9249

Original

Diag. Cht. Nos. 8802 & 9103

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Topographic

Field No. ..... Office No. T-9249

LOCALITY

State: Alaska

General locality: Bristol Bay Area

Locality: CAPE PEIRCE

194 8

CHIEF OF PARTY

A. Newton Stewart, Chief of ~~Field~~ Party

Charles A. Clark, Chief of Radial Plot Office

Div. Of Photogrammetry, Wash., D.C.

LIBRARY & ARCHIVES

DATE Jan. 17, 1955

8-1870-1 (1)

9249

DATA RECORD

T- 9249

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

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

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

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): 9-20-50 Date reported to Nautical Chart Branch (IV): 9-22-50

Applied to Chart No. Date: Date registered (IV): JULY 9, 1953

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

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

Reference Station (III): The difference between Unadjusted Datum and N.A. 1927 Datum is Lat. plus/~~minus~~ 16 m. and Long. ~~plus~~/minus 2 m. ✓ Let

(Unadjusted)

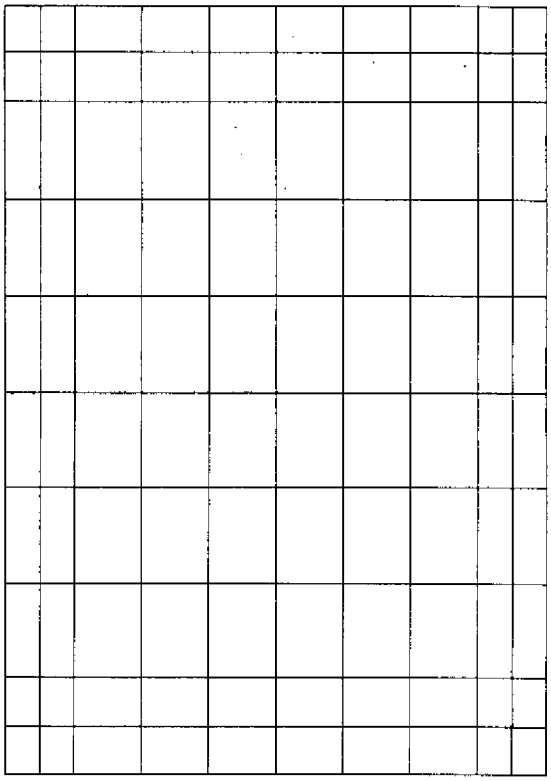
Lat.: Long.: ~~Adjusted~~ Unadjusted

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.



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

Clarence E. Misfeldt
and
Louis Levin

DATA RECORD

Field Inspection by (II): A. Newton Stewart Date: 1948

Planetable contouring by (II): None Date:

Completion Surveys by (II): None Date:

Mean High Water Location (III) (State date and method of location):
The shoreline on this manuscript is as it was in 1948 since field inspection made in 1948 was used as a guide during instrument delineation of the shoreline.

Projection and Grids ruled by (IV): Ruling Machine Date: 1 Sept. 1949

Projection and Grids checked by (IV): Theodore L. Jansen Date: 1 Sept. 1949

Control plotted by (III): James L. Harris(Portland Office) Date: 14 Dec. 1949

Control checked by (III): Marie B. Elrod (Portland Office) Date: 28 Dec. 1949

Radial Plot or ~~Stereoscopic Control Extension by (III)~~: James L. Harris and J.E. Deal (Portland) Date: 20 June 1950

Stereoscopic Instrument ~~compilation~~ delineation (III): Planimetry and Contours Clarence E. Misfeldt and Louis Levin Date: 30 Aug. 1950

Manuscript ~~delineated~~ Compilation by (III): John B. McDonald Date: 8 Sept. 1950

Photogrammetric Office Review by (III): Louis J. Reed Date: 20 Sept. 1950

Elevations on Manuscript checked by (~~II~~) (III): Louis J. Reed Date: 20 Sept. 1950

M-2618-12(4)

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
20480 and 20481	8/24/47	*none	1:20,000	--
23166B	9/1/48	11:40	1:20,000	~~3.0 ft. below MST~~ (M L L W)

* Clock in camera not functioning

Tide (III)

Diurnal

Ratio of Ranges	Mean Range	Spring Range
*2.8	6.2	8.9

*Ratio of rise for high waters

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

Washington Office Review by (IV): B.J. Colner Date: 10-23-52

Final Drafting by (IV): M J Day Date: 2-17-53

Drafting verified for reproduction by (IV): W O Hallin Date: 3-12-53

Proof Edit by (IV): S Stempler Date: 4/23 53

Land Area (Sq. Statute Miles) (III): 12 sq. mi.
Shoreline (More than 200 meters to opposite shore) (III): 32 miles
Shoreline (Less than 200 meters to opposite shore) (III): none
Control Leveling - Miles (II): none
Number of Triangulation Stations searched for (II): 2 Recovered: 2 Identified: 2
Number of BMs searched for (II): none Recovered: Identified:
Number of Recoverable Photo Stations established (III): 4
Number of Temporary Photo Hydro Stations established (III): 12

Remarks: Tide Predictions, Alaska were prepared by the Division of Tides and Currents for the more accurate prediction of tides at various points in this part of project Ph-8. Details for T-9249 are on reverse side of this page.

M-2618-12(4)

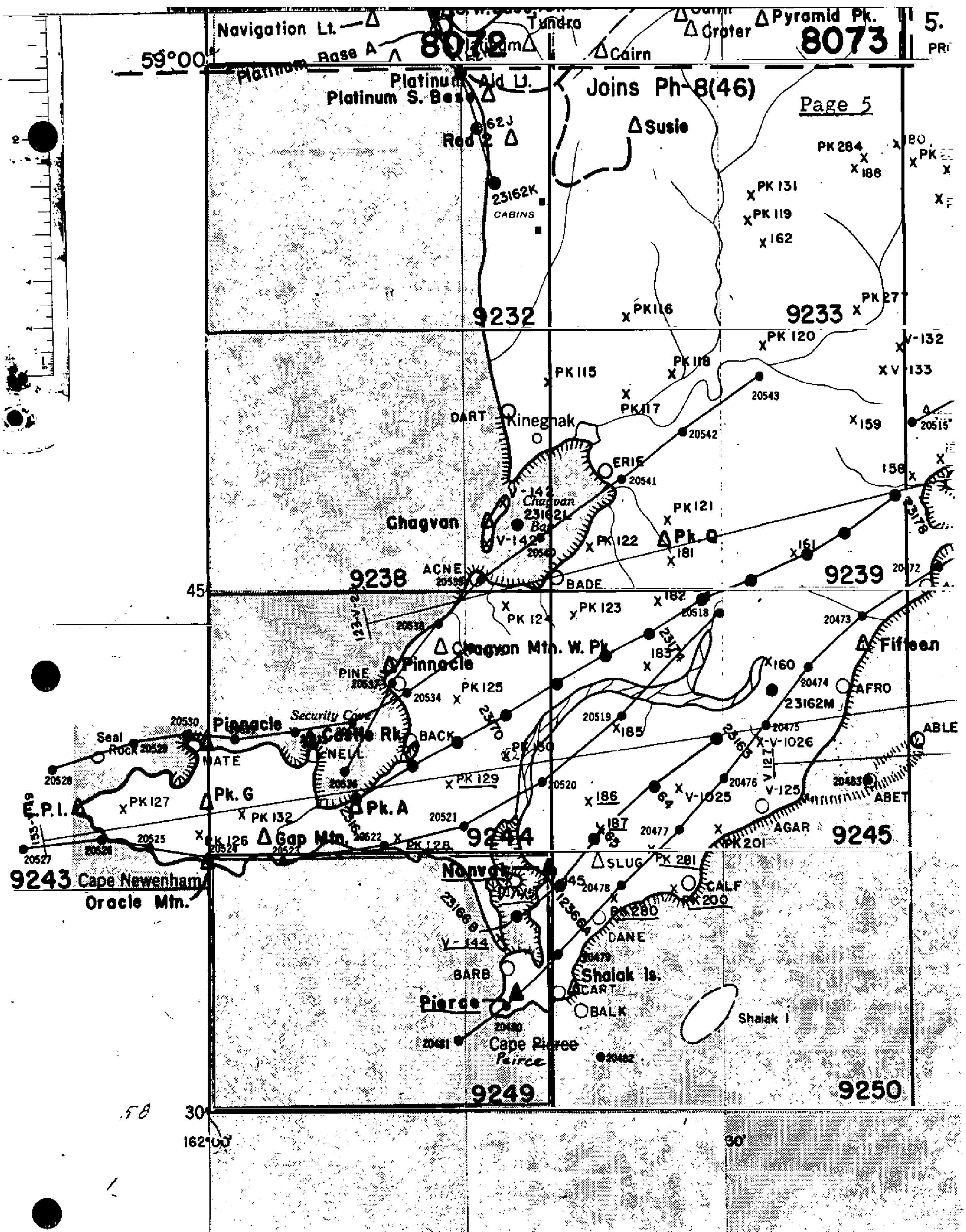
TIDE PREDICTIONS, ALASKA

Bristol Bay Reference Station Nushagak Bay

Time Meridian 150° W

Hagemeister Island to Cape Newenham:

Times of high and low waters subtract $4^h\ 30^m$
Heights of high waters multiply by ratio 0.55
Heights of low waters multiply by ratio 0.85
Subtract 6.0 ft. to refer heights to MSL


Page 5
Joins Ph-8(46)
Navigation Lt.
Tundra
Crater
Pyramid Pk.
8073
Cairn
59°00'
Platinum Base
Platinum Afd Lt.
Platinum S. Base
Red 2
Susie
23162K
CABINS
PK 284
PK 131
PK 119
162
9232
PK 116
9233
PK 277
PK 120
V-132
PK 115
PK 118
V 133
20543
PK 117
DART
Kinegnak
20542
159
ERIE
20541
158
V-142
Chagvan Bay
23162L
PK 121
Chagvan
V-142
PK 122
Pk. Q
181
161
ACNE
BADE
9238
9239
45
PK 124
PK 123
182
20518
20473
Fifteen
Chagvan Mtn. W. Pk.
Pinnacle
PINE
183
160
PK 125
20474
AFRO
23162M
Security Cove
20534
20519
185
20475
ABLE
Seal Rock
Pinnacle
Castle Rk.
BACK
V-1026
NATE
NELL
PK 150
20528
PK 129
20520
20476
V-125
ABET
E.P.I.
PK 127
Pk. G
Pk. A
186
V-1025
PK 132
20521
AGAR
Gap Mtn.
PK 126
PK 128
9244
187
20477
PK 201
9245
9243
Cape Newenham
Oracle Mtn.
Nanvak
SLUG
PK 281
CALF
20478
PK 200
PK 280
V-144
DANE
BARB
Shaiak Is.
CART
BALK
Pierce
Shaiak I
20480
20481
Cape Pierce
Pierce
20482
9249
9250
30
162°00'
30'

58

C

Summary to Accompany T-9249

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-9249 is the most southwesterly map of the project and is bounded by Bristol Bay on the south. It includes Cape Peirce and the mouth and southern portion of Nanvak Bay.

The map manuscript consists of one sheet, 7½ 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

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

PHOTOGRAMMETRIC PLOT REPORT

See descriptive report for T-9238, Project Ph-8B(46).

COMPILATION REPORT

Stereoscopic Mapping Section
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 Peirce. In addition, elevations were furnished by the field for two elevated points falling within the limits of this map, and for several other peaks located just outside. All peaks are underlined on the map layout and control sketch, page 5. Vertical Control was adequate for contouring.

33. Supplemental Data:

a. Plotting Instrument Photographs:
20479, 480, 520, and 521 (9-lens metal mounts)

b. Field Inspection Photographs:
20478, 479, 480, and 521 (9-lens field prints)

* c. Graphic Control Surveys: NONE
(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

* c. These surveys fall to the north of T9249

* d. Hydrographic Surveys: NONE

(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, 1:20,000, 1912.

* These surveys fall just north of T9249

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. Field inspection showed no shoal or low water lines; shoal lines on the manuscript are plotting instrument delineated.

36. Offshore Details: Not applicable.

37. Landmarks and Aids:

Reference form 561, page 47, in A. N. Stewart's 1948 season report No. 172, entitled, "Aerial Photograph Control and Inspection, Bristol Bay, Alaska". An elevated and isolated sharp rock was selected as the one landmark on this manuscript. It can be identified on the map since the rock was also selected as a triangulation station and named NANVAK, 1948.

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. Form 524 cards were furnished for the ~~three~~ four topo stations located on this quadrangle. Filed in Div. Photogrammetry general files.

39. Junctions:

T-9243

This map sheet joins T-9244 and T-9250. All junctions are in agreement.

40. Horizontal and Vertical Accuracy:

Standard. See item 66.

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 13 following.

Pierce Triangulation and Cape Peirce are spelled differently

49. Notes for the Hydrographer:

See separate unnumbered page, following.

50. Compilation Office Review:

See T-2.form, following.

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

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9249

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 N

9. Plotting of sextant fixes N 10. Photogrammetric plot report ✓ 11. Detail points N

✓ = checked
N = Non-existant

ALONGSHORE AREAS
(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

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

BOUNDARIES

31. Boundary lines N 32. Public land lines N

MISCELLANEOUS

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

40. _____ Louis A. Reed, Chief.
Reviewer — Supervisor, Review Section or Unit

41. Remarks (see attached sheet) Stereoscopic Mapping Section

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:

M-2623-12

GEOGRAPHIC NAMES

Survey No.

T-9249

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Bristol Bay										1
Nanvak Bay										2
Shaiak Island										3
Cape Peirce										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Geographic Names underlined in red are approved.

HMQ

10/22/52

49: NOTES FOR THE HYDROGRAPHER:

Map Manuscript T-9249

Photo Hydrographic Stations

Signal No.	Photo No.	Description
373	20521	Point of grass at edge of beach.
374	20521	Point of grass at edge of beach.
381	20479	Center of flat topped, just offshore rock about 2 m above MHW.
382	20479	Top of sharp rock about 5 m high and 20 m offshore.
383	20479	Top of sharp rock about 5 m high and 10 m offshore.
384	20480	Highest point of sharp rock about 3 m high and 25 m out from base of bluff.
385	20480	Highest part of end of a rocky point.
386	20480	Center of lone rock just offshore.
389	20480	Highest point of rock about 10 m high connected to bluff by lower narrow ridge. From west an arch appears underneath.
390	20480	Northwesterly of 2 points of jagged knife edge rock attached to toe of bluff and about 40 ft. high.
571	20522	Highest point of white topped rock about 20 m out from base of bluff.
572	20522	Highest and west of top of large rock about 15 m about MHW and about 7 m out from shore.

Recoverable Topographic Stations

BALK 1948
BARB 1948
FATE 1948
CART 1948

Review Report T-9249
Topographic Map
October 23, 1952

62. Comparison with Registered Topographic Surveys.- None

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 were noted between the map and the chart.

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 ~~National Standards of Accuracy~~ project instructions ~~Map~~ and is adequate as a base for any scale hydrographic surveys or nautical charts

Reviewed by:

B. J. Colner

APPROVED

L. C Landy 11/17/54
Chief, Review ~~Section~~ Branch
Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Photogrammetry
MGR
1/12/54

Chief, Div. of Coastal Surveys

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

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9249

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
Feb 1958	9103	L.S.S.	~~Before~~ After Verification and Review 3/11a
			considered adequate applied with / reconstructed
1-5-70	9103	H. Radden	~~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.