**Type of Survey**  PLANIMETRIC (PHOTOGRAPHIC)  
**T-9066**  
**Field No.** Ph-8 (46)  
**Office No.** T-9067

**LOCALITY**

**State**  
ALASKA

**General locality**  
BRISTOL BAY

**Locality**  
NORTH SHORE OF KVICHAK BAY, ETOLIN  
POINT AND NUSHAGAK BAY

1949

**R.F.A. Studds, Chief Party**  
A.N. Stewart, Field Party  
W.H. Bainbridge, Portland Photo. Office

**LIBRARY & ARCHIVES**

**DATE** JUNE 12, 1953
DATA RECORD

T-9066

Quadrangle (II): Project No. (II): Ph-S(46)

Field Office: Nushagak Peninsula, Chief of Party: A. Newton Stewart
Alaska


Instructions dated (II III): 19 March 1948 Copy filed in Descriptive
Report No. T-

(VI)

Completed survey received in office: 1-25-47

Reported to Nautical Chart Section: 2-7-49

Reviewed: 20 May, 1952 Applied to chart No. Date:

Redrafting Completed:

Registered: 11 March 1953 Published:

Published Scale:

Compilation Scale: 1:20,000

Scale Factor (III): None

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean Lower Low Water

Reference Station (III): LASTOR, 1947

Lat.: 58° 37' 32.937" (1204.8 m.) Long.: 153° 07' 57.202" (924.8m.) Adjusted

Unadjusted

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)
<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>17894 to 17896 Incl.</td>
<td>9-22-46</td>
<td>12:30</td>
<td>1:20,000</td>
<td>10.1 ft. above M.L.L.W.</td>
</tr>
<tr>
<td>17937</td>
<td>9-23-46</td>
<td>11:03</td>
<td>1:20,000</td>
<td>14.1 ft. above M.L.L.W.</td>
</tr>
<tr>
<td>2041 to 2044 Incl.</td>
<td>8-23-47</td>
<td>11:50</td>
<td>1:20,000</td>
<td>24.7 ft. above M.L.L.W.</td>
</tr>
<tr>
<td>23332 to 23337 Incl.</td>
<td>9-1-48</td>
<td>14:13</td>
<td>1:20,000</td>
<td>6.5 ft. above M.L.L.W.</td>
</tr>
<tr>
<td>23369 to 23371 Incl.</td>
<td>9-2-48</td>
<td>10:04</td>
<td>1:20,000</td>
<td>1.3 ft. above M.L.L.W.</td>
</tr>
</tbody>
</table>

Tide from (III): Predicted Tide Tables Pacific Ocean and Indian Ocean 1946, Reference Station Mushagak Bay (Clark Pt.).

Mean Range: 15.2 ft.
Spring Range: 19.5 ft.
Diurnal Range: 4.0 ft.

Camera: (Kind or source) U.S. Coast and Geodetic Survey 9 lens focal length 8.25 inches.

Field Inspection by: Party of Lt. Comdr. A. Newton Stewart and Ship "Pathfinder". Date: Season 1947

Field Edit by: None Date:

Date of Mean High-Water Line Location (III): Field inspected in 1947 and revised to agree with the 1948 photographs.

Projection and Grids ruled by (III) Washington Office Date: March 1948
" " " " checked by: Washington Office Date: March 1948
Control plotted by: Frank H. Elrod Date: April 12, 1948
Control checked by: Roy A. Davidson Date: April 13, 1948

Radial Plot by: J.E. Deal and J.L. Harris Date: May 12, 1948
Helen Leube (Shoreline) Nov. 10, 1948
Detailed by: Marie B. Elrod (Interior) June 6, 1948

Reviewed in compilation office by: Ree H. Barron Date: Dec. 4, 1948
Dec. 5, 1948

Elevations on Field Edit Sheet checked by: Date:
STATISTICS (III)

Land Area (Sq. Statute Miles): 102.8

Shoreline (More than 200 meters to opposite shore): 22.0 Statute Miles

Shoreline (Less than 200 meters to opposite shore): None

Number of Recoverable Topographic Stations established: 4
(These stations may also have been submitted by the Ship "Pathfinder.")

Number of Temporary Hydrographic Stations located by radial plot: 11

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:
DATA RECORD

T- 9067

Quadrangle (II): Project No. (II): Ph-8(46)

Field Office: Nushagak Peninsula, Chief of Party: A. Newton Stewart
Alaska


Instructions dated (II III): 19 March 1948 Copy filed in Descriptive
Report No. T- (VI)

Completed survey received in office: 1-25-49

Reported to Nautical Chart Section: 2-7-49

Reviewed: 20 May, 1952 Applied to chart No. Date:

Redrafting Completed: 5-21-52

Registered: E. A. Hunter

Published:

Compilation Scale: 1:20,000 Published Scale:

Scale Factor (III): None

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean Lower Low
Water

Reference Station (III): SUPPLY, 1947

Lat.: 58° 43' 51.798" (1587.2m) Long.: 157° 46' 05.587" (907.7m) **Adjusted**

State Plane Coordinates (VI):

X = Y =

Military Grid Zone (VI)
PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
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<td>9-22-46</td>
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<td>1:20,000</td>
<td>14.9 Ft. above M.L.L.W.</td>
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<tr>
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<td>9-23-46</td>
<td>11:10</td>
<td>1:20,000</td>
<td>14.95 Ft. above M.L.L.W.</td>
</tr>
<tr>
<td>23274 to 23274 Incl.</td>
<td>9-1-48</td>
<td>2:42</td>
<td>1:20,000</td>
<td>51.14 Ft. above M.L.L.W.</td>
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</table>

Tide from (III): Predicted Tide Tables Pacific Ocean and Indian Ocean 1946
Reference Station NUSHAGAK BAY (Clark Pt.)
Mean Range: 15.2 ft.  Diurnal
Spring Range: 19.5 ft.
Camera: (Kind or source) U.S. Coast and Geodetic Survey 9 lens focal length 8.25 inches.

Field Inspection by: Party of Lt. Comdr. A. Newton Stewart  date: Season 1947
Field Edit by:  date:
Date of Mean High-Water Line Location (III): Field inspected in 1947 and revised to agree with the 1948 photographs.

Projection and Grids ruled by (III) Washington Office  date: March 1948
" " " " checked by: Washington Office  date: March 1948
Control plotted by: Frank H. Elrod  date: April 12, 1948
Control checked by: Roy A. Davidson  date: April 13, 1948
Radial Plot by: J.E. Deal and J.L. Harris  date: May 15, 1948
Detailed by: Roy A. Davidson
Ree H. Barron  date: June 17, 1948
Reviewed in compilation office by: Ree H. Barron  date: June 30, 1948
J.E. Deal  date: Dec. 3, 1948
Elevations on Field Edit Sheet checked by:  date:
STATISTICS (III)

Land Area (Sq. Statute Miles): 50.6

Shoreline (More than 200 meters to opposite shore): 16.2 Statute Miles

Shoreline (Less than 200 meters to opposite shore): None

Number of Recoverable Topographic Stations established: 6
(These stations may also have been submitted by the Ship "PATHFINDER")

Number of Temporary Hydrographic Stations located by radial plot: 16

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Compilation Party, or (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:
FIELD INSPECTION REPORT
Map Manuscripts T-9066 and T-9067
Area of the 1st Radial Plot
Project Ph-8(45)

There was no detailed field inspection in the area of these two map manuscripts. Pertinent data on photographic interpretation of planimetric details was obtained during various conferences between Lt. Comdr. Stewart and personnel of the compilation office during February and March 1943. During this period photographs were examined under the stereoscope, the character of the country was discussed and notes were made on the photographs to clarify the detail for the compilers.

The original field inspection in the area is discussed in the "Project Report, Aerial Photograph Control and Inspection, Bristol Bay, Alaska, Project Ph-8(45) May to September 1947" submitted by Lt. Comdr. A. Newton Stewart.

Library: Season's Report No. 134, 1947

W.H. Painebridge
Comdr. - USCG Survey
FIELD INSPECTION REPORT
Map Manuscripts T-9066 and T-9067
Area of the 1st Radial Plot
Project Ph-8(46)

There was no detailed field inspection in the area of these two map manuscripts. Pertinent data on photograpic interpretation of planimetric details was obtained during various conferences between Lt. Comdr. Stewart and personnel of the compilation office during February and March 1948. During this period photographs were examined under the stereoscope, the character of the country was discussed and notes were made on the photographs to clarify the detail for the compilers.

The original field inspection in the area is discussed in the "Project Report, Aerial Photograph Control and Inspection, Bristol Bay, Alaska, Project Ph-8(46) May to September 1947" submitted by Lt. Comdr. A. Newton Stewart.

Library: Season's Report, No. 138, 1947

W.H. Painbridge
Comdr.-USC&G Survey
CONTROL:

A complete discussion of the horizontal control stations falling in the area of these two map manuscripts will be found in Item 26, "Control", of the descriptive report for Map Manuscripts No's. T-9051 and T-9052, Project Ph-8(46).

During the 1943 season the Ship "PATHFINDER" established and identified in the area of T-9067 the additional recoverable topographic station HAV, 1943. This station is in agreement with the original radial plot.

In July of 1948 Lt. Comdr. A.H. Stewart furnished this office a positive identification of the recoverable topographic station TAFB, 1947. This station falls in the area of T-9066, and was very useful during the running of the new radial plot with the 1948 photographs.

RADIAL PLOT:

The radial plot for these two map manuscripts was first completed in May 1948 using photographs taken in 1946 and 1947. At that time they were included as part of the combined radial plot comprising map manuscripts No's. T-9051, T-9052, part of T-9058, T-9060, T-9061, T-9062, T-9066 and T-9067. This radial plot has been fully described in Item 27, "Radial Plot", of the descriptive report for T-9051 and T-9052, Project Ph-8(46).

In November 1948 the radial plot for these two map manuscripts was rerun using photographs taken in 1948. They were included as part of a combined radial plot comprising map manuscripts T-9042, T-9049, T-9050, T-9059, T-9060, T-9066 and T-9067. The work for this radial plot was done in the same manner as that described for the original radial plot.

In a few places pass points were moved slightly, but for the most part the results of the new radial plot proved the original radial plot to be correct.

DETAILING:

These maps were compiled in accordance with instructions for Project Ph-8(46). Features and symbols were shown as indicated in Photogrammetry Instructions No's. 10, 12, and 17 and in a special symbol of hachures, furnished by the Washington Office.
The transforming printer at the Washington Office was not in proper adjustment at the time the photographs were printed and they could not be oriented in their entirety at the compilation table when radially plotting various types of pass points. Each chamber of each photograph could be oriented separately since a sufficient number of pass points were established during the radial plot. For at least two of the chambers on each photograph it was found necessary to de-center the photograph radially, to or from the chamber being oriented, so that the radials to the pass points and horizontal control stations in the chamber would pass through their positions on the map manuscripts.

In order to furnish the Ship "PATHFINDER" with data for the 1948 hydrographic work in Kvichak Bay, detailing was divided into two distinct steps. In the first phase of the work all photo-hydro stations, shoreline pass points and recoverable topographic stations were located. Then the shoreline was detailed from data contained on the field inspection photographs. The shoreline field inspection was not as complete as desired for the area. It is supplemented, however, by information contained in the descriptive report submitted by Lt. Comdr. Stewart, and by stereoscopic examination of the photographs, with Lt. Comdr. Stewart, during the time he was in the Portland Office. There were some minor differences of opinion between the field party of Lt. Comdr. Stewart and the Ship "PATHFINDER" as to the location of the high-water line. In most cases the shoreline as delineated by Lt. Comdr. Stewart's party was accepted. When the above work was completed, prints on ozal cloth were made and forwarded to the Ship "PATHFINDER" by air mail.

The second phase of the work consisted of the compilation of interior planimetric features. Since there was no field inspection of interior areas the interpretation of the photographic details was accomplished by stereoscopic examination of the photographs, and from descriptions of the area furnished personally by Lt. Comdr. A. Newton Stewart. Reference is also made to Pages 11 of the "Project Report Aerial Photograph Control and Inspection, Bristol Bay, Alaska, Project Ph-8(46), A. Newton Stewart, Chief of Party, May 6 Sept., 1947.

Detail points were radially plotted near or along the tops of cliffs, bluffs, and steep banks so that they could be compiled as accurately as possible.

From a stereoscopic examination of the photographs, the many ponds found in the area appear to be at various definite differences of elevations and not on a plain or gradual rise inshore from the shoreline. It could not be definitely deter-
mined whether or not there is drainage connecting many of the ponds. It may be that at some period during the year there is a definite drainage pattern connecting all ponds. In any case, the minor drainage in this area is very complicated, and can only be accurately determined by a detailed field inspection of the area.

Because of new photography, additional work was required. A thorough examination of the 1948 photographs was made. Any change that had occurred in the planimetric features since the original photography was corrected. It was necessary to revise small portions of the original detail, caused by minor changes to the original radial plot, and to detail additional areas not covered by the original photography. At the request of the Ship "PATHFINDER" additional temporary hydrographic signals were selected and radially plotted at this time. Refer to Paragraph 35 of this report for additional details on this part of the work.

Czalid prints, made after the map manuscripts were revised to agree with the 1948 photography and then reviewed, have been forwarded to the Ship "PATHFINDER".

It is believed that all provisions of paragraph 5 of the instructions relative to drafting have been applied to the map manuscripts.

29: **SUPPLEMENTAL DATA:**

No supplemental data was furnished for the area of these map manuscripts.

30: **MEAN HIGH WATER LINE:**

The mean high-water line was detailed in accordance with field inspection data furnished by Lt. Comdr. Stewart. In addition a stereoscopic examination of the photographs was made, by Lt. Comdr. Stewart and several of the personnel of the compilation office, at which time any doubtful points regarding the location of the high-water line were resolved.

The mean high-water line is shown by a continuous black acid ink line .008" in thickness. There are no marsh areas bordering the shoreline.

31: **LOW-WATER AND SHOAL LINES:**

It was impossible to delineate the low-water lines from the photographs. The approximate limits of mud flat areas, which bare at low-water, have been detailed from the 1947 photographs that were made when the predicted tide was 6.0 ft. above mean lower low-water.

(see page 2 of this report for tide data.)
The predicted tides for the 1948 photographs were 4.0 ft. above mean lower low water. The mud flat limits however, were too indefinite on these 1948 photographs for satisfactory delineation. Approximate shoal areas were detailed from the 1948 photographs.

32: DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

There are no details offshore from the mean high-water line.

33: WHARVES AND SHORELINE STRUCTURES:

There are no wharves or other shoreline structures within the area of these two map manuscripts.

34: LANDMARKS AND AIDS TO NAVIGATION:

A report on these features was submitted by the Ship "PATHFINDER".

35: HYDROGRAPHIC CONTROL:

The field inspection party of 1947 identified seven temporary hydro signals in each of the areas covered by these two map manuscripts. These were radially plotted and are numbered 6601 to 6607 inclusive, and 6701 to 6707 inclusive. The locations and descriptions of these stations were furnished to the Ship "PATHFINDER" in the spring of 1948. In the fall of 1948 the Ship "PATHFINDER" requested that additional temporary hydro signals be located in this area for use during the 1949 season. Accordingly this office, very carefully, by stereoscopic examination and office inspection of the photographs, selected thirteen picture points which were radially plotted. Four lie in the area of T-9065 and are numbered 6608 to 6611 inclusive. Nine lie in the area of T-9067 and are numbered 6702 to 6716 inclusive. Ozalid prints showing the location of these signals and sketches and descriptions, on small pieces of acetate, were forwarded to the Ship "PATHFINDER" in December 1948. There is also a complete list, of all the temporary hydrographic signals falling in the area of these two map manuscripts, attached to this descriptive report.

36: LANDING FIELDS AND AERONAUTICAL AIDS:

There are no landing fields or aeronautical aids in this area.

37: GEOGRAPHIC NAMES:

Geographic names were obtained from a sketch on tracing cloth which accompanies a special report by Lt. Comdr. A. Newton Stewart,
entitled "Geographic Names, Bristol Bay, Alaska, December 19, 1947."

38: **RECOVERABLE TOPOGRAPHIC STATIONS:**

Copies of form 524 are being submitted for the following:

<table>
<thead>
<tr>
<th>In T-9056</th>
<th>In T-9067</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPE, 1947</td>
<td>MIKE, 1947</td>
</tr>
<tr>
<td>ZEST, 1947</td>
<td>MIST, 1947</td>
</tr>
<tr>
<td>TONE, 1947</td>
<td>WOLF, 1947</td>
</tr>
<tr>
<td>TENT, 1947</td>
<td>MARK, 1947</td>
</tr>
<tr>
<td></td>
<td>HAM, 1947</td>
</tr>
<tr>
<td></td>
<td>CAP, 1947</td>
</tr>
</tbody>
</table>

It is possible that the Ship "PATHFINDER" has also submitted copies of form 524 for these stations.

39: **JUNCTIONS:**

Complete and satisfactory junctions have been made between these map manuscripts and adjacent map manuscripts.

44: **COMPARISONS WITH EXISTING TOPOGRAPHIC SURVEYS:**

There were no previous topographic surveys of the area furnished to this office.

45: **COMPARISONS WITH NAUTICAL CHARTS:**

A visual comparison was made with nautical chart No. 3802 scale 1:1,023,188. There are many places, particularly relative to drainage, where the nautical chart and map manuscripts are not in agreement.

Approved:  
W.H. Reinbridge  
Comdr.-USCG Survey  
Chief of Party

Respectfully submitted,  
J. Edward Deal, Jr.  
Photogrammetric Engineer

* Field Computation: 3rd order Δ, 6-7318, p. 8
HYDROGRAPHIC SIGNAL SITES
Project Ph-8(46)
North Shore KVICHAK BAY
From Etolin Point to KVICHAK RIVER.
Sheets No's. 9056 and 9067

T-9066

#6601
Formerly #159:  The station is the top and seaward face of the grass covered point. It does not appear prominent on the photo, but was very plain from the air. ....Field Photo #17894.

#6602
Formerly #177:  The station is the ocean end of a small run of brush in a minute draw, from the northern most cut of three in the bluff and extending into the old lake bed. Picked from air. Target probably needed. . . Field Photo #17895.

#6603
Formerly #178:  The station is the mouth of the cut in the bluff line (center thereof) and on line with the bluff base. Picked from air. Target needed. .........Field Photo #17895.

#6604
Formerly #179:  The station is the mouth and center thereof of the cut in the bluff and on the elongation of the base of the bluff line at bluff base. Picked from air. Target needed. .........Field Photo #17895.

#6605
Formerly #180:  The station is the mouth and center thereof of the cut in the bluff and on the elongation of the bluff line at its base. Picked from air. Target needed. .........Field Photo #17895.

#6606
Formerly #181:  The station is the center of the mouth of the draw and on line with the base of the bluff, beach level. Picked from air. Target needed. .........Field Photo #17895.
The station is the rounded point of
the grassy bank on the easterly side of the
small stream. Picked from air.

Field Photo #17896

The following signals were selected and radially plotted at the
compilation office as requested by the Ship "PATHFINDER" in November
1948.

The most southerly tip of the largest
of a group of four small ponds. It lies
midway between topographic station ZEST, 1947 and a prominent draw to the east, near
the southwest corner of a large pond and
about 60 meters inshore from the top of the
marine cliff.

The center of an eyebrow string of
small dark spots believed to be either very
small ponds or small clumps of brush. It
lies about 3/4 of a mile west of topograph-
ic station ZEST, 1947, 1/4 of a mile east
of a draw and about 40 meters inshore from
the top of the marine cliff.

The south tip of the most southerly
of three small ponds located about 2 miles
west of topographic station ZEST, 1947 and
300 meters west of a draw. It lies about
40 meters inshore from the top of the mar-
ine cliff.

Center of a small clump of brush
located about 7/8 of a mile southwest of
triangulation station Lastor, 1947 and about
130 meters south of the most southern limits
of a large pond. It is the most easterly
of several small clumps of brush.
The station is the center of the mouth of the draw and on line with the base of the bluff-beach level. Picked from the air. Target needed. ..........Field Photo #17896.

The station is the center of the mouth of the draw at beach level, and on elongation of the base of the bluff. Picked from the air. Target needed. ..........Field Photo #17897.

The station is the center of the mouth of the draw at beach level, and on the elongation of the base of the bluff. Picked from the air. Target needed. ..........Field Photo #17897.

The station is the center of the mouth of the draw, at beach level, and on the elongation of the bluff line-base thereof. Picked from the air. Target needed. ....Field Photo #17998.

The station is the center of the mouth of the draw at beach level and on line with the base of the bluff. Picked from the air. Target needed. ..........Field Photo #17998.

The station is the rounded grass point at the end of where the bluff breaks down to a small stream. It is on the western side of the stream. Picked from the air. ....Field Photo #17997.

The station is the southern gable of the cabin. Picked from the air. ..Field Photo #17995.

The following signals were selected and radially plotted at the compilation office as requested by the Ship "PATHFINDER" in November 1948:
The most easterly tip of a small pond located about 400 meters west of topographic station Wolf, 1947, midway between and to the south of two larger ponds. It lies 50 meters southeast of another small pond and 30 meters inshore from the top of the marine cliff.

The most southerly tip of a small pond located about 80 meters southeast of a large pond and 1/2 of a mile west of a dry lake bed. It lies 80 meters inshore from the top of the marine cliff.

The center of a small clump of brush located at the southwest end of a brush covered small bluff. It lies about 250 meters east of a dry lake bed, 650 meters west of a prominent draw and 45 meters inshore from the top of the marine cliff.

The most eastern point of a small clump of brush which is the largest of a group of three clumps. It lies 150 meters south of a point of a bluff and 60 meters inshore from the top of the marine cliff, 300 meters east of a small pond.

The southeast tip of a small pond about 60 meters west of a deep depression and 100 meters east of a prominent gully. It lies 100 meters south of a larger pond, 70 meters inshore from the top of the marine cliff and about 1 mile southwest of triangulation station Lake Point.

The most southerly tip of a small pond about 7/8 of a mile southeast of triangulation station Lake Point. It lies on the inshore side of a slight knoll, about 80 meters inshore from the top of the marine cliff.

The most northerly point of a darkly shaded area, which is believed to be either a slight depression or a patch of vegetation located 1 3/4 miles east of triangulation station Lake Point, 1947. It lies 120 meters south of the southwest end of a large pond and 100 meters inshore from the top of the marine cliff.
The most northeasterly tip of a slight depression, located 250 meters northeast of topographic station Mist, 1947, and about 70 meters inshore from the top of the marine cliff.

The east point of a knoll just west of a small draw, 130 meters south of a small pond, 20 meters inshore from the top of the marine cliff. It lies approximately 1 mile east of topographic station Mist, 1947.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR $\gamma$-COORDINATE</th>
<th>LONGITUDE OR $\lambda$-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS FORWARDED</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS BACKED</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARDED</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS BACKED</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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<td>1927</td>
<td>158 - 43 - 04,523</td>
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<td>1927</td>
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<td>158 - 17 - 11,331</td>
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<td>(785.2)</td>
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<td>(626.1)</td>
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</tbody>
</table>

1 FT. = 304.8006 METER

COMPUTED BY: J.C. Lejoye

DATE: 3/30/48

CHECKED BY: J.A. Hinely

DATE: 4/3/48
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR ( \beta )-COORDINATE</th>
<th>LONGITUDE OR ( \lambda )-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</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>
</tr>
</thead>
<tbody>
<tr>
<td>LAKE PT., 1947</td>
<td>G-7328</td>
<td>1927</td>
<td>58 - 41</td>
<td>41.501</td>
<td>1284.1</td>
<td>(572.4)</td>
<td>Used in radial plot</td>
<td></td>
</tr>
<tr>
<td>SUPPLY, 1947</td>
<td>G-7328</td>
<td>1927</td>
<td>157 - 50</td>
<td>34.090</td>
<td>549.1</td>
<td>(417.4)</td>
<td>Used in radial plot</td>
<td></td>
</tr>
<tr>
<td>HAM, 1948</td>
<td>Field Comp.</td>
<td>1927</td>
<td>157 - 46</td>
<td>54.306</td>
<td>872.4</td>
<td>(91.6)</td>
<td>Topo, station not used in radial plot</td>
<td></td>
</tr>
</tbody>
</table>

1 FT. = 0.3048006 METER

COMPUTED BY: J.C. Lajoye
DATE: 4/5/43
CHECKED BY: J.A. Hinely
DATE: 4/8/43
T-9066, T-9067.

Geographic Names:

For title: Alaska
Bristol Bay

On sheets: Kvichak Bay
Etolin Point*
Nushagak Bay

Names underlined in red are approved. 5-20-57

*pending final action by B.G.N.,
apply this name to high area about
lat. 58°40' N.
61. General

Though the elevation of this area is not great (approximately 50 ft. to 250 ft.), the topography is very rough, because of the diffuse drainage pattern and the northward-dipping rock structure. The main streams have marsh valleys of varying width and have many laterals, so that the areas between consist of many terraced "islands" of higher, grass-covered ground, or of countless ponds in tundra areas.

62. Comparison with Registered Surveys:

None

63. Comparison with Maps of Other Agencies:

USGS Bushagak Bay, Alaska 1:250,000, printed 1949, 1943 Photographs, "1947 H4 Datum".

The datum for this map seems to be that of the C.G.S. 1909 control (Bushagak Independent Datum), which is approximately 0' 4.0" north of and 1' 33.9" east of the 1927 North American Datum.

64. Comparison with Contemporary Hydrographic Survey:

<table>
<thead>
<tr>
<th>Year</th>
<th>Survey</th>
<th>Datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949</td>
<td>H-7767</td>
<td>1:20,000</td>
</tr>
<tr>
<td>1949</td>
<td>H-7760</td>
<td>1:20,000</td>
</tr>
<tr>
<td>1950</td>
<td>H-7759</td>
<td>1:20,000</td>
</tr>
<tr>
<td>1950</td>
<td>H-7926</td>
<td>1:20,000</td>
</tr>
</tbody>
</table>

The shorelines on the hydrographic surveys were taken from the planimetric maps T-9066 & T-9067. The shoreline has been altered in two places on T-9066 to conform to the 1940 photographs: 56° 30'/56° 41' and 56° 37'/56° 41'.

The shallow area on the map manuscripts is in general agreement with the sounding data.

65. Comparison with Nautical Charts:

<table>
<thead>
<tr>
<th>Chart</th>
<th>Datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>9052</td>
<td>1:100,000 58° 36' lat cd. Apr. 1950 rev. Nov. 1950</td>
</tr>
<tr>
<td>9051</td>
<td>58° 36' lat cd. Apr. 1950 rev. Nov. 1950</td>
</tr>
</tbody>
</table>

Those two charts are based on the maps in project Ph-8(46) and the contemporary hydrographic surveys.

Charted, but not mapped:

Daybeacon at Stolin Point
Cabin at 58° 27'/58° 07' (T-9066), (probably SHEB on H-7763)
Bluff elevations were added during review from information on forms 524 or from the field inspection report. To indicate the nature of the interior control station, elevations were also added. These elevations refer to Mean Sea Level.

66. Accuracy:

The shoreline is well controlled and field inspection notes gave a good basis for photograph interpretation. Interior detail was delineated wholly by office interpretation. Main drainage and the greater part of the numerous ponds are delineated. These maps comply with the project instructions and are adequate for use as a base for hydrographic surveys and the construction of nautical charts.

Reviewed by:
Lena T. Stevens

Approved:

S. J. Griffith  
Chief, Division of Photogrammetry

W. Edmonston  
Chief, Nautical Chart Branch
Division of Charts

O. E. Reddy  
Chief, Div. of Photogrammetry

Earl O. Satter
Chief, Div. of Coastal Surveys
# Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/49</td>
<td>9051</td>
<td>S. McIsaac</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td>12/1/49</td>
<td>9052</td>
<td>S. McIsaac</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td>1-19-55</td>
<td>9051</td>
<td>J. McLean</td>
<td>No correction After Verification and Review</td>
</tr>
<tr>
<td>11-33-91</td>
<td>1632r</td>
<td>W. J. Ohno</td>
<td>Before After Verification and Review - Corrected applied</td>
</tr>
</tbody>
</table>

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.
HORIZONTAL DATUM ADJUSTMENT

Bristol Bay, Alaska

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:

Ph-8(46), TOPOGRAPHIC
T-9038 thru T-9040  
9044, " 9047  
9051, " 9057  
9061, 9065, 9070  
9071, 9074, 9075  
9227 thru 9253

Ph-8A(46), PLANIMETRIC
T-9041 thru T-9043  
9048, " 9053  
9058, " 9063  
9066, " 9069  
9072, 9073  
9076, 9078

Ph-8B(46), SHORELINE
T-8873 (E&N) and T-8874