9232 9233

9233

9232

Diag. Cht Nos. 8802, 9103, & 9302

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-8 (46) *Office No* T-9232 & 9233

LOCALITY

State Alaska

General locality Kuskokwim Bay

Locality Chagvan

194 8

CHIEF OF PARTY

A. Newton Stewart, Chief of Field Party
Div. of Photogrammetry, Washington, D.C.

LIBRARY & ARCHIVES

DATE November 22, 1955

8-1870-1 (1)

711-aal

77 30 October 1952

Chief, Div. of Photogrammetry

Examination of topographic manuscripts T-9232 and T-9233, Kuskokwim Bay, Alaska

Descriptive Report.-Apparently the general locality on the cover should be Kuskokwim Bay and not Bristol Bay.

Page 10, paragraph 26 and Page 12, paragraph 33.- Why not put this tabulation of vertical control in the descriptive report, possibly after the radial plot section? It is vital information to the map and should be a part of the descriptive report unless it is too bulky to insert.

Page 13, paragraph 40.-There does not seem to be enough information. The radial plot report indicates a low horizontal accuracy in the southwestern part of T-9233, and it appears from casual examination of the sheet that the vertical accuracy will be lower in the southern corner of T-9233. This sort of information should be summarized.

Map T-9233.-The drafting is excellent and the compilation of supplemental contours very good.

Many of the feeder streams seem rather stiff and straight, and the contours are not turned around streams sufficiently for good appearance. This comment is made without examination of the photographs, but I think it worth calling to the attention of the compilers.

There are rather too many feeder streams. This is indicated by red pencil marks on the map copy. This subject has been discussed recently and I expect has been taken care of on new drawings.

Two elevations are shown for station V-121. I realize that you did this probably to give additional information, but it will be better to select the best elevation and show only that. You are free to choose the instrument elevations in lieu of the ground elevations, if you feel sure that the former is more reliable. In this case, a note should be made on the summary of vertical control. As regards both V-121 and V-122, the question arises as to whether these are triangulation stations. Sometimes a horizontal position is computed for a future station from horizontal angles furnished with the vertical control. This is quite

all right for plotting purposes, but such stations should not be shown as a triangulation station unless the position is on record in Geodesy.

T-9232.-Two elevations are shown for each of peaks 104 and 288. This is the same situation as mentioned above.

The note "shore bluffs" is lettered in two places, but the limits are not shown. The Drafting Section cannot apply hachures without the limits. In this case, however, the 25 foot contours run so close to the shore that hachures are probably not needed.

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

DATA RECORD

T-9232 & 9233

Project No. (II): Ph-8[illegible](46) Quadrangle Name (IV): T-9232 = RED MOUNTAIN
T-9233 = SUSIE MOUNTAIN

Field Office (II): Platinum, Alaska Chief of Party: A. Newton Stewart

Photogrammetric Office (III): Washington D.C. Officer-in-Charge: Radial Plot by Lester C. Lande
Compilation by Louis J. Reed

Instructions dated (II) (III): Copy filed in Division of Photogrammetry (IV)

21 Apr 48 = Field
4 Feb 49 = Office

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): SEP 30 1952 Date reported to Nautical Chart Branch (IV): OCT 21 1952

Applied to Chart No. Date: Date registered (IV): 8-17-55

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

Geographic Datum (III): NA 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/minus 16 m. and Long. plus/minus 5 m. vlel.

Reference Station (III):

Lat.: Long.: Adjusted [redacted]

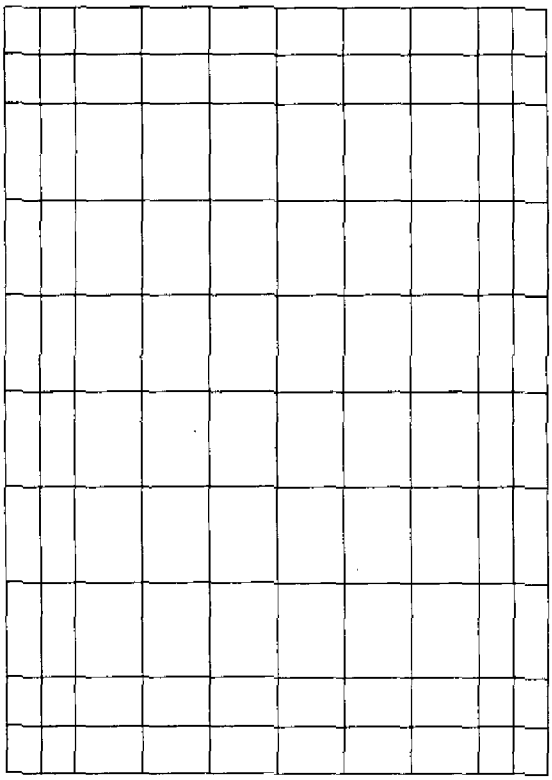
Plane Coordinates (IV): State: Zone:

Y= X=

Coordinate System = none other thab WAC construction Grid

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)
(D) (III)

100% compiled by Clarence E. Misfeldt
on the Reading Plotter, model "A".

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):
Shoreline is dated 1948 since it was field located on photos during that season, and those photos were used as a guide when the shoreline was delineated on the Reading Plotter, model "A".

Projection and Grids ruled by (IV): On the Reading Ruling machine by Theodore L. Janson Date: 6 Sep 49

Projection and Grids checked by (IV): Howard W. Wolfe Date: 7 Sep 49

Control plotted by (III): Charles H. Davies Date: 8 Nov 50

Control checked by (III): Samuel D. Blankenbaker Date: 9 Nov 50

Radial Plot or Control extension by (III): Roscoe J. French Date: 10 Sep 51

Stereoscopic Instrument delineation Planimetry and Contours (III): Clarence E. Misfeldt Date: 22 Jun52 Date:

Manuscript delineated by (III): Robert L. Sugden Date: 26 Sep 52

Photogrammetric Office Review by (III): Louis J. Reed Date: 29 Sep 52

Elevations on Manuscript checked by (III): Louis J. Reed Date: 29 Sep 52

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
20514-5	24 Aug 47	Clock Stopped	1:20,000	
28424-5	8 Aug 50	15:09	"	
28426-7	"	15:10	"	*
2844XXX 0-1	"	15:25	"	MSL ✓
284XXXX38-9	"	15:24	"	
28406-7	"	14:48	"	
28448-9	"	15:39	"	
28450-1	"	15:40	"	
28404-5	"	15:45	"	

* Data from Mr Disney of T&S, 25 Sep 52.

Tide (III)

Reference Station: MATARANI, Peru
Subordinate Station: Goodnews Bay Entrance, Alaska —
Subordinate Station:

~~Ratio of~~ Ranges (Ratio of MW rise of)	Mean Range	~~Spring~~ Diurnal Range
2.8	6.2	8.9

Washington Office Review by (IV): Date:

Final Drafting by (IV): M. J. Day Date: (9232 — 2/15/55; 9233 — 1/24/55)

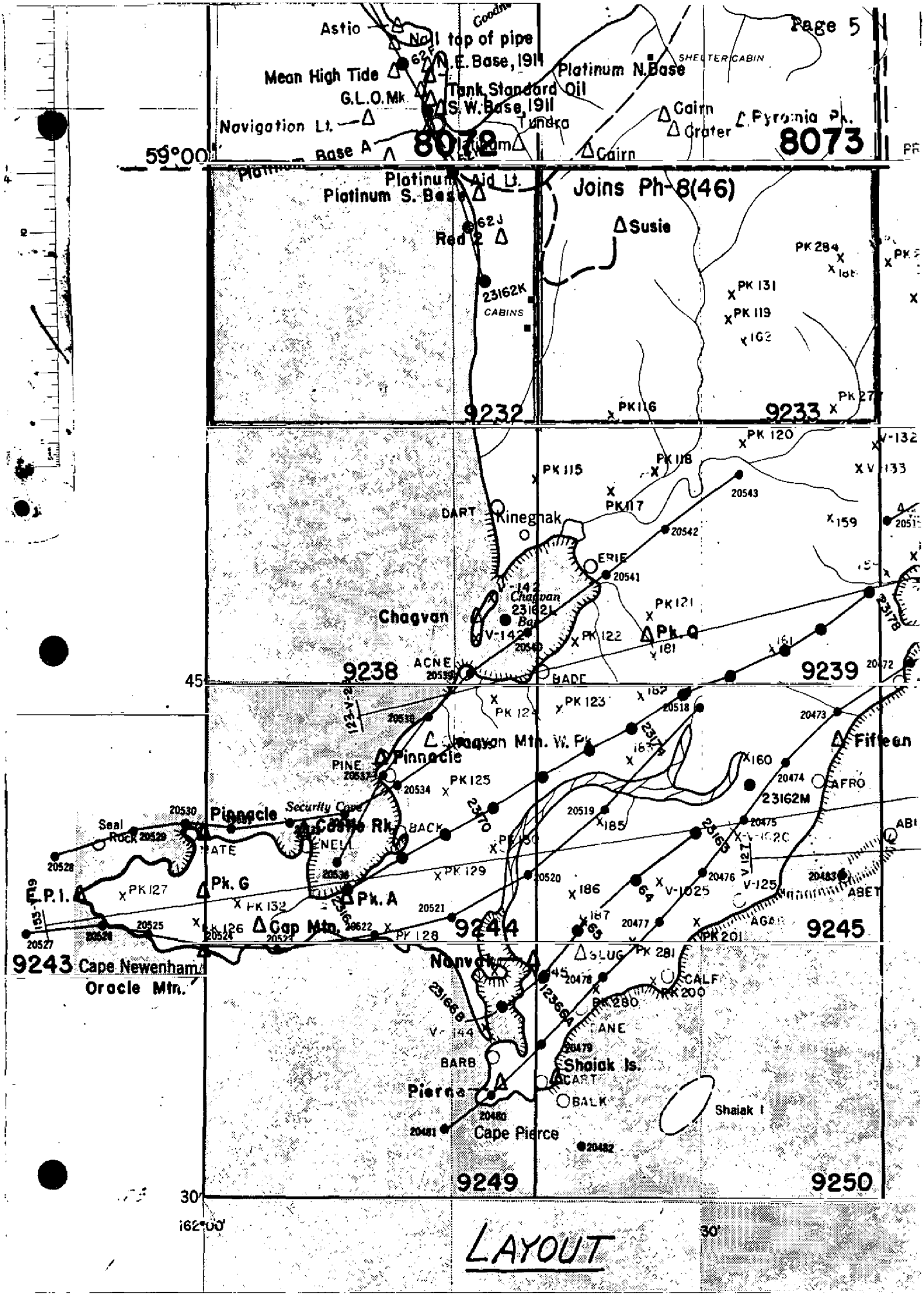
Drafting verified for reproduction by (IV): T-9233 Wm O. Hallin, 9232 WO Hallin Date: 1-27-55, 2-18-55

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): T-9232 = 18 sq mi; T-9233 = 91 sq mi
Shoreline (More than 200 meters to opposite shore) (III): T-9232 = 9 miles; T-9233 = none
Shoreline (Less than 200 meters to opposite shore) (III): none
Control Leveling - Miles (II): none
Number of Triangulation Stations searched for (II): Recovered: Identified: ~~8~~ five
Number of BMs searched for (II): Recovered: Identified: None
Number of Recoverable Photo Stations established (III): two
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

M-2618-12(4)


Astio
Nail top of pipe
N.E. Base, 1911
Mean High Tide
G.L.O. Mk.
Tank Standard Oil
S.W. Base, 1911
Navigation Lt.
Base A
Platinum N. Base
SHELTER CABIN
Cairn
Crater
Pyramid Pk.
Tundra
8072
8073
59°00'
Platinum Aid Lt.
Platinum S. Base
Joins Ph-8(46)
Susie
Red 2
23162K
CABINS
PK 284
PK 131
PK 119
PK 116
9232
9233
PK 120
PK 115
PK 118
PK 117
DART
Kinegnak
ERIE
Chagvan
Chagvan Bay
PK 121
PK 122
Pk. Q
ACNE
BADE
9238
9239
45
PK 123
PK 124
Chagvan Mtn. W. Pk.
Pinnacle
PINE
PK 125
Fifteen
AFRO
23162M
Pinnacle
Security Cove
Castle Rk.
BACK
Seal Rock
NATE
NELL
PK 129
Pk. G
Pk. A
E.P.I.
PK 127
PK 132
Cap Mtn.
PK 128
9244
9245
9243
Cape Newenham
Oracle Mtn.
Nanvak
SLUG
PK 281
CALF
PK 200
PK 280
DANE
BARB
Shaiak Is.
CART
BALK
Pierce
Cape Pierce
Shaiak I
9249
9250
30'
162°00'
30'

LAYOUT

Summary to Accompany T-9232 & T-9233

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-9232 and T-9233 fall in the northwesterly portion of the project. T-9232 contains Salmon River and is bounded by Kuskokwim Bay to the west. T-9233 contains Kinegnak River and Shaw Creek.

Each 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 clothbacked lithographic print of each map at the compilation scale will be registered with the combined descriptive report in the Bureau Archives. These maps will not be published.

FIELD INSPECTION REPORT

2-20:

Refer to:

"Project Report, Aerial Photograph Control and Inspection, ristol Bay, Alaska", Project Ph-8B(46), May to July 1948, by A. Newton Stewart, Chief of Party.

PHOTOGRAMMETRIC PLOT REPORT:

21. Area Covered:

The topographic maps covered with this radial line plot are in the vicinity of Platinum, Alaska, between Chagvan Bay and Goodnews Bay.

T-8057 --- T-8058 --- south part
T-8072 T-8073
T-9232 T-9233
T-9238 --- T-9239 --- north part

22. Method:

Radial plot:

Vinylite base grids which will subsequently serve as manuscripts were ruled with a polyconic projection and a 2500 meter UTM grid. Nine-lens, metal mounted photographs at 1:20,000 scale were used throughout. They were supplemented by eight single-lens photographs at 1:10,000 scale in the vicinity of Platinum where a small plot was laid to locate aids to navigation in that area.

Vinylite templets were used and calibration templet No. 27380 was used to adjust for transforming errors. No serious trouble was encountered and no tilts were computed for probable closer tolerances.

The area was covered with a fairly adequate density of vertical and horizontal control. Some difficulty was experienced by the triangulation field parties in properly identifying suitable substitute stations because identification was done during the 1948 field season in part on older photography. Successful attempts were made to supplement control identification with 620 snapshots taken from a small airplane at low altitudes. These proved invaluable and in only a few instances was it impossible to properly identify the stations.

Satisfactory adjustment and closure was made on all horizontal control except Baluka, 1948, Peak T, 1948, and Pyramid Peak, 1911, 1948.

All intersections were drilled with a No. 80 twist drill down through the several thicknesses of templets and the points were drafted with 4 mm. blue permanent ink circles on the reverse side of the manuscripts.

23. Adequacy of Control:

The attached index shows the density and distribution of horizontal and vertical control. Vertical control

stations V-121 and V-122 were not used in the plot as horizontal control. Their geographic positions were available from field computations, but the pricking information was not adequate enough to include them in the plot.

At least one more triangulation station could have been utilized near the junctions of T-9232, 9233, 9238, 9239, to insure the accuracy of the plot in that area where the plot joins with that of one laid on Ph-8 to the South. This is considered the weakest area in the plot since no check other than good intersections and tight azimuths could be made. An attempt was made to junction properly with the Ph-8 plot to the South in the northern parts of T-9238 and T-9239. However, it is considered that this Ph-41 plot is of higher accuracy as carried down from rigidly held control. Consequently the secondary pass points in the junction area were repricked to agree with the new plot positions and are shown on the base grid with red circles.

Disposition of horizontal control not held in plot:

Baluka, 1948

Attempts were made to identify the substitute stations submitted, but were abandoned because of poor photographic interpretation. However, a point of detail was selected and radial plotted to serve as a pass point only. It is coincidence that it falls only one mm. from the station.

Pyramid Peak, 1911, 1948

A good intersection was obtained on the highest point of Pyramid Peak which plots .8 mm. from the geographic position as computed from horizontal angles observed during two different seasons. The plot is rigid enough to consider an observation error here.

Peak T, 1948

Two sharp points on Pk. T were radially plotted and inked on the manuscript. Protracting the angles observed from Promontory, 1948 and Baluka, 1948 reveals that the lines of sight in both cases pass through these plotted positions which would seem to indicate an observing error and an erroneous position for Pk. T.

24. Supplemental data:

None

25. Photography:

The photography is excellent with few transforming irregularities indicated, and they have good contrast and a minimum of tilt. Except for a few of the higher peaks the images are good, and the photos were not difficult to prepare for radial plotting.

26. Vertical Control:

A tabulation of the elevations obtained by the photo-trig process is submitted on Form 29D under separate cover and is filed under Ph-41 (49) in Photogrammetry general files.

Elevations of all triangulation stations in the area have been adjusted to MSL by Geodesy, and are shown on a sketch map of the triangulation scheme filed in Ph-41(49) general files.

A generally satisfactory set of elevations was obtained and the density is considered adequate for controlling contours the needed distance inland.

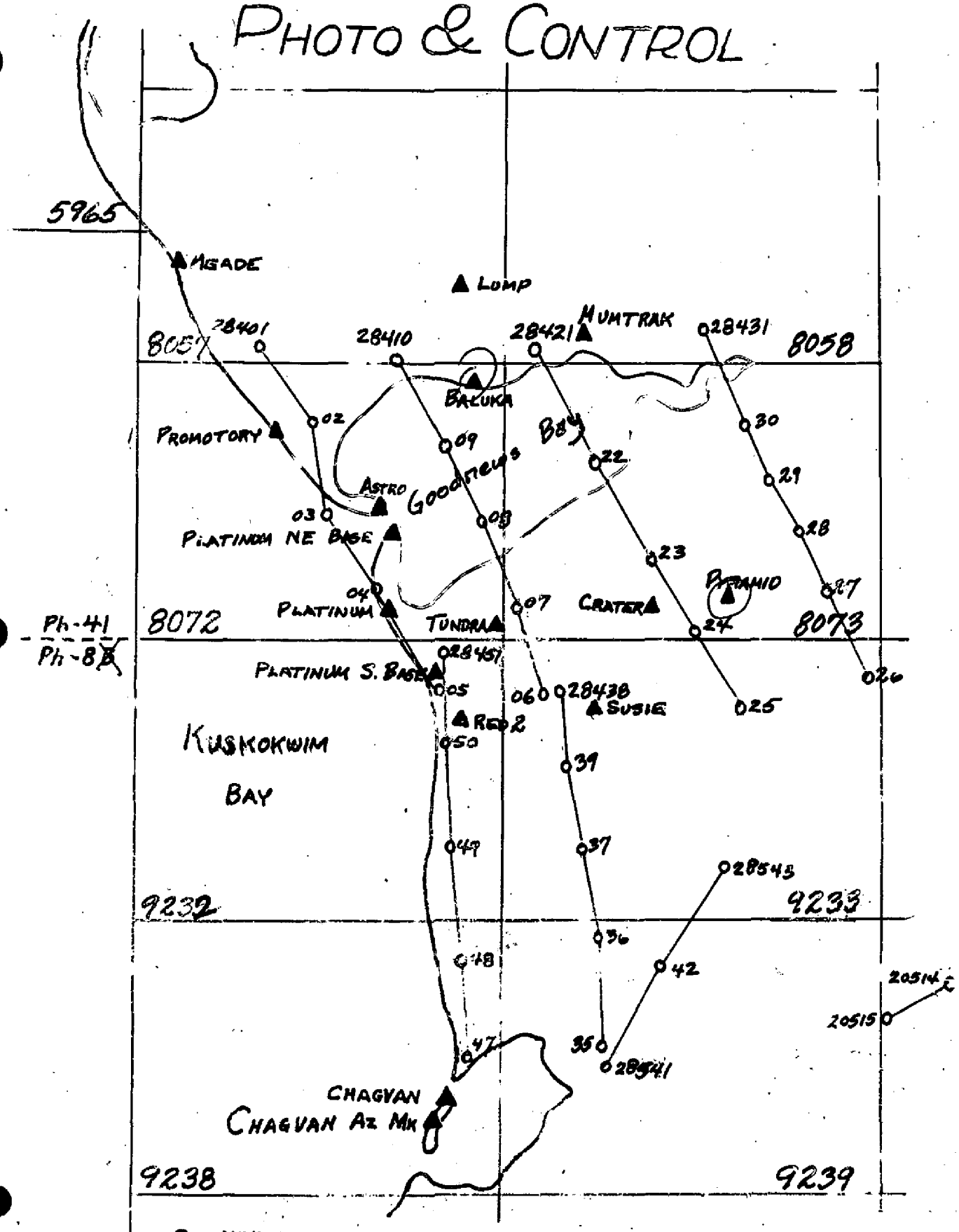
Submitted by:

/s/ Roscoe J. French
Roscoe J. French
September 1951

Approved by:

/s/ L. C. Lande
L. C. Lande

SKETCH
PHOTO & CONTROL



○ = NINE LENS PHOTOS
▲ = HOR. CONTROL HELD IN PLOT

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 on T-9232 and the quad is completely compiled, but a small area along the west edge of T-9233 is left blank because of lack of photo coverage.

32. Control:

Refer to side-headings 23 and 26 of the Radial Plot Report, included herein. Vertical control for rectification and contouring purposes consisted of datum as indicated by the shoreline, and by elevations computed for peaks after the radial. More points of elevation could have been used, especially on the western edge where instrument bridging had to be resorted to after a trial indicated it would be possible.

33. Supplemental Data:

Tabulation of elevations compiled as a part of the radial plot procedure.
Project Report, Project Ph-41(49), May to July 1949, by A. Newton Stewart, Chief of Field Party.

34. Contours and Drainage:

The photographic quality of the photographs was satisfactory for contouring purposes and no areas of questionable contours remain.

35. Shoreline and Alongshore Details:

Inspection of the shoreline in the area of T-9232 is non-existent due to a lack of photo coverage of the area at the time of the field work. However, inspection to the north and south of this sheet has been sufficient to indicate the shoreline location on this quad also. No low-water or foul areas were apparent in the photos.

36. Offshore Details: Not applicable.

37. Landmarks and Aids: None.

38. Control for Future Surveys:

No hydro signals have been located. No topo stations were established on T-9233, but two were selected in the field on T-9232 and have been positioned by the

radial plot, as follows: (see 524 cards)

SEEP, 1949 and BUMP, 1949

39. Junctions:

All junctions are in agreement; T-8072 and T-8073 are on the north edge, and T-9238 and T-9239 on the south.

40. Horizontal and Vertical Accuracy: Standard.

46. Comparison with Existing Maps:

a. USGS Alaska Map 50, Platinum and Vicinity, Alaska, 1:62,500, 1938 edition.
b. 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 September 1916 (2nd edition), last correction 21 Apr 47.

48. Geographic Name Lists: See two separate pages, following.

49. Notes for the Hydrographer: None.

50. Compilation Office Review: See T-2 form, following.

Submitted by:

Orvis N. Dalbey

Orvis N. Dalbey,
Cartographer-Photogrammetric

Approved and Forwarded by:

Louis J. Reed

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

GEOGRAPHIC NAMES
Survey No.
T-9232

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	
ANITA CREEK										1
BOULDER CREEK										2
CLARA CREEK										3
DOWRY CREEK										4
DRY GULCH										5
FOX GULCH										6
GOODNEWS MINING COMPANY CAMP										7
KUSKOKWIM BAY										8
LAST CHANCE CREEK		(just N. of lat 58°56')								9
LAST CHANCE CREEK		(into Kuskokwim Bay)								10
McCANN CREEK										11
MEDICINE CREEK ama per Heck										12
PLATINUM CREEK										13
QUARTZ CREEK										14
RED MOUNTAIN										15
SALMON RIVER										16
SEATTLE CREEK										17
SMALLS CREEK										18
SNOW GULCH										19
SQUIRREL CREEK										20
THORSEN MOUNTAIN										21
TRACTOR ROAD										22
				Names approved						23
				2-19-53. L. Heck						24
										25
										26
										27
										27

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9232 - 9233

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 N 8. Bench marks N

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

✓ = checked
N = non-existent

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 N 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 N

CULTURAL FEATURES

27. Roads ✓ 28. Buildings ✓ 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. _____
Reviewer

_____
Supervisor, Review Section or Unit

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

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:

M-2623-12

Review Report T-9232 and T-9233
Topographic Maps
February 19, 1953

62. Comparison with Registered Topographic Surveys.- None

63. Comparison with Maps of other Agencies.-

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

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

See item 47
Chart No. 9103, Kuskokwim Bay, 1:200,000, published Sept. 1916 (2nd edition), last correction 10 October 1950.
There are no significant differences between these maps and the chart.

66. Adequacy of Results and Future Surveys.-

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

These maps are considered adequate as a base for hydrographic surveys and the construction of nautical charts.

Reviewed by:

B. J. Colner

B. J. Colner

APPROVED:

L C Landy
Chief, Review Section
Division of Photogrammetry

H. C. Edmonston
Chief, Nautical Chart Branch
Division of Charts 6Fd

L W Swanson
Chief, Div. of Photogrammetry MSR
9 November 1955

Earl O. Heaton JB
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9232

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1958	9103	L.S.S.	~~Before~~ After Verification and Review
12-24-69	9103	H. Ladd	Considered adequate appd until reconstructed ~~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.

NAUTICAL CHARTS BRANCH

SURVEY NO. T.9233

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1958	9103	L.S.S.	~~Before~~ After Verification and Review
12-24-69	9103	[illegible]	considered adequate app'd until reconstructed ~~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.