9063

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric Air Photographic

Field No. T-9063 *Office No.*

LOCALITY

~~State~~ Territory of Alaska

General locality Kvichak Bay

Locality East Shore of Kvichak Bay, Naknek River Northerly

Project Ph-8(46)A

194

CHIEF OF PARTY

R.F.A. Studds, Ship "PATHFINDER" (Field)

W.H. Bainbridge, (Office)

LIBRARY & ARCHIVES

DATE May-21-1953

8-1870-1 (1)

9063

DATA RECORD

T-9063

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

Field Office (II): Ship "PATHFINDER" Chief of Party: R.F.A. Studds

Photogrammetric Office (III): Portland, Oregon Officer-in-Charge: W.H. Bainbridge

Instructions dated (II) (III): 19 March 1948

Copy filed in Division of Photogrammetry (IV) office files

Method of Compilation (III): Graphic

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

Scale Factor (III): None

Date received in Washington Office (IV): 5-5-49 Date reported to Nautical Chart Branch (IV): 5-10-49

Applied to Chart No. 9051 Date: 11/4/49 Date registered (IV): 3/23/53

Publication Scale (IV): Not published Publication date (IV):

Geographic Datum (III): N.A. 1927 Vertical Datum (III): ~~Mean Sea Level~~ High Water

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

The difference between Unadjusted Datum and N.A. 1927 Datum is Lat. [redacted]/minus 2.1 m. and Long. [redacted]/minus 4.5 m.

Reference Station (III): NIG, 1946

Lat.: 58° 48' 13.~~197~~395" ~~416.6~~ 4.5 m ~~(1440.0 m)~~ Long.: 156° 56' 22.~~772~~228" ~~361.4~~ 56.9 m ~~(602.0 m)~~ Adjusted ✓ Unadjusted

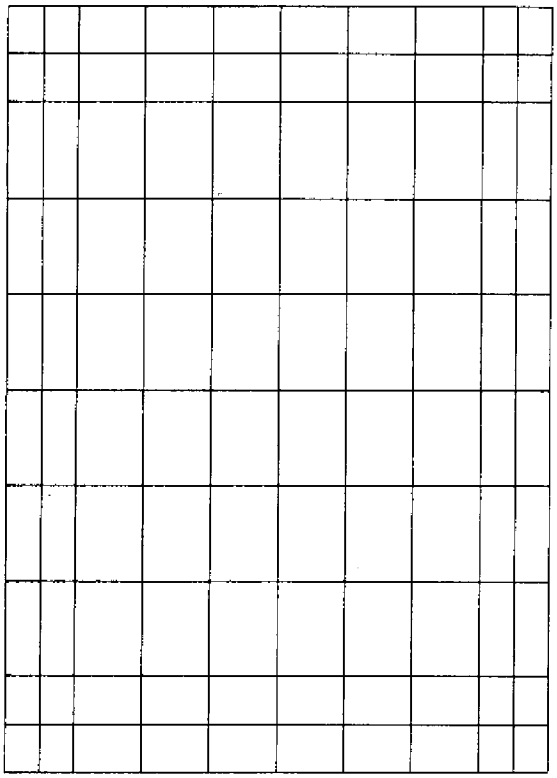
Plane Coordinates (IV): Military Grid: State: WAC Lambert Zone: projection

Y= X=

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

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

M-2618-12(4)



Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): Ship "PATHFINDER" Date: Season 1946 Season 1947

Planetable contouring by (II): None Date:

Completion Surveys by (II): None Date:

Mean High Water Location (III) (State date and method of location): High-water line was located on 1943 photographs by field party. This data was transferred to 1946 photographs with the use of the stereoscope and then compiled.

Projection and Grids ruled by (IV): Washington Office Date: 1948

Projection and Grids checked by (IV): Washington Office Date: 1948

Control plotted by (III): John H. Winniford Date: 12/9/48

Control checked by (III): James L. Harris Date: 12/28/48

Radial Plot or Stereoscopic Control extension by (III): James L. Harris & J.E. Deal Date: 2/1/49

Stereoscopic Instrument compilation (III): Planimetry } Not applicable Date:

Contours } Date:

Manuscript delineated by (III): John Winniford Date: 2/14/49

Photogrammetric Office Review by (III): Ree H. Barron Date: 2/28/49

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

Camera (kind or source) (III): USC&GS 9 lens focal length 8.25 inches

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
14403 to 14405	6/10/43	11:46	1:20,000	13.0 ft. above M.L.L.W.
14390	6/10/43	11:23	1:20,000	14.5 ft. above M.L.L.W.
17985	9/26/46	9:48	1:20,000	3.5 ft. above M.L.L.W.

Tide (III)

Ratio of Ranges	Mean Range	Diurnal ~~Spring~~ Range
	15.2	19.5

Reference Station: NUSHAGAK BAY, ALASKA (Clark Point)
Subordinate Station: Approximation at the mouth of Kvichak
Subordinate Station: River to be plus 1 hour.

Washington Office Review by (IV): C. Hanavick Date: 9-29-49

Final Drafting by (IV): E. G. Hunter Date: 8-1-52

Drafting verified for reproduction by (IV): W.O. Hallum Date: 9-4-52

Proof Edit by (IV): W.O. Hallum Date: 10-15-52

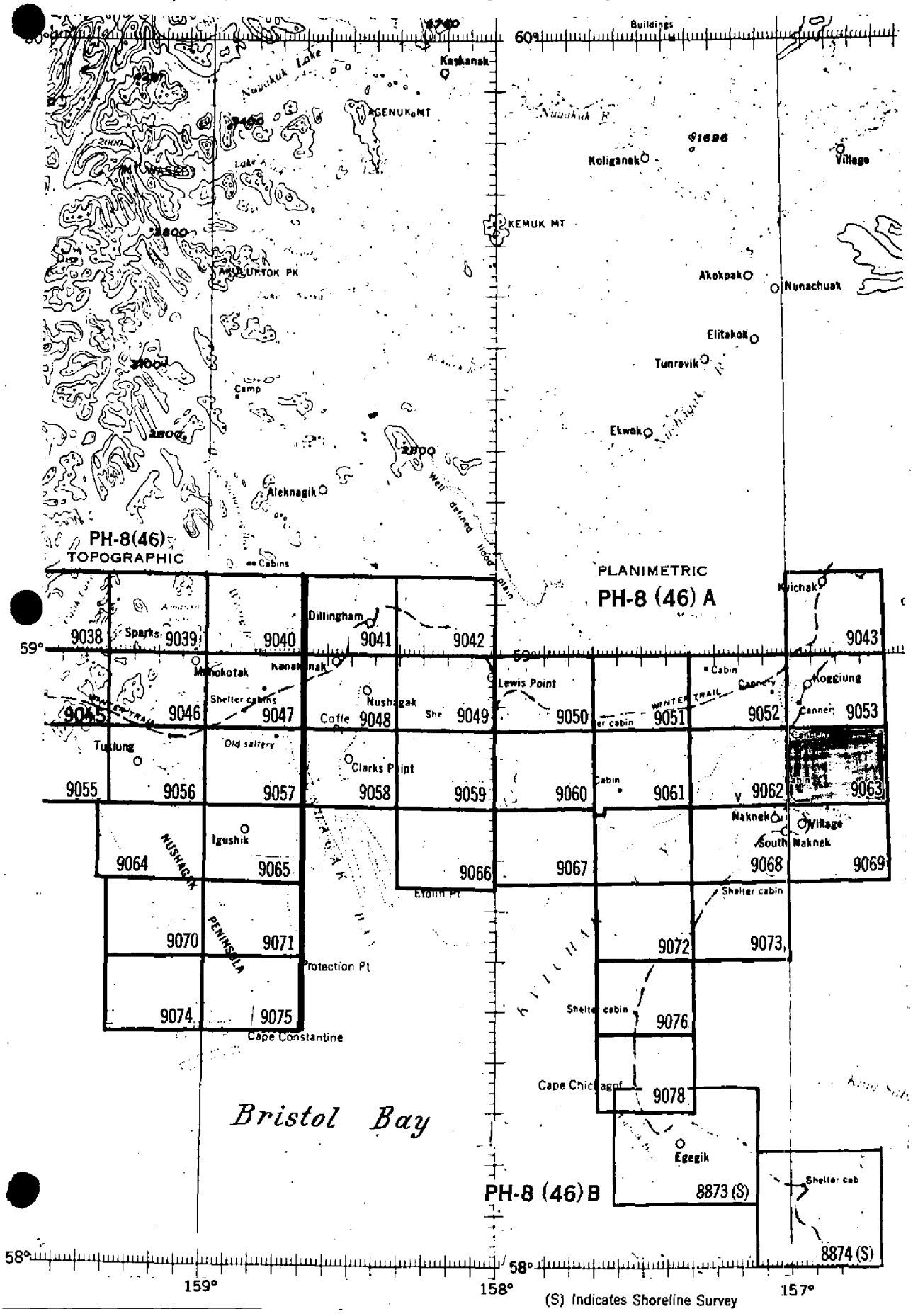
Land Area (Sq. Statute Miles) (III): 72.0
Shoreline (More than 200 meters to opposite shore) (III): 1.0 Statute Miles
Shoreline (Less than 200 meters to opposite shore) (III): 4.0 Statute Miles
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): Recovered: Identified:
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III): ~~None~~ /
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

M-2518-12(4)

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

ALASKA, Vicinity of Bristol Bay



(S) Indicates Shoreline Survey

Summary to Accompany T-9063

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, and Part B, the most southerly part of the project, consisting of 2 shoreline maps of the Egegik River from Bristol Bay to Becharof Bay.

Field work in the area of the planimetric maps from about 157° 30' westward to and including Nushagak Peninsula was carried forward cooperatively by the photogrammetric party under A. Newton Stewart, the reconnaissance party under W.H. Husemeyer and the triangulation party under C. LeFevor. 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' the field work was accomplished by the hydrographic party on the Ship PATHFINDER under Comdr. R.F.A. Studds.

A cloth-backed lithographic print of this map at compilation scale and the descriptive report will be registered in the Bureau Archives.

FIELD INSPECTION REPORT
Map Manuscript T-9063
Area of the 5th Radial Plot
Project Ph-8(46)

Field inspection work in this area was done by the Ship "PATHFINDER", but a report has not been submitted to this office.

W.H. Bainbridge
Comdr.-USC&G Survey

For information on field inspection in the area of this project refer to the following filed in the Bureau Library:

1) Season Reports No. 156 (1947), and No. 170 (1948) submitted by Comdr. R.F.A. Studds.

2) Season Report No. 138 (1947) submitted by Lt. Comdr. A. Newton Stewart.

COMPILATION REPORT
Map Manuscript No. T-9063
Project Ph-8(46)

26: CONTROL:

A complete discussion of the horizontal control stations falling in the area of this map manuscript will be found in Item 26, "Control", of the descriptive report for Map Manuscripts No's. T-9068 and T-9069.

27: RADIAL PLOT:

This map manuscript is part of a combined radial plot, comprising Map Manuscripts No's. T-9036, T-9043, T-9053, T-9063, T-9068 and T-9069, which has been fully described in Item 27, "Radial Plot" of the descriptive report for Sheets No's. T-9068 and T-9069.

28: DETAILING:

This map was 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 manuscript.

The field inspection consisted generally of a partial identification of the mean high-water line and adjacent foreshore and backshore areas. Also, since Lt. Comdr. Stewart was stationed at the Portland Office while this sheet was being compiled, he was consulted frequently on interpretation of photographic details, and from his knowledge of the area, and by stereoscopic study of the photographs with him, much valuable information was obtained.

It could not be determined 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 insufficient photographic coverage, the detailing could not be completed to the eastern limits of the map manuscript.

No attempt has been made to detail and symbolize the many changes in ground elevations. The most prominent of the knolls, which are abundant in the area, have been shown with an appropriate symbol.

Ozalid prints of the completed map manuscript have been forwarded to the Ship "PATHFINDER" and to the Seattle Processing Office.

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

29: SUPPLEMENTAL DATA:

No supplemental data was furnished for the area of this map manuscript. See Review Report

30: MEAN HIGH-WATER LINE:

A very small part of the mean high-water line of Kvichak Bay falls within the limits of this map manuscript. It has been shown by a continuous black acid ink line .012" in thickness.

31: LOW-WATER AND SHOAL LINES:

There are none within the limits of this map manuscript, except for a mud bank adjoining the MHW line.

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 none within the limits of this map manuscript.

34: LANDMARKS AND AIDS TO NAVIGATION:

A report on these features has been submitted by the Ship "PATHFINDER". See Review Report

35: HYDROGRAPHIC CONTROL:

Temporary hydrographic control stations have been located by the Ship "PATHFINDER."

36: LANDING FIELDS AND AERONAUTICAL AIDS:

There are none within the limits of this map manuscript.

37: GEOGRAPHIC NAMES: 814 ✓

Geographic Names have been shown on the map manuscript as furnished by the Ship "PATHFINDER" in a temporary report on Geographic Names and as shown on a copy of an advance chart of Kvichak Bay, Egegik Bay to Libbyville, dated September 1947, Scale 1:100,000.
Refer to Form 1234 attached to this report for approved list of geographic names.

38: RECOVERABLE TOPOGRAPHIC STATIONS:

There are none within the limits of this map manuscript.
See side heading 38 of the Review Report.

39: JUNCTIONS:

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

44: COMPARISONS WITH EXISTING TOPOGRAPHIC SURVEYS:

There were no previous topographic surveys available to this office. See Review Report

45: COMPARISON WITH NAUTICAL CHARTS:

A comparison was made by use of the vertical projector with the advance chart of Kvichak Bay, Egegik Bay to Libbyville, dated Sept. 1947, Scale 1:100,000. In general the planimetric features of the chart and map manuscript are in agreement. The compilation office has not

been furnished any data on the landmark "KNOLL" shown on the chart.

Refer to side heading 3 f of the Revised Report.

Approved:

W.H. Bainbridge

W.H. Bainbridge
Comdr.-USC&G Survey
Chief of Party

Respectfully submitted:

J. Edward Deal Jr.

J. Edward Deal, Jr.
Photogrammetric Engineer

MAP T-9063 PROJECT NO. Ph-8(46) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
	G-6906	N.A.	58° 48' 13.462"	416.6	(1440.0)				Used in radial	
NIG, 1946	Page 5	1927	156° 56' 22.510"	361.4	(602.0)				plot.	
	Field Comp.	N.A.	58° 49' 48.213"	1491.9	(364.7)				Not identified,	
BEND, 1946?	Page 3	1927	156° 59' 54.591"	875.9	(86.8)				established in 1946?	
	G-6906	N.A.	58° 45' 52.763"	1632.6	(223.9)				" " "	
AIR, 1946	Page 5	1927	156° 46' 44.777"	719.8	(244.7)				" "	
	Field Comp.	N.A.	58° 49' 48.46"	1499.5	(357.1)				Not identified,	
BEND LIGHT, 1946?	Page 4	1927	156° 59' 55.17"	885.2	(77.5)				established in 1947.	

Note: Positions unadj. (Field computation)

1 FT. = .3048006 METER

COMPUTED BY: F.H. Elrod DATE October 6, 1948 CHECKED BY: G. Richter DATE November 2, 1948

M-2388-12

GEOGRAPHIC NAMES

Survey No. T-9063

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Alaska			(for title)							1
Kviohak Bay			"	"						2
Bend Light										3
Graveyard Creek										4
Pauls Creek			(mainly on T-9069)							5
										6
										7
										8
				Names underlined in red are approved. 7-14-49 L. Heck						9
										10
										11
										12
										13
										14
										15
										16
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										25
										26
										27

M 234

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

T-9063

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE ~~DELETED~~ } STRIKE OUT ONE

Seattle, Washington 30 March, 19 48

I recommend that the following objects which have *(~~have not~~)* been inspected from seaward to determine their value as landmarks be charted on *(~~deleted from~~)* the charts indicated.

The positions given have been checked after listing by E. H. Sheridan
copied by: C. Hanavich
copy checked by: R.F.A. Studds

Chief of Party.

STATE Alaska, Bristol Bay

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° ′	LATITUDE D.M. METERS	LONGITUDE ° ′	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
The Bond Light	White slatted tripod (△ Bond Light)	Ned	58 49	1500	156 59	885	NA 1927 unadj.	Triang. CS-327	1947		X		8802 A-3370

Note: 1. Data abstracted from Chart Letter No. 470 (1948).
2. Positions unadj. (Field Computations).

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

16—53896-1 U. S. GOVERNMENT PRINTING OFFICE

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

T-9063

NONFLOATING AIDS OR LANDMARKS FOR CHARTS
(Nautical)

TO BE CHARTED
TO BE ~~DELETED~~ } STRIKE OUT ONE

Seattle, Washington 30 March, 1948

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on ~~*(deleted from)*~~ the charts indicated.

The positions given have been checked after listing by E. H. Sheridan
copied by: C. Hanavich
copy checked by: R.F.A. Studds
Chief of Party.

STATE Alaska, Bristol Bay

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° ′	LATITUDE D.M. METERS	LONGITUDE ° ′	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
KNOLL	Top of low-rounded knoll, about 65' above MHW		58 49	1149	156 59	241	NA 1927	Topo. PF-F-47	7-18-47		X		8802 A3370

Note: 1. Data abstracted from Chart Letter 470 (1948).
2. Positions unadj. (Field computations).

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. *Information under each column heading should be given.*

16—51690-1 U. S. GOVERNMENT PRINTING OFFICE

Division of Photogrammetry

Review Report of T-9063

28 Detailing

To maintain a uniformity in the drainage pattern within the project, a few of the more important tributaries joining the main creeks were added, and unimportant, short drainage laterals were removed. Two prominent bog areas were added.

29 Supplemental Data

The following were inspected for any additional information:

1. Topographic control survey T-7099 (1948)
2. Hydrographic control survey H-7616 (1947-48)

34 Landmarks and Aids to Navigation

One landmark (KNOLL, 1947) and one aid to navigation, recommended by the Ship PATHFINDER, that fall within the area of this map manuscript have been listed by the reviewer on Form 567 and attached to the Descriptive Report. They were abstracted from Chart Letter 470 (1948) which is filed in the Nautical Chart Branch, Division of Charts.

38 Recoverable Topographic Stations

Topographic station KNOLL, 1947, (a landmark) was plotted by the reviewer. Since no Form 524 was found, it was made up during review. For additional information refer to side heading 34 above.

40 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 symbol used is a wedge-shaped line.

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 (1941-43), scale 1:500,000, Naknek (136A), Alaska.

45 Comparison with Nautical Charts

1. Nautical Chart No. 8802, scale 1:1,023,188 at Latitude 56°00', August 1944 (17th Edition).

2. Nautical Chart No. 8502, scale 1:969,761 at Latitude 58°00', August 1944 (11th Edition).

3. Advance Nautical Information Chart (Kvichak River, scale 1:100,000).

47 Adequacy of the Compilation

The compilation is considered adequate. To denote more fully the extensive drainage system and to distinguish (except for the two prominent bog areas added) the tundra from the muskeg or bog areas is not feasible unless supplemented by field inspection. In view of this, only the evident streams and their main laterals, including the numerous ponds, are noted on the map manuscript. This map complies with the National Map Accuracy Standards.

Reviewed by:

Charles Hanavich
Charles Hanavich, 29 July 1949

Approved by:

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

H. M. Edmonston
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

Earl D. Hanson
Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T9063

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
11/4/49	9051	S.G. McGann	~~Before~~ (After) Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

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