

9243

Diag. Cht. No. 9103

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Ph-8 (16) Office No. T-9243

LOCALITY

State ALASKA

General locality BRISTOL BAY AREA

Locality CAPE NEWENHAM

1948

CHIEF OF PARTY

A.N. Stewart, Chief of Field Party

C.W. Clark, Portland Photogrammetric Office

LIBRARY & ARCHIVES

DATE May-June-11-1953

9243

DATA RECORD

T- 9243

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

Field Office (II): Bristol Bay Area, Alaska Chief of Party: A. Newton Stewart

Photogrammetric Office (III): Portland, Oregon
(Radial Plot) Officer-in-Charge: Charles W. Clark
Washington, D.C. Louis J. Reed, Chief
Instructions dated (II) (III): 4 February 1949 Stereoscopic Mapping Sec.
21 April 1948 (Field) Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Reading Plotter

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

Scale Factor (III): 1:1

Date received in Washington Office (IV): 8-30-50 Date reported to Nautical Chart Branch (IV): Sept. 1950

Applied to Chart No. Date: Date registered (IV): 10 Apr 1953

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

Geographic Datum (III): North American 1927 Vertical Datum (III):

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. plus 17 m.
and Long. minus 2 m.

Reference Station (III):

Lat.: Long.: Adjusted
~~Unadjusted~~

Plane Coordinates (IV): State: Zone:

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.

Camera (kind or source) (III): USC&GS, 9-lens, Camera B, f of 8.25 inches

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
20524 thru 20530	24 August 1947	*none	1:20,000	

* clock in camera not functioning

Tide (III)

Reference Station: Matarani, Peru
 Subordinate Station: Goodnews Bay Entrance, Alaska
 Subordinate Station:

Diurnal		
Ratio of Ranges	Mean Range	Spring Range
*2.8	6.2	8.9

*Ratio of rise for high waters

Washington Office Review by (IV): B. J. Colner

Date: 10-3-52

Final Drafting by (IV): *M. J. Day*

Date: 1-14-53

Drafting verified for reproduction by (IV): *W. O. Hallum*

Date: 1-27-53

Proof Edit by (IV): *Streifer*

Date: 2/19 53

Land Area (Sq. Statute Miles) (III): 14 sq. mi.

Shoreline (More than 200 meters to opposite shore) (III): 19 miles

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

Control Leveling - Miles (III): (111) none

Number of Triangulation Stations searched for (H): (111) 4 Recovered: 4

Identified: 2

Number of BMs searched for (H): (111) none Recovered:

Identified:

Number of Recoverable Photo Stations established (III): 5

Number of Temporary Photo Hydro Stations established (III): 21

Remarks:

59°00'

Navigation Lt. —△

8072

Tundra

△Crater

△Pyramid Pk.

8073

PRC

Platinum Base A

Platinum Aid Lt.
Platinum S. Base

Joins Ph-8(46)

Page 5

Red 2 △

△Susie

PK 284 X
X 188 X
X PK 131
X PK 119
X 162

9232

X PK 116

9233

PK 27

45

9238

Chogvan

DART Kinegnak

ERIE

PK 121

9239

X 159

X V 132
X V 133

Chogvan Mtn. W. Pk.

△Pinnacle

PINE

BACK

PK 125

△Fifteen

AFRO

ABLE

Seal Rock 20529

Security Cove

PK G

PK 127

PK 132

PK 126

PK 128

PK 129

PK 130

PK 131

PK 133

PK 134

PK 135

PK 136

PK 137

PK 138

PK 139

PK 140

PK 141

PK 142

PK 143

PK 144

PK 145

PK A

PK 128

PK 129

PK 130

PK 131

PK 132

PK 133

PK 134

PK 135

PK 136

PK 137

PK 138

PK 139

PK 140

PK 141

PK 142

PK 143

PK 144

PK 145

PK 146

Nanva

△SLUG

PK 281

PK 280

PK 282

PK 283

PK 284

PK 285

PK 286

PK 287

PK 288

PK 289

PK 290

PK 291

PK 292

PK 293

PK 294

PK 295

PK 296

CALF

PK 200

DANE

SHAIAK IS.

BALK

SHAIAK I.

9249

9250

Oracle Mtn.

58

30

162°00'

30'

C

Summary to Accompany T-9243

Ph-8(46) covers the north shore of Bristol Bay in Alaska and runs from the Egegik River and Kvichak Bay on the East to Cape Newenham on the West.

It is divided into three parts as follows:

Ph-8(46)A includes 23 planimetric maps in the general area of Kvichak Bay and extends from Egegik Bay to Nushagak Bay.

Ph-8(46)B is composed of two shoreline surveys on the Egegik River between Egegik Bay and Lake Becharof.

Ph-8(46) includes 45 topographic maps covering the area from Nushagak Peninsula westward to Cape Newenham and north to Goodnews Bay. It includes offshore islands such as Hagemeister and the Walrus Islands.

T-9243 is the most westerly map of the project and is bounded by Bristol Bay on the South and Kuskokwim Bay on the north and is located west of Security Cove.

The map manuscript consists of one sheet, 8 minutes in latitude and 20 minutes in longitude, at a scale of 1:20,000, with a contour interval of 50 feet. A cloth-backed lithographic print of the map at the compilation scale will be registered with the Descriptive Report in the Bureau Archives. This map will not be published.

FIELD INSPECTION REPORT

2-20

Refer to "PROJECT REPORT, AERIAL PHOTOGRAPH CONTROL
and INSPECTION, BRISTOL BAY, ALASKA", Project Ph-8(46) May
to July 1948. A. Newton Stewart, Chief of Party
Library # 172/48.

FIELD INSPECTION REPORT

2-20

Refer to "PROJECT REPORT, AERIAL PHOTOGRAPH CONTROL
and INSPECTION, BRISTOL BAY, ALASKA", Project Ph-8(46) May
to July 1948. A. Newton Stewart, Chief of Party

Library # 172/48.

COMPILATION REPORT

Washington Office

31. Delineation:

Contours, shoreline, and all cultural features were delineated simultaneously on the Reading Plotter, Model A. Photo coverage was complete. Field inspection covered the shoreline on the sheet but was very limited in the amount of detail and information furnished; map detail is mostly of office origin.

32. Control:

Refer to descriptive report for map manuscript T-9238, side-heading No. 23, where it is stated that field selection and identification of control was very poor, but that after considerable consultation with field personnel who did the work, adequate stations to control the radial plot were identified. This office made a thorough study of the station identification and agrees with the Portland Office as regards the quality of the field work. However, no alteration of the plot was considered feasible and the plot was accepted.

Vertical control was furnished primarily by the surface of the sea surrounding Cape Newenham. In addition, elevations were furnished for four peaks that are indicated on the Map Layout and control sketch, page 5. Vertical control was adequate for contouring.

33. Supplemental Data:

- a. Plotting Instrument Photographs:
20524 thru 20531 (9-lens metal-mounts)
- b. Field Inspection Photographs:
20522 thru 20533 (9-lens field prints)
- c. Graphic Control Surveys:
 - (1) T-3310, "West Coast of Alaska - Bering Sea - Security Cove", Explorer, R. S. Patton, 1912, 1:20,000.
 - (2) T-3311 & 12, "Alaska-West Coast, Cape Newenham to Chagvan Bay and Chagvan Bay to Goodnews Bay", Explorer, R. S. Patton, 1912, 1:20,000.
- d. Hydrographic Surveys:
 - (1) H-3409, "Alaska-West Coast-Bering Sea-Cape Newenham-etc.", Explorer, R. S. Patton, 1:60,000, July-Sept. 1912.

(2) H-3410, "Alaska-West Coast-Bering Sea-Security Cove", Explorer, R. S. Patton, 1:12,000, 1912.

34. Contours and Drainage:

No particular difficulty was had with the photography other than photographic quality which could have been improved somewhat, and no areas of questionable contours exist.

35. Shoreline and Alongshore Details:

The shoreline around the Cape is very rugged and therefore very little alongshore detail was indicated by the field inspector. Likewise, very little shoreline was identified on the photographs; it was shown only where gravel beaches existed in large coves, and such coves were few and far between, only one on the north side of the Cape existing in the area of manuscript T-9243. Field inspection showed no shoal or low water lines and none have been delineated. The stage of tide when the photographs were taken was about three feet from mean sea level. The instrument operators had this in mind during delineation and the shoreline and offshore details are considered to be in good position in spite of the lack of field inspection.

36. Offshore Details:

Bird Rock is an island off the north coast of the Cape. It was treated in the same manner as explained in side-heading No. 35, above.

37. Landmarks and Aids:

Two peaks were selected in the field for map location and recommended as landmarks, Peak 126 and Bird Rock. Reference form 567, page 47, in A. N. Stewart's 1948 season report No. 172, entitled, "Aerial Photograph Control and Inspection, Bristol Bay, Alaska". Both peaks are shown on the manuscript as located by the plotting instrument. The peak on Bird Rock was not located by the radial plot. An attempt was made to locate 126 on the plot and it is so named on the base sheet, but the highest point was not selected making it necessary to do so on the Reading Plotter during delineation.

38. Control for Future Surveys:

Reference side-heading No. 49 of this report, "Notes to the Hydrographer", where recoverable topo and hydro stations are listed with descriptions and number of photo on which each is identified. All stations have been located by the radial plot and are shown by symbol on the map manuscript. No additional stations were added during instrument delineation. 524 cards were furnished for the five topo stations located on this quadrangle.

38. Control for Future Surveys:

Reference side-heading No. 49 of this report, "Notes to the Hydrographer", where recoverable topo and hydro stations are listed with descriptions and number of photo on which each is identified. All stations have been located by the radial plot and are shown by symbol on the map manuscript. No additional stations were added during instrument delineation. 524 cards were furnished for the five topo stations located on this quadrangle.

39. Junctions:

This map sheet junctions T-9244 and T-9249, and all junctions are in agreement.

40. Horizontal and Vertical Accuracy:

~~Standard.~~ See Item 66 of the Review Report.

46. Comparison with Existing Maps:

USGS Alaska Map 18, Goodnews District, Alaska, 1:250,000, 1938 edition.

47. Comparison with Nautical Charts:

Chart No. 9103, Kuskokwim Bay, 1:200,000, published Sept. 1916 (2nd Edition), last correction, 21 April 1947.

48. Geographic Name List:

See separate page following, ~~page~~ attached to this report.

49. Notes for the Hydrographer:

See two separate unnumbered pages following.

50. Compilation Office Review:

See T-2 form ~~following~~, *attached to this report.*

Submitted by:

Orvis N. Dalbey
Orvis N. Dalbey
Cartographer-Photogrammetric

Approved and Forwarded:

Louis J. Reed
Louis J. Reed, Chief,
Stereoscopic Mapping Section
Washington Office

49: NOTES TO THE HYDROGRAPHER:

Map Manuscript T-9243

Photo Hydrographic Stations

<u>Signal No.</u>	<u>Photo No.</u>	<u>Description</u>
✓362	20530	Pinnacle rock about 9 m about MHW.
✓363	20530	Southeast corner of rock outcrop on top of bluff about 73 ft. above MHW. Rock projects 15 ft. above grass top of bluff.
✓364	20530	Pinnacle rock projects about 3 m above MHW.
✓365	20530	Pinnacle rock projects about 9 m about MHW.
✓366	20530	Pinnacle rock projects about ?m about MHW.
✓399	20531	Grass topped rock at outer edge of a rock ledge that extends out from mainland.
✓550	20529	Highest point of rock ledge that extends out from shore. White top
✓551	20529	Highest point of a rock just offshore.
✓552	20529	Highest point of rock which is about 3 m above MHW and 65 m offshore.
✓553	20529	Outer top end of rock ledge that extends out from west side of Seal Rock. About 3 m about MHW.
✓554	20529	High pinnacle rock, second one in from the north side of Seal Rock About 125 ft. elevation.
✓555	20529	Outer grass topped pinnacle on top of a rock ledge that extends out from base of bluff.
✓556	20529	Top of rock about 2 m about MHW and 20 m out from base of bluff.

<u>Signal No.</u>	<u>Photo No.</u>	<u>Description</u>
✓ 557	20526	Large white topped rock about 6 m about MHW and just offshore. Highest point of.
✓ 558	20526	Highest point of large rock about 60 m offshore.
✓ 559	20526	Sharp topped rock just offshore and about 30 m high with base connected to mainland.
✓ 560	20525	White topped rock about 6 m out from shore.
✓ 561	20525	Highest point of rock that lies about 10 m. out from a large rocky point.
✓ 562	20525	Symmetrical pinnacle rock with base connected to mainland and about 300 ft. high.
✓ 563	20525	Small rock about 4 m above MHW and lies off a group of larger rocks.
✓ 564	20524	Highest point of the outer and western end of a high rocky point.

Recoverable Topographic Stations

✓ MATE 1948
 ✓ CAVE 1948

✓ DAZE 1948
 ✓ EKKA 1948
 ✓ SEAL 1948

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9243

- 1. Projection and grids
- 2. Title
- 3. Manuscript numbers
- 4. Manuscript size

CONTROL STATIONS

- 5. Horizontal control stations of third-order or higher accuracy
- 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)
- 7. Photo hydro stations
- 8. Bench marks
- 9. Plotting of sextant fixes
- 10. Photogrammetric plot report
- 11. Detail points

ALONGSHORE AREAS
(Nautical Chart Data)

v = checked
n = non-existent

- 12. Shoreline
- 13. Low-water line
- 14. Rocks, shoals, etc.
- 15. Bridges
- 16. Aids to navigation
- 17. Landmarks
- 18. Other alongshore physical features
- 19. Other along-shore cultural features

PHYSICAL FEATURES

- 20. Water features
- 21. Natural ground cover
- 22. Planetable contours
- 23. Stereoscopic instrument contours
- 24. Contours in general
- 25. Spot elevations
- 26. Other physical features

CULTURAL FEATURES

- 27. Roads
- 28. Buildings
- 29. Railroads
- 30. Other cultural features

BOUNDARIES

- 31. Boundary lines
- 32. Public land lines

MISCELLANEOUS

- 33. Geographic names
- 34. Junctions
- 35. Legibility of the manuscript
- 36. Discrepancy overlay
- 37. Descriptive Report
- 38. Field inspection photographs
- 39. Forms

40. _____
Reviewer

Louis J. Ford, Chief
Supervisor, Review Section or Unit
Stereoscopic Mapping Section

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

783m

734

71-rs

File with
T-9243

28 Nov. 1950

Chief, Division of Geodesy
Chief, Division of Photogrammetry
Geographic Names

Ref. : A letter to Chief, Division of Geodesy from W. W. Husemeyer, dated 21 November 1950, on the subject: Alaska Surveys

The last paragraph of reference letter states that the geographic name of a small island near the end of Cape Newenham depicted on map manuscript T-9243 is in question. The map manuscript shows the name of this island as "Bird Rock" whereas reference letter states that the name should be "Seal Rock". This question has been brought to the attention of Mr. Heck (Geographic Names) and Mr. Heck has furnished the following information:

A report on geographic names submitted by Comdr. Stewart states that the name of this feature should be "Bird Rock". Comdr. Stewart quotes 4 sources for this name and further states that it is in undisputed local usage. The name "Bird Rock" should be retained on the map manuscript until the question is settled by the Board on Geographic Names.

O. S. Reading
Chief, Div. of Photogrammetry

cc: 78
854

GEOGRAPHIC NAMES

Survey No.

T-9243

Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Maps	Rand McNally Atlas	U. S. Light List		
<u>Bering Sea</u>										1
<u>Bird Rock</u>										2
<u>Bristol Bay</u>										3
<u>Cape Newenham</u>										4
<u>Jagged Mt.</u>										5
<u>Kuskokwim Bay</u>										6
<u>FOURTH JUDICIAL DIVISION</u>										7
<u>THIRD JUDICIAL DIVISION</u>										8
<u>ORACLE MOUNTAIN</u>										9
<u>Alaska</u>										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red are approved
11-8-52
L. Heck

REVIEW REPORT T-9243
Topographic Map
October 3, 1952

62. Comparison with Registered Topographic Surveys.-

T-3311 1:20,000 1912

The map manuscript supersedes this survey for nautical charting purposes.

63. Comparison with Maps of other Agencies.-

Goodnews District, Alaska, 1:250,000, 1938 - USGS
No discrepancies noted.

64. Comparison with Contemporary Hydrographic Surveys.-None

65. Comparison with Nautical Charts.-

See Item 47

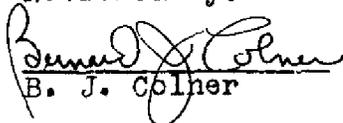
Chart No. 9103, Kuskokwim Bay, 1:200,000, published
September 1916 (2nd edition), last correction 10 October 1950.
No discrepancies noted.

66. Adequacy of Results and Future Surveys.-

Further field edit is not considered necessary prior
to hydrographic surveys in the area.

This map complies with project instructions and is adequate as
a base for hydrographic surveys and the construction of nautical charts.

Reviewed by:

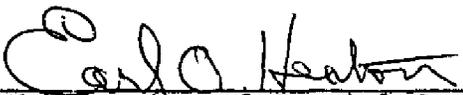

B. J. Colner

APPROVED


Chief, Review Section B
Div. of Photogrammetry


Chief, Nautical Chart Branch
Division of Charts *CA*


Chief, Div. of Photogrammetry


Chief, Div. of Coastal Surveys
MF

Red

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

