, 9074, 9075</td>
<td>9072, 9073</td>
</tr>
<tr>
<td>9227 thru 9253</td>
<td>9076, 9078</td>
</tr>
</tbody>
</table>

Ph-8B(46), SHORELINE:

T-8873 (E&W) and T-8874