

9061

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Diag. Cht. No. 8502-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC  
T-9061  
Field No. Ph-8 (46) Office No. T-9062

LOCALITY

State TERRITORY OF ALASKA  
General locality BRISTOL BAY  
Locality NORTH SHORE OF KVICHAK BAY

1948

A. N. Stewart CHIEF OF PARTY  
R. F. A. Studds, Chief of Field Party  
R. A. Earle, Portland, Oregon Office

LIBRARY & ARCHIVES

DATE June - 12 - 1953

RECORD SHEET

Div. of Photogrammetry  
Graphic Compilation Sect.

GENERAL LOCALITY Bristol Bay, Alaska  
North Shore of Kvichak Bay  
LOCALITY East of Etolin Point.....

SHEET NO. T-9061.....

PROJECT NO. Ph-8 (46).....

PHOTOS ORDERED 2-3-48..... REC'D 4-2-48

SCALE 1:20000.....

PROJECTION ORDERED 2-3-48... REC'D 4-2-48

Joins T-9051. Ck.....

CONTROL:

COMPUTED J.C. Lajoie VERIFIED J.A. Hinely

PLOTTED F.H. Elrod. VERIFIED R.A. Davidson

PHOTO PREPARATION:

CONTROL J.C. Lajoie..... J.A. Hinely

AZIMUTHS F. H. Elrod.....

PASS POINTS F.H. Elrod.....

TEMPLETS R.A. Davidson VERIFIED J.L. Harris  
son

RADIAL PLOT:

PLOTTED BY J.L. Harris.. DATE 5-12-48

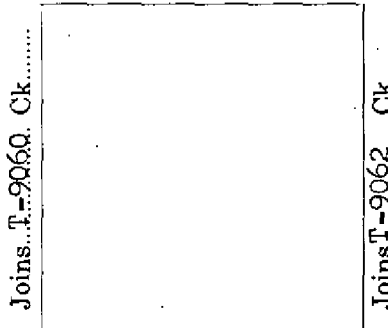
VERIFIED J.E. Deal..... DATE 5-12-48

COMPILATION:

DETAIL POINTS C. Wiebe..... DATE 5-13-48

DETAIL BY C. Wiebe..... DATE 6-8-48

VERIFIED BY Ree H. Barron DATE 6-11-48



Joins none..... Ck.....

DATE OF PHOTOS 9-22-46  
9-23-46.....

TIME OF PHOTOS 12:42, 10:59,  
and 10:05 Pacific Standard Time

STAGE OF TIDE.....

10.1 Ft. above M.L.L.W.....

14.1 Ft. above M.L.L.W.....

6.9 Ft. above M.L.L.W.....

COMPARISON WITH PREVIOUS SURVEYS; TOPO., HYDRO., AND CHARTS:

None.....

REMARKS.....

FORWARDED TO Washington Office..... DATE December 24, 1948.....

*R.A. Earle*  
R.A. Earle, Chief of Party

RECORD SHEET

Div. of Photogrammetry  
Graphic Compilation Sect.

GENERAL LOCALITY Kvichak Bay, Alaska  
Southwest of the mouth  
LOCALITY of Kvichak River

SHEET NO. T-9062

PROJECT NO. Ph-8(46)

PHOTOS ORDERED 2-3-48 REC'D 4-2-48

SCALE 1:20000

PROJECTION ORDERED 2-3-48 REC'D 4-2-48

Joins T-9052 Ck.....

CONTROL:

COMPUTED J.C. Lajoie VERIFIED J.A. Hinely

PLOTTED F.H. Elrod VERIFIED R.A. Davidson

PHOTO PREPARATION:

CONTROL J.C. Lajoie, J.A. Hinely, F.H. Elrod

AZIMUTHS F.H. Elrod

PASS POINTS F.H. Elrod

TEMPLETS C. Wiebe VERIFIED J.L. Harris

RADIAL PLOT:

PLOTTED BY J.L. Harris DATE May 12, 1948

VERIFIED J.E. Deal DATE May 12, 1948

COMPILATION:

DETAIL POINTS M.B. Elrod DATE May 12, 1948

DETAIL BY M.B. Elrod DATE May 28, 1948

VERIFIED BY Ree H. Barron DATE June 10, 1948

DATE OF PHOTOS 9-22-46  
9-25-46

TIME OF PHOTOS 12:42, 9:48 and  
10:05 Pacific Standard Time

STAGE OF TIDE 10.1 ft. above  
M.L.L.W., 6.0 ft. above M.L.L.W.,  
and 6.9 ft. above M.L.L.W.

COMPARISON WITH PREVIOUS SURVEYS; TOPO., HYDRO., AND CHARTS:

none  
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REMARKS  
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.....  
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FORWARDED TO Washington Office DATE December 24, 1948

*R.A. Earle*  
R.A. Earle, Chief of Party

## DATA RECORD

T-9061

Quadrangle (II):

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

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

Compilation Office: Portland, Ore. Chief of Party: R. A. Earle

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

Completed survey received in office: 12-28-48

Reported to Nautical Chart Section: 1-3-49

Reviewed: 16 June 1952 Applied to chart No. Date:

Redrafting Completed: M. Webber A. Berry 8-52

Registered: 11 March 1953 Published:

Compilation Scale: 1:20,000 Published Scale:

Scale Factor (III): none

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

Reference Station (III): Second Point, 1947

Lat.:  $58^{\circ}-45'-19.420''$  (600.0m) <sup>7</sup> <sup>(1.1)</sup> Long.:  $157^{\circ}-33'-23.708''$  (382.2m) <sup>379</sup> <sup>75.9</sup> AdjustedThe difference between Unadjusted Datum  
and N.A. 1927 Datum is Lat. plus/minus 0.2 m.  
and Long. minus 6.3 m.~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

Yes



PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
17901 to 17904 inc.	9-22-46	12:42	1:20000	14.5 10.1 ft. above M.L.L.W.
17931 and 17932	9-23-46	11:15	1:20000	16.5 14.1 ft. above M.L.L.W. <sup>high tide</sup> <sub>that day</sub>
17993 to 17996 inc.	9-25-46	10:14	1:20000	7.0 6.9 ft. above M.L.L.W.

**Tide from (III):** Predicted Tide Tables Pacific Ocean and Indian Ocean 1946  
Reference station Nushagak Bay (Clark Point)

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

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

**Field Inspection by:** Party of Lt. Comdr. A. Newton      **date:** Season 1947  
Stewart

**Field Edit by:** none      **date:**

**Date of Mean High-Water Line Location (III):** Date of Photographs

**Projection and Grids ruled by (III)** Washington Office      **date:** March 1948

" " " checked by: " "      **date:** " "

**Control plotted by:** Frank H. Elrod      **date:** April 12, 1948

**Control checked by:** R.A. Davidson      **date:** April 13, 1948

**Radial Plot by:** J.L. Harris and J.E. Deal      **date:** May 12, 1948

**Detailed by:** Carita Wiebe      **date:** June 8, 1948

**Reviewed in compilation office by:** Ree H. Barron      **date:** June 11, 1948

**Elevations on Field Edit Sheet**  
**checked by:**      **date:**

9/70

STATISTICS (III)

Land Area (Sq. Statute Miles): 73.8

Shoreline (More than 200 meters to opposite shore): 10 statute miles

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

Number of Recoverable Topographic Stations established: 1

Number of Temporary Hydrographic Stations located by radial plot: 7

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:

YLS

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
14388 to 14390 inc.	Unknown	Unknown	1:20000	Unknown
17906 and 17907	9-22-46	12:42	1:20000	14.5 10.1 ft. above M.L.L.W.
17983 to 17985 inc.	9-25-46	9:48	1:20000	5.5 6.0 ft. above M.L.L.W.
17990 to 17992 inc.	9-25-46	10:05	1:20000	6.6 6.9 ft. above M.L.L.W.

**Tide from (III):** Predicted Tide Tables Pacific Ocean and Indian Ocean 1946  
Reference Station NUSHAGAK BAY (Clark Point)

**Mean Range:** 15.2 ft.

**Spring Range:** 19.5 ft.  
Diurnal

**Camera: (Kind or source)** U.S. Coast & 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):** Date of Photographs

**Projection and Grids ruled by (III)** Washington Office **date:** March 1948

" " " **checked by:** " " **date:** " "

**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

**Detailed by:** Marie B. Elrod **date:** June 7, 1948

**Reviewed in compilation office by:** Ree H. Barron **date:** June 10, 1948

**Elevations on Field Edit Sheet**  
**checked by:** **date:**

24.0

STATISTICS (III)

Land Area (Sq. Statute Miles): 31.0

Shoreline (More than 200 meters to opposite shore): 20.0 statute miles

Shoreline (Less than 200 meters to opposite shore): 4.0 statute miles

Number of Recoverable Topographic Stations established: none

Number of Temporary Hydrographic Stations located by radial plot: none

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).

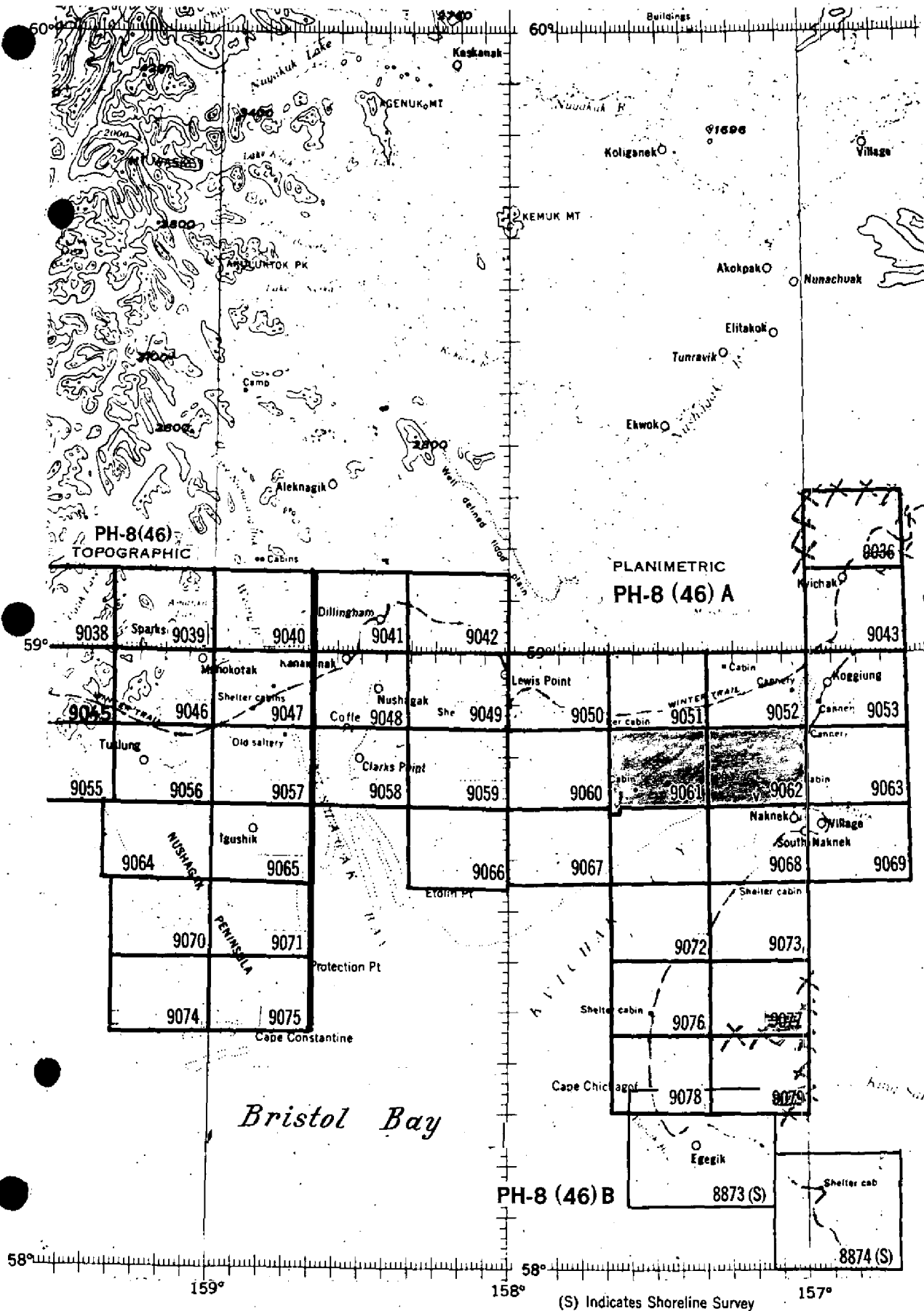
Remarks:

*Jed*



PLANIMETRIC AND SHORELINE MAPPING PROJECT PH-8 (46) A-B

ALASKA, Vicinity of Bristol Bay



(S) Indicates Shoreline Survey

DATA RECORD

T- 9062

Quadrangle (II):

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

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

Compilation Office: Portland, Ore. Chief of Party: R.A. Earle

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

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: 16 June, 1952 Applied to chart No. Date:

Redrafting Completed: M. Walker 8-52

Registered: Published:

Compilation Scale: 1:20000 Published Scale:

Scale Factor (III): none

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean <sup>High</sup> Lower Low Water

Reference Station (III): KING, 1947

Lat.: 58°-50'-34.<sup>.847</sup>~~16~~<sup>78.3</sup>" (107<sup>7</sup>~~8~~" (387.7m) Long.: 157°-12'-23.<sup>.502</sup>~~717~~<sup>376.9</sup>" (387.7m) ~~Adjusted~~ <sup>(11-5-51)</sup> Adjusted, 1946 control

The difference between Unadjusted Datum and N.A. 1927 Datum is Lat. minus 1.1 m. and Long. minus 5.6 m.

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

gen

Summary to Accompany T-9061 & T-9062

Project Ph-8(46), Vicinity of Bristol Bay, Alaska, consists of 44 topographic, 23 planimetric, and 2 shoreline surveys.

The topographic surveys extend from 158° 40' (east shore of Nushagak Peninsula) to 162° 20' (Cape Newenham.)

The eastern position of the project is divided into Part A, (Planimetric Maps) 156° 38' (Kvichak River) to 158° 40' (Nushagak Bay) where the topographic surveys begin; and Part B, the most southerly part of the project, consisting of two shoreline maps of the Egegik River from Bristol Bay to Becharof Lake.

T-9061 covers that portion of the north shore of Kvichak Bay which includes the greater part of Halfmoon Bay. T-9062 extends eastward from Halfmoon Bay to include the Kvichak River entrance at Graveyard Point and southward along the east shore of Kvichak Bay to Pederson Point.

Field work in the area of the planimetric maps from about 157° 30' (central part of T-9061) westward to include Nushagak Peninsula was carried forward cooperatively by the photogrammetric party under A. Newton Stewart, the reconnaissance party under William W. Husemeyer, and the triangulation observation party under Curtis Le Fever. Four 1909-10 stations were recovered on the eastern side of Nushagak Peninsula and the 1947 control was thus tied into the 1909-10 work. No additional search was made for 1909-10 stations, the 1947 control being sufficient for the new project.

East of 157° 30' field work was accomplished by the hydrographic party on the ship PATHFINDER under Comdr. R. F. Studds.



FIELD INSPECTION REPORT  
Map Manuscripts T-9061 and T-9062  
Area of the 1st Radial Plot  
Project Ph-8(46)A

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 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. At this time Lt. Comdr. Stewart was requested to make additional shoreline inspection in several questionable areas in the vicinity of Nushagak Bay, when he returned to Alaska for the 1948 season. This data was furnished the compilation office in June 1948.

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.*

The 1947 Season's Report, Ship "PATHFINDER" contains additional data relative to field inspection in the area. *Library: Season's Report No 156, 1947 (CS-327)*

*R.A. Earle*

R.A. Earle  
Lt. Comdr. - USC&G Survey



COMPILATION REPORT  
Map Manuscripts No. T-9061 and T-9062  
Project Ph-8(46)A

26: 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)A

During the 1948 season the Ship "PATHFINDER" established and identified, in the area of T-9061, an additional recoverable topographic station namely: HO, 1948. This station held well, when used in the original radial plot.

27: RADIAL PLOT:

These two map manuscripts are part of a 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, which has been fully described in Item 27, "Radial Plot", of the descriptive report for sheets T-9051 and T-9052, Project Ph-8(46)A

28: DETAILING:

These maps were compiled in accordance with instructions for this project. 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. Enough pass points had, however, been established during the radial plot, so that each chamber of each photograph could be separately oriented. 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. The shoreline was then detailed from data contained on the field inspection photographs. The shoreline field inspection was not as complete as desired for the area. It was supplemented, however, by information



contained in the descriptive report 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 was some minor difference of opinion as to the location of the high-water line between the field party of Lt. Comdr. Stewart and the Ship "PATHFINDER". In most cases the shoreline as delineated by Lt. Comdr. Stewart's party was accepted. When the above work was completed, prints on ozacloth 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 photograph interpretation was accomplished by stereoscopic examination of the photographs and from descriptions of the area personally furnished by Lt. Comdr. A. Newton Stewart. Reference is also made to Page 11 of the "Project Report Aerial Photograph Control and Inspection, Bristol Bay, Alaska, Project Ph-8(46)", A. Newton Stewart, Chief of Party. (*Library: Season's Report, No. 138, 1948*)

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 determined if there is drainage connecting many of the ponds or if 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 cannot be accurately *see 61 of Review Report* determined without a detailed field inspection of the area.

Ozalid prints of the completed map manuscripts have been forwarded to the Ship "PATHFINDER".

Several of the new photographs, taken in 1948, covered the western part of T-9061; however, no revisions of or additions to the original planimetry were necessary.

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.

*\* Because the alternating hard and soft formations dip quite steeply (northward) the ridges have a step-like appearance from seaward. Many small ponds lie in the successive softer formations and near the base of the cliffs formed by the harder rocks. Ponds are, therefore, at various elevations, even in deep basins on top of hills.*



30: MEAN HIGH-WATER LINE: *See also Review Report 66.*

The mean high-water line was detailed in accordance with field inspection data furnished by Lt. Comdr. Stewart and the Ship "PATHFINDER". 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.

*Report T-7099 says: "The area just east of the creek near station KING is very low & marshy. This low area extends on to signal RUSS & beyond." (58° 53') Photos 17907 & 17984 See Review Report 61, last paragraph.*

31: LOW-WATER AND SHOAL LINES:

No attempt was made to delineate any low-water lines, by office examination of the photographs. The approximate limits of mud flat areas, which bare at low-water, have been detailed from photographs that were made when the predicted tide tables indicated the tide was 6.0 ft. above mean lower low water. The limits of these areas have been shown by a light, dashed, black acid ink line.

There was no field inspection of shoal areas for this project and no attempt has been made to detail them by office examination of the low-water 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:

These features were compiled from office examination of the photographs and available field inspection data.

34: LANDMARKS AND AIDS TO NAVIGATION:

It is assumed that a report on these features was submitted by the Ship "PATHFINDER". *Chart Letter No. 470 (1948) (Landmarks only)*

35: HYDROGRAPHIC CONTROL:

There are seven hydro signal stations falling in the area of T-9061 which were radially plotted as identified by



the field inspection party. None were identified in the area of T-9062. A list of the hydro signal stations shown on T-9061 is 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:

A copy of form 524 is being submitted for COPE, 1947. (7-9061)  
This station was located by theodolite and described by Lt. Comdr. A. Newton Stewart. G-7328, p. 5. 2<sup>nd</sup> order.

39: JUNCTIONS:

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

44: COMPARISONS WITH EXISTING TOPOGRAPHIC SURVEYS:

Comparison was made with Topographic Sheet No. PF-F-47 Scale 1:20,000. Only short sections of shoreline are shown on this topographic sheet and these are in agreement with the shoreline shown on the map manuscript. 7-7099

45: COMPARISONS WITH NAUTICAL CHARTS:

A visual comparison was made with nautical chart No. 8802 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:

*R.A. Earle*  
R.A. Earle  
Lt. Comdr.-USC&G Survey  
Chief of Party

Respectfully submitted,

*J. Edward Deal Jr.*  
J. Edward Deal, Jr.  
Photogrammetric Engineer



HYDROGRAPHIC SIGNALS  
T-9061

#6101  
Formerly # 190

The station is the center of the mouth of the draw and in line with the bluff line.  
Note: Some of the notes on the photo concerning this station have been rubbed out. It was the practice to pick draws with their mouths at beach level. This station pricked at beach level but photo appears as tho the cut in the bank was only about  $\frac{1}{2}$  way to beach level from the top. Picked from the Air.  
Target needed.....Field Photo 17995

#6102  
Formerly # 191

The station is the center of the mouth of the draw, at beach level, on line with the elongation of the bluff. Picked from the Air.  
Target needed.....Field Photo 17993

#6103  
Formerly # 192

The station is the center of the mouth of the draw, at beach level on line with the elongation of the bluff. Picked from the Air.  
Target needed. ....Field Photo 17993

#6104  
Formerly # 193

The station is the center of the mouth of the draw, at beach level, on line with the elongation of the bluff. Picked from the Air.  
Target needed.....Field Photo 17993

#6105  
Formerly # 194

The station is the southwesterly gable of the cabin. Picked from the Air. Field Photo 17993

#6106  
Formerly # 195

The station is the grass-covered edge of the bluff, on the east side of the creek, just before it drops downward into the creek bottom.  
Picked from the Air.....Field Photo 17993

#6107  
Formerly # 196

The station is the edge of the grass on the bluff line, at the eastern side of the creek, and on top of the bluff before the slope into the creek bottom. Picked from the Air. Field Photo 17993



MAP T. .... 2061..... PROJECT NO. Ph-8(46)..... SCALE OF MAP 1:20000..... SCALE FACTOR none.....

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 FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)		
<sup>1947</sup> Second Pt. 1947	G 7328 Page 2	N.A. 1927	58 - 45	- 19.420	600.9	(1255.6)					Identified
Cope, 1947	G 7328 Page 5	"	157 - 33	- 23.768	382.2	(582.6)		Used in radial plot.	Topo. station (pricking card not furnished) see Form 524	Page 5 of 8-7328 lists 1st x 2nd ord.	
			157 - 25	- 07.614	1415.3	(441.3)					
High, 1947	G 7328 Page 5	"	157 - 20	- 18.646	122.3	(841.3)		Identified, used in radial plot			
			58 - 49	- 32.604	1008.9	(847.6)					
HO, 1948	A.1 G-7936 940M	G 722	157 - 24	- 28.550	299.2	(663.6)			Tapa. Form 524		
			58 - 48	- 22.503							



MAP T-9062 PROJECT NO. Ph-8(46) SCALE OF MAP 1:20000 SCALE FACTOR none

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		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
451 KVICHAK, 1946 <i>1945</i>	Page 1 G 7328	N.A. 1927	58 - 50 - 12.222 157 - 15 - 52.626	378.2 844.3	(1478.4) (118.3)				Identified, used in radial plot
BRISTOL BAY PACKING COMPANY TANK 1946	Page 14 G 6906	"	58 - 45 - 54.785 157 - 03 - 37.242	1695.2 598.7	(161.4) (365.8)	<i>removed 5.5 m.</i>	<i>Bank eroding. Sta. lost, 1948</i>		Identified by PATHFINDER No pricking card furnished
LIBBY, McNEIL & LIBBY, LIBBYVILLE CANNERY TANK 1946	Page 12 G 6906	"	58 - 46 - 42.384 157 - 03 - 11.654	1311.5 187.3	(545.1) (776.8)				Identified by PATHFINDER No pricking card furnished
BEND LIGHT, 1947	Page 16 G 6906	"	58 - 49 - 48.629 156 - 59 - 55.447	1504.7 889.7	(351.9) (73.0)				Not used in radial plot
6-7105 KING, 1947	Field Comp. Page 3	"	58 - 50 - 34.884 157 - 12 - 23.841	1079.4 382.5	(777.2) (580.0)				Identified, used in radial plot
6-7225 LOW, 1947	Field Comp. Page 3	"	58 - 48 - 10.983 157 - 01 - 13.387	339.8 215.0	(1516.8) (748.4)				Not used in radial plot
GRAVEYARD POINT LIGHT, 1947	Field Comp. Page 4	"	58 - 52 - 05.98 157 - 00 - 39.97	185.0 640.6	(1671.5) (321.1)				Identified, used in radial plot
LIBBY, McNEIL & LIBBY, KOGGIN G. CANNERY, TWIN TANKS 1947	Field Comp. Page 4	"	58 - 52 - 01.12 157 - 00 - 24.87	34.7 398.6	(1821.9) (563.1)				Identified, used in radial plot
<i>Kvichak 2, 1947</i>	<i>P. 1 G-7328 G-7328</i>		<i>58 - 50 - 12.728 157 - 15 - 52.241</i>	<i>393.8 838.1</i>	<i>(1462.7) (124.5)</i>		<i>Plotted during review</i>		

1 FT. - 3048006 METER COMPUTED BY: J.C. LaJoye DATE 4/2/48 CHECKED BY: J.A. Hinely DATE 4/8/48 M-2388-12



Geographic Names.

T-9061.

Alaska (for title)  
Bristol Bay " "  
Kvichak Bay ✓  
Halfmoon Bay ✓

T-9062.

Alaska (for title)  
Bristol Bay " "  
Kvichak Bay ✓  
Bristol Bay Cemetery Light *not on ms.*  
Pederson Point ✓  
Libbyville ✓  
The Bend Light (not Bend Light)  
Salmon Flats ✓  
Graveyard Point ✓  
Graveyard Creek ✓  
Koggiung ✓  
Albert Channel ✓  
King Salmon Creek ✓  
Copenhagen Creek ✓  
Halfmoon Bay ✓  
Gravel Spit Anchorage ✓

Gravel Spit Light (latest Light List shows at 58°50.9',  
*(Estab. 1950. not on ms T-9062)* 157° 11.7', near mouth  
Copenhagen Creek)

Names underlined in red are  
approved. 6-11-52 *Red*

See nautical chart 9051 for placement of above names



REVIEW REPORT T-9061 and T-9062  
Planimetric Manuscripts  
16 June 1952

61. General:

The topography in the T-9061 area is similar to that of T-9067 <sup>to the west</sup> ~~in the west~~, -intricately rough because of the diffuse drainage pattern and the northward-dipping rock structure which erodes to form seaward-facing cliffs. 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 tundra areas having countless ponds. The elevation ranges from approximately 50 ft at the coast to 350 ft within a distance of four miles. (Station JAUNT is 3/4 mile north of the map limit and has an elevation of 354 ft above MSL.)

The rough topography ends abruptly at the west side of the stream at the extreme eastern part of the map area (T-9061).

During review salient topographic features have been added in order to bring out the structural pattern-continuity from the west, and to establish the divide between Nushagak River drainage and Kvichak Bay drainage. This divide is little more than a mile from the Kvichak Bay coast in the southwestern part of the map area and is low in comparison with its continuation northeastward.

The divides and additional streams were added only after stereoscopic examination, because what appear as continuous stream valleys are often merely saddles between knolls, and form low divides between opposing drainage.

Ponds give little indication of drainage pattern. They are at multiple elevations and seem not to be interconnected. Many occur in deep basins on top of hills.

Streams were drawn with the intermittent symbol <sup>on the ms.</sup> because the stream bed is not clearly discernible in the marsh valleys.

Bluff elevations were also added.

T-9062 embraces only a narrow strip along the north coast of Kvichak Bay. It is lower and more tundra-like. A marsh area extends from Copenhagen Creek, eastward. The marsh symbol was added during review.

62. Comparison with Registered Surveys:

(Correction Sheet No. 316, Nos. 1, 2, 3, Project Ph-8(46), was compiled from 1943 nine-lens photographs reduced to approximate scale 1:75,000. They are shoreline and drainage compilations. They are filed in the General Files of Division of Photogrammetry under the CS-number.)



T-7096	1:20,000	1947	(Graphic Control)
T-7099	1:20,000	1948	" "

63. Comparison with Maps of Other Agencies:

None.

64. Comparison with Contemporary Hydrographic Surveys:

H-7767	1:20,000	1949	T-9061
H-7671	1:20,000	1948	"
H-7616	1:20,000	1947-8	T-9062
H-7617	1:20,000	1947	"

The shorelines on the hydrographic surveys were taken from planimetric maps T-9067, T-9061 & T-9062. No changes to shoreline were made during review; but a marsh symbol was added in the eastern part of T-9062.

65. Comparison with Nautical Charts:

9051 1:100,000 at 58° 36', 1st ed. Apr. 1950, rev. Nov. 1950

This chart is based on the maps in project Ph-8(46) and the contemporary hydrographic surveys.

Charted but not mapped:

- Bristol Bay Cannery Light
- Bristol Bay Cannery Range Rear Daybeacon
- Gravel Spit Light (1950)

66. Mean High-Water Line:

The shoreline in the area between 58° 47' and 58° 51' on T-9062 (photos 178983-5, 1946) was obscured by clouds. Photo 14389 (1943) was used to delineate the shoreline in that area.

67. Accuracy:

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

Reviewed by:

Lena T. Stevens  
Lena T. Stevens

Approved:

S. V. Griffith  
Chief, Review Section *B*  
Division of Photogrammetry

H. Edmonstone  
Chief, Nautical Chart Branch  
Division of Charts *GFD*

O. S. Reading  
Chief, Div. of Photogrammetry  
*RRS*

Carl O. Heaton  
Chief, Div. of Coastal Surveys  
*HRZ*

# NAUTICAL CHARTS BRANCH

SURVEY NO. <sup>9061</sup>  
9062

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
11/4/49	9051	J. H. McGinnis	<del>Before</del> After Verification and Review
1-19-55	9051	J. H. Eaton	<sup>No Correction</sup> <del>Before</del> After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

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  
9054 " 9057  
9064, -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&W) and T-8874