

9051

9052

17

9051 9052

Diag. Cht. Nos. 8502-3 & 8802

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC
Field No. Ph-B (16) Office No. T-9051
T-9052

LOCALITY

State ALASKA
General locality BRISTOL BAY
Locality NAKEEN, KVICHAK BAY & KVICHAK RIVER

194 8

~~R. F. A. Studs~~ CHIEF OF PARTY
~~A. N. Stewart~~, Field Party.
R. A. Earle, Portland Photogrammetric Office

LIBRARY & ARCHIVES

DATE June - 11 - 1953

DATA RECORD

T- 9051

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:

12-20-48

Reported to Nautical Chart Section: 12-28-48

Reviewed: 20 July 1949 Applied to chart No.

Date:

Redrafting Completed: 10-8-52

Registered: 25 MAR 1953

Published:

Compilation Scale: 1:20,000

Published Scale:

Scale Factor (III): None

Geographic Datum (III): N. A. 1927

Datum Plane (III): Mean ^{High} ~~Lower~~ Low Water

Reference Station (III): ~~JAUNT~~ ^{JUANT}, 1947

Lat.: 58 53' 46.0⁰¹² ~~44~~" (142^{3.7} ~~4~~ m) Long.: 157 28' 30.7³¹⁴ ~~55~~" (497.7^{85.4} ~~5~~ m) Adjusted ✓

The difference between ~~Unadjusted~~ Datum
and N.A. 1927 Datum is Lat. ~~0.0~~ / minus ~~0.0~~ m.
and Long. ~~0.0~~ / minus 7.1 m. 1.0

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
17929 to 17931 incl.	9/23/46	11:00	1:20,000	14.1 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: *Inapplicable* 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 & J. L. Harris date: May 12, 1948

Detailed by: Roy A. Davidson date: June 17, 1948

Reviewed in compilation office by: J. E. Deal date: June 30, 1948

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

027

STATISTICS (III)

Land Area (Sq. Statute Miles): 51.6

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

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

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:

J/12

DATA RECORD

T- 9052

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: Applied to chart No. Date:

Redrafting Completed: 11-19-52

Registered: 25 Mar. 1953 Published:

Compilation Scale: 1:20,000 Published Scale:

Scale Factor (III): None

Geographic Datum (III): N. A. 1927 Datum Plane (III): Mean ^{High} Lower Low Water

Reference Station (III): SQUAW, 1946

Lat.: 58 55' 54.^{.467}_{.784}" (1688.7m) Long.: 157 04' 07.^{.404}_{.700}" (124.7m)

Adjusted

The difference between ~~Unadjusted~~ Datum and N.A. 1927 Datum is Lat. ~~2.7m~~ / minus ~~2.7m~~ and Long. ~~2.7m~~ / minus ~~2.7m~~.

-5.7

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

Y10

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
14400 to 14403 Incl.	6-10-43	11:40-44	1:20,000	
17908 & 17909	9/22/46	12:44	1:20,000	14.35 10.1 ft. above M. L. L. W.
17926 to 17929 Incl.	9/23/46	11:00	1:20,000	16.0 14.1 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:
Diurnal 19.5 ft.

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 and Ship "PATHFINDER" Season 1947

Field Edit by: date:

Date of Mean High-Water Line Location (III): Date of 9 Lens 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 Davidson date: April 13, 1948

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

Detailed by: Helen L. Laube date: June 10, 1948

Reviewed in compilation office by: Ree H. Barron date: June 14, 1948

Elevations on Field Edit Sheet
checked by: date:

(Handwritten initials)

STATISTICS (III)

Land Area (Sq. Statute Miles): 103.4

Shoreline (More than 200 meters to opposite shore): 9.5 Statute miles

Shoreline (Less than 200 meters to opposite shore): 1.5 Statute miles

Number of Recoverable Topographic Stations established: 1
(This station may also have been submitted by Ship "PATHFINDER")

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:

SUMMARY TO ACCOMPANY T-9051 and T-9052

Project Ph-8(46), Vicinity of Bristol Bay, Alaska, consists of 44 topographic, 27 planimetric, and 2 shoreline surveys.

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

The eastern portion of the project is divided into Part A, 156° 38' (Kvichak River) to 158° 40' (Nushagak Bay) ~~where the topographic surveys begin;~~ ^{The planimetric maps} 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-9051 maps the interior area east of Nushagak River and North of Kvichak Bay. T-9052 continues eastward from T-9051 and includes the western shoreline of lower Kvichak River.

Field work in the area of the planimetric maps from about 157° 30' westward to include Nushagak Peninsula was carried forward cooperatively by the photogrammetric party under A. Newton Stewart, the reconnaissance party under Wm. W. Husemeyer, and the triangulation observation party under Curtis LeFever. 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. A. Studds, 1947

FIELD INSPECTION REPORT
Map Manuscripts T-9051 and T-9052
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 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-9051 and T-9052
Project Ph-8(46)

26: CONTROL:

For purposes of clarity the control in the area of the first radial plot, which includes map manuscripts No's. T-9051, T-9052, T-9060, T-9061, T-9062, T-9066 and T-9067, is discussed as a unit.

Facts contained on pages 23 to 27 inclusive of the "Project Report, Aerial Photograph Control and Inspection, Bristol Bay, Alaska, Project Ph-8(46), May to September 1947, submitted by Lt. Comdr. Stewart, point out that many of the horizontal control stations in the area were doubtfully identified. Since Lt. Comdr. Stewart was stationed in this office, when compilation work on Project Ph-8(46) was started, he was personally consulted regarding the location of each doubtful station, and his opinions, which were very definite in most cases, were accepted when these stations were pricked on the photographs.

From a casual examination of the location of horizontal control stations in the area, it appears that the stations are adequate and fairly well distributed for radial plot purposes, however, this was not the case. On the east, in the area of T-9052 and T-9062, where there are many well distributed stations, and in the western portion of the area where several well identified stations in T-9058 were utilized to supplement those stations in the vicinity of ETOLIN POINT, control was adequate. Between the east and west parts of the area, where most of the shoreline to be compiled and hydro signals to be established for the Ship "PATH-FINDER", were located, the control stations were sparse, poorly identified, and not properly distributed. In this area where there were seven stations, five were nearly equally spaced along 35 miles of shoreline, and the other two were located eight miles inshore and twenty miles apart. At least four of these seven stations were doubtfully identified. Also, the two flights, which contain photographs No's. 17896 to 17907 inclusive and No's. 17993 to 17998 inclusive, and which are located close together and parallel to the shoreline, do not reach either of the two interior stations. This meant that these particular photographs were doubtfully controlled by the stations located along the shoreline, all of which fall close to and on the south side of both flight lines. In addition, it might be stated that these stations could not be pricked with any degree of certainty on the interior flight of photographs (No's. 17929 to 17937) because in all cases they fall at the extreme limits of photography, where the photographs are indistinct.

T-9066
9067
9061
9062

T-9051
9060
9064

T-9061
66
67

From the above it can be seen that a great amount of adjustment in the orientation of the templets was necessary to satisfactorily complete the radial plot and that much dependence had to be placed on the azimuth and cross azimuth lines as they had to be used to carry the control back and forth over the area.

Although there were less than the required minimum of well identified control stations available for a large portion of the area to be compiled, the radial plot work was completed, as suggested in paragraph 19 of the instructions for Project Fh-8(46). The methods used and the difficulties encountered during the running of this radial plot are described in the following paragraph.

27: RADIAL PLOT:

These two map manuscripts were included in 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.

The radial plot work on the combined plot proceeded as follows:

- (1) Conjugate centers were transferred to overlapping photographs.
- (2) Azimuth and cross azimuth lines were plotted on all photographs.
- (3) All horizontal control stations, which were identified by the field inspection unit and others, and which could be identified by office inspection, were pricked on all photographs on which they appeared.
- (4) Well identified pass points, which would be cut in during the running of the radial plot, were then selected and pricked on the office photographs, and radial lines to all points were drawn.
- (5) Templates were then made on sheets of clear acetate in accordance with Photogrammetry Instructions No. 11 dated 2/28/47. Calibration photographs were used as instructed in a letter from Chief, Division of Photogrammetry dated 20 April 1948. Inks of various colors were used to designate the azimuth and cross azimuth lines, and the radial lines to horizontal control stations, topographic stations, and pass points.
- (6) Eight polyconic projections, ruled on acetate, were furnished this office for use as map manuscripts. Imposed on these polyconic projections in red ink is a special grid, laid out in squares of 2500 meters. All horizontal control stations which were established in 1946 and 1947 and their substitute stations, if they were identified, were plotted on the map manuscripts. Standard symbols, listed in Photogrammetry Instructions No. 12 dated 3/17/47, were used to indicate all stations.

- (7) Several sheets of Virginia Pak, size 36" x 51" ruled with 2500 meter square grids were furnished this office for use as base grid sheets. The grids on these sheets were numbered to correspond with the special grid, in red ink, imposed on the polyconic projections. After all plotting was completed and checked the stations or sub-stations, that had been identified for use in this radial plot, were transferred to these base grid sheets, by matching common grid lines.
- (8) The several sheets of base grids were placed on the large radial plot table and joined together by matching common grid lines. Clear cellulose tape was used to hold the base grid sheets together.
- (9) The templets were oriented directly on the joined base grid sheets. As many of the horizontal control stations were doubtfully identified on the photographs, notes pertaining to the accuracy of identification were lettered on each templet near the radials to said control stations. As the numerous control stations located in the eastern portion of this radial plot permitted the templets in that area to be easily oriented and rigidly fixed; the radial plot work was started in the east and extended westward. In this eastern area all control stations and azimuth and cross azimuth lines held well and good intersections were obtained on pass points. As the work progressed westward, even though azimuth and cross azimuth lines could be strongly held, it was found that the plotted positions of all horizontal control stations, beginning with KING, 1947, were falling west of the radially plotted positions. At this time the plotting of the flight lines and all other work was rechecked. After many unsuccessful attempts to lay, what the compilation office felt to be, an accurate plot, and after all checks failed to disclose the real cause of the trouble, the Washington Office was advised of this difficulty and they verified the positions of all stations except KVICHAK 2, 1947. After this verification of control, experimental work on the plot was resumed and it was found that in order to tie into the identified horizontal control stations within reason, it was necessary to partially disregard the azimuth and cross azimuth lines. In most cases one azimuth line of any two which were common would have to be held off slightly so that the two azimuth lines did not coincide throughout their length and were not exactly parallel. After adjusting the orientation of the templets many times, a radial plot was completed in which good pass point intersections were obtained and in which none of the radials to the horizontal control stations were off by an amount that would indicate serious errors.

T-9062

T-9062

The results of this plot were as follows:

^{T-9062} Radials to stations KVICHAK 1946, KING 1947, COPE 1947, ^{T-9061} and LASTOR 1947, did not pass over the actual plotted position, however, they were generally tangent to the point and in no case were they more than 5 meters distant.

^{T-9052} Radials to station RUSS 1947, intersected about 10 meters from the plotted position. This is believed to be caused by identification but Lt. Comdr. Stewart verified the pricked position, as he did in the cases for most of the other questionable stations.

The geographic position of triangulation station "NAKAT PACKING CANNERY CO. TANK 1946 (Page 16-G-6906) is in error. The station was correctly located by the Ship "PATHFINDER" ^{T-9052} in 1947 as "NAKAT PACKING CO. LONE RED TANK".

- (10) The radial plot was turned over so that the templates were face down on the radial plot table. The locations of all pass points and photograph centers were carefully pricked and indicated directly on the reverse side of the joined base grid sheets. These points were then transferred to the map manuscripts by matching common grid lines.

In spite of the questionable factors, it is felt that good results were obtained in this radial plot and that accurate shoreline surveys could be compiled for use by the hydrographic parties.

(Chief of Party) Note: Considering the nature of the country, the purpose of the survey and the good results which were finally obtained, it is definitely felt that nothing can be gained by attempting to rerun this radial plot.

28: DETAILING:

These maps were compiled in accordance with instructions for the 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 current hydrographic survey 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. It might be stated that shoreline field inspection was not as complete as could be desired, however, it was supplemented 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, photograph interpretation was accomplished by a stereoscopic examination of the photographs and by studying descriptions of the area. Reference is also made to Page 11 of the "Project Report, Aerial Photograph Control and Inspection, Bristol Bay, Alaska, Project Ph-8(46) submitted by Lt. Comdr. Stewart.

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 elevations and not on a plain or gradual rise inshore from the shoreline. It could not be definitely determined if these ponds are connected 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 forms a most complicated pattern, and cannot be accurately determined without a detailed field inspection of the area.

Because of insufficient photograph coverage, only about 50 percent of the area of T-9051, as indicated on the index map for this project, could be compiled.

** 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 made by the harder rocks. Ponds are, therefore, at various elevations, even in deep basins on top of hills.*

Ozalid prints of the completed map manuscripts 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 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.

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 photographs that were made when the predicted 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.

It was impossible to detail the approximate shoal areas for this project 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:

There is one small dock located in a narrow stream about 6 miles southwest of Nakeen.

34: LANDMARKS AND AIDS TO NAVIGATION:

It is assumed that a report on these features was submitted by the Ship "PATHFINDER".

ck L. No

35: HYDROGRAPHIC CONTROL:

The field party did not select or identify any photo-hydro signals in the area of these map manuscripts.

36: LANDING FIELDS AND AERONAUTICAL AIDS:

There are no landing fields, or recommended aeronautical aids, in the area.

37: GEOGRAPHIC NAMES: *214*

Geographic names were obtained from a sketch which accompanied a special report by Lt. Comdr. A. Newton Stewart, entitled "Geographic Names, Bristol Bay, Alaska, December 19, 1947. The name "Squaw Creek" was noted on field inspection photograph No. 17909 and has been shown on the map manuscript as a geographic name.

38: RECOVERABLE TOPOGRAPHIC STATIONS: *None in T-9051*

A copy of Form 524 is being submitted for Squaw Creek Light, 1948. It is probable that the Ship "PATHFINDER" also submitted this form for this station.

39: JUNCTIONS:

Complete and satisfactory junctions have been made between T-9051 and T-9052 and with adjoining map manuscripts.

44: COMPARISONS WITH EXISTING TOPOGRAPHIC SURVEYS:

As far as known, there were no previous topographic surveys in this area.

45: COMPARISONS WITH NAUTICAL CHARTS:

A visual comparison was made with nautical chart No. 8802 scale 1:1,023,188. Squaw Creek is not shown on this chart.

Approved after Additional
Comments were Added:

R.A. Earle
R.A. Earle
Lt. Comdr. - USC&GS
Chief of Party

Respectfully submitted:

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

22 December 1948

To: Lt. Comdr. Robert A. Earle
U. S. Coast and Geodetic Survey
c/o Swan Island Postal Station
Portland 18, Oregon

Subject: Planimetric maps T-9051 and T-9052,
project Ph-8(46)

We were very interested in examining the reference manuscripts since they are the first received on project Ph-8.

The drawings are excellent, and from a hurried examination appear to be quite complete.

The description of the radial plot from Kvichak Bay westward to Etolin Point is clear, concise, and adequate, and this applies to the remainder of the descriptive report. We will not relay this radial plot in the Washington Office.

The descriptive report does not mention the existence of graphic control surveys within the shoreline area of T-9052, nor state whether a comparison was made with those surveys. This should be done, preferably under paragraph 29 or in a separate paragraph. I think there is at least one graphic control survey, but am not sure whether you had it at the Portland Office.

T-7096
T-7097

K. T. Adams
Chief, Division of Photogrammetry

MAP T. 9052

PROJECT NO. Ph-8 (46)

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -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	
			O	I	FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
NAKAT PACKING CO. CANNERY TANK, 1946	<i>Fld. Comp.</i> Page 16 G-6906	<i>1923.6 (14-5-57)</i> N. A. 1927 <i>p. 183</i>	58	55	55.070	1704.0	(152.6)				Void (G.P. in corr- ect. use NAKAT PACKING CO. LONE RED TANK) <i>below</i>
<i>r. 1947</i> SQUAW, 1946 (71ft)	PAGE 6 G-6906	" <i>174</i>	58	55	54.554	1688.1	(168.5)				Established
S-2600, Cor 3, (GLO), 1946	Page 14 G-6906	" <i>183</i>	58	55	54.557	1688.2	(168.4)				Established
<i>r. 1947</i> NAKAT PACKING CO. WHITE STACK 1946	Page 12 G-6906	" <i>181</i>	58	56	05.126	158.6	(1698.0)				Established
DUCK CREEK LIGHT 1946 (107) IS	Page 16 G-6906	" <i>181</i>	58	57	20.508	634.6	(1222.0)				Established
DUCK, 1946 (r. 1947)	Page 6 G-6906	" <i>172</i>	59	00	02.313	71.6	(1785.1)			<i>North of map limit</i>	Established
RUSS, 1947	F. COMP Page 3 G-6905	"	58	53	21.127	653.7	(1202.9)				Established
NAKAT PACKING CO. TWIN TANKS, 1947	F. Comp Page 4 G-6905	"	58	55	55.07	1704.1	(152.5)				Established
TELEPHONE POINT LIGHT, 1947	" G-6905	"	58	54	46.26	1431.4	(425.2)				Established
NAKAT PACKING CO. LONE RED TANK, 1947	" G-6905 <i>p. 14</i>	"	58	55	56.58	1750.8	(105.8)			<i>r. 1947 of 1946 sta. with new G.P. (1, above)</i>	Established

1 FT. = 3048006 METER
COMPUTED BY: J. C. L.

DATE: 4/5/48

CHECKED BY: J. L. H.

DATE: 4/8/48

M-2388-12

GEOGRAPHIC NAMES

Survey No. T-9051

Name on Survey	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A	B	C	D	E	F	G	H	
<u>Alaska</u>			(for title)						1
<u>Bristol Bay</u>			"	"				USCB	2
									3
Since there are no names on this sheet, its title might well include "West of Kvichak Bay"									4
									5
									6
									7
									8
									9
									10
T-9052									11
<u>Alaska (title)</u>									12
<u>Kvichak River</u>									13
<u>Kvichak Bay</u>									14
<u>Makeen</u>									15
<u>Copenhagen Creek</u>									16
<u>King Salmon Creek</u>									17
<u>Telephone Point</u>									18
<u>Sea Gull Flat</u>									19
									20
									21
									22
									23
									24
									25
									26
									27

Names underlined in red are approved. 7-14-49

Additional names
11-19-52
L. Heck

Division of Photogrammetry
Review Report of
T-9051

28 Detailing

To maintain a uniformity in the drainage pattern within the project, a few unimportant, short drainage laterals were removed. Vegetation (trees) was added to the manuscript along the west side.

38 Relief

The representation of approximate relief by hachuring has been used to indicate the general relief of the terrain.

Along steep or precipitous bluffs, the bluff (other than rocky) symbol was used as noted in Photogrammetry Instructions No. 17. Along less steep bluffs and slopes, the hachure symbols used are wedge-shaped lines and/or lines drawn down the slope and perpendicular to the contour.

40 Photographic Coverage

No detail is shown in the north west and north central portions of the map manuscript since no photographic coverage was available.

44 Comparison with Existing Topographic Quadrangles

1. Topographic map of Nushagak District, Alaska, USGS, scale 1:250,000, surveyed 1930-31, reprinted 1940.

2. AAF Preliminary Base, compiled by USGS from trimetrogon photography (1941-1943), scale 1:500,000, Naknek (136 A), Alaska.

A "Winter Trail" noted on this map is not shown on the map manuscript as no evidence of a trail could be discerned on the photographs of the area.

45 Comparison with Nautical Charts

1. Nautical Chart No. 8802, scale 1:1,023, 188 at Latitude $56^{\circ} 00'$, August, 1944 (17th Edition).

2. Nautical Chart No. 8502, scale 1:969,761 at Latitude $58^{\circ} 00'$, August, 1944, (11th Edition)

47 Adequacy of the Compilation

The compilation is considered adequate. To denote more fully the extensive drainage system and to distinguish the tundra from the muskeg or marsh areas is not feasible unless supplemented by field inspection. In view of this, only the

as a base for hydrographic surveys and the construction of nautical charts.

REVIEW REPORT T-9052
Planimetric Map
20 June 1952

61. General:

The drainage in this map area is a part of the Kvichak Bay and Kvichak River system, except in the extreme north-western corner where the ponds probably drain northwestward into the Nushagak River system.

62. Comparison with Registered Surveys:

T-7096	1:20,000	1947 (Graphic Control)
T-7097	"	"

(Correction Sheet project 316, numbers 1, 2, 43, for 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 File of Division of Photogrammetry under the CS-number.)

63. Comparison with Maps of Other Agencies:

None

64. Comparison with Contemporary Hydrographic Surveys:

H-7615	1:20,000	1947
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The shoreline on the hydrographic surveys were taken from planimetric maps T-9052, T-9053, T-9043. No changes to shoreline were made during review.

65. Comparison with Nautical Charts:

9051	1:100,000 at 58° 36', 1st ed. Apr. 1950 rev. Nov. 1950
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This chart is based on the maps in project Ph-8(46) and the contemporary hydrographic surveys. Marsh symbol was added in the Telephone Point area and southward.

66. Accuracy:

The shoreline was well controlled and meets the National Standards of Map Accuracy. The interior is delineated wholly from photo interpretation. Drainage is very intricate, diffuse, and not surely decipherable from photo inspection. The main stream patterns are shown with adequate accuracy. *The interior detailing is adequate as a base for hydrographic surveys and nautical charts.*

Reviewed by:

Lena T. Stevens
Lena T. Stevens

Approved:

S. V. Gillith
Chief, Review/Section 3
Division of Photogrammetry

J. Madmonster
Chief, Nautical Chart Branch
Division of Charts *GFS*

O. S. Reading
Chief, Div. Photogrammetry
RS

Carl O. Henton
Chief, Div. Coastal Surveys
CRF

appled chart 905: 2/1/50 L.A.H.

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