5726 5727
5728

5727
5728
5726

Diag. Cht. No. 9103

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-41 (49) Office No. T-5726 thru T-5728

LOCALITY

State Alaska

General locality Kuskokwim Bay

Locality Jacksmith Bay

1949-50

CHIEF OF PARTY

A.N.Stewart, Chief of Field Party
L.J.Reed, Div. of Photo.,Wash.,D.C.

LIBRARY & ARCHIVES

DATE June 19, 1958

B-1870-1 (1)

DATA RECORD

T-5726, 27, 28

Project No. (II): Ph-41(49) Quadrangle Name (IV):

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

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

Instructions dated (II) (III): 3 Mar 49

Copy filed in Division of Photogrammetry (IV) Office Files

Method of Compilation (III): Reading 9-lens Plotters

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

Scale Factor (III): None

Date received in Washington Office (IV): NOV 1 0 1954 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 15 April 1958

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

Reference Station (III):

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

Plane Coordinates (IV): State: Zone:

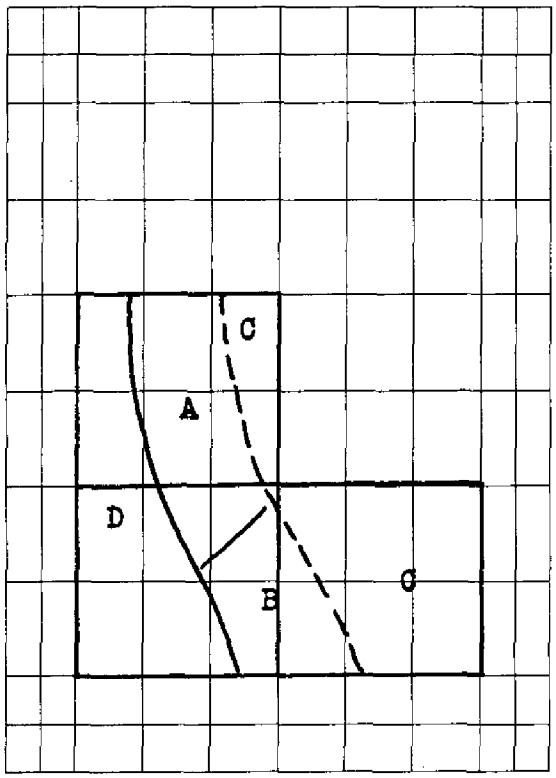
Y= X=

Universal Transverse Mercator Grid with 2500 meter intervals.

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)

No contouring in field during 1949.

Area A = compiled by Clarence E. Misfeldt on the Reading 9-lens Plotter, model "A".

Area B = compiled by Louis Levin on the Reading 9-lens Plotter, model "B".

Area C = Unmapped

Area D = Kuskokwim Bay

DATA RECORD

Field Inspection by (II): Date:

Shoreline and shoreline stations by: B. Kurs 13 July 1949
Inland horizontal control by : none
Vertical control by : J. Chamberlin 11 July 1949

Planetable contouring by (II): Date:

None

Completion Surveys by (II): Date: ——

None

Mean High Water Location (III) (State date and method of location):

MHWL is dated 1949 since it was delineated on the 9-lens plotters using 1949 field inspection as a guide.

Projection and Grids ruled by (IV): Austin Riley on the Reading Ruling Machine Date: 16 Sep 53

Projection and Grids checked by (IV) Howard D. Wolfe Date: 18 Sep 53

Control plotted by (III): Lester C. Lande Date: 20 Sep 53

Control checked by (III): Neil S. Schultz Date: 22 Sep 53

Radial Plot ~~or Stereoscopic~~ Control extension by (III): Samuel D. Blankenbaker Date: 28 Oct 53

Stereoscopic Instrument ~~extension~~ delineation (III): Planimetry Louis Levin and Clarence E. Misfeldt Date: 16 Jun 54
Contours Date:

Manuscript delineated by (III): John B. McDonald Date: 2 Nov 54

Photogrammetric Office Review by (III): Louis J. Reed Date: 9 Nov 54

Elevations on Manuscript checked by (II) (III): Louis J. Reed Date: 9 Nov 54

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
28378-82	8 Aug 50	14:15	1:20,000	8' below MHHW
28385-86	"	14:20	"	"
28459-60	"	15:55	"	"

Tide (III)

Reference Station: Matarani, Peru
Subordinate Station: ~~Eek Channel off Kwimhagak~~
Subordinate Station: Warehouse Creek Entrance

Ratio of Ranges	Mean Range	Diurnal ~~Spring~~ Range
~~4.3 H~~		
~~1.7 L~~	~~9.7~~	~~12.3~~
4.4 H 1.7 L	10.0	12.6

Washington Office Review by (IV): K. N. Maki Date: 17 Jan. 1955

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

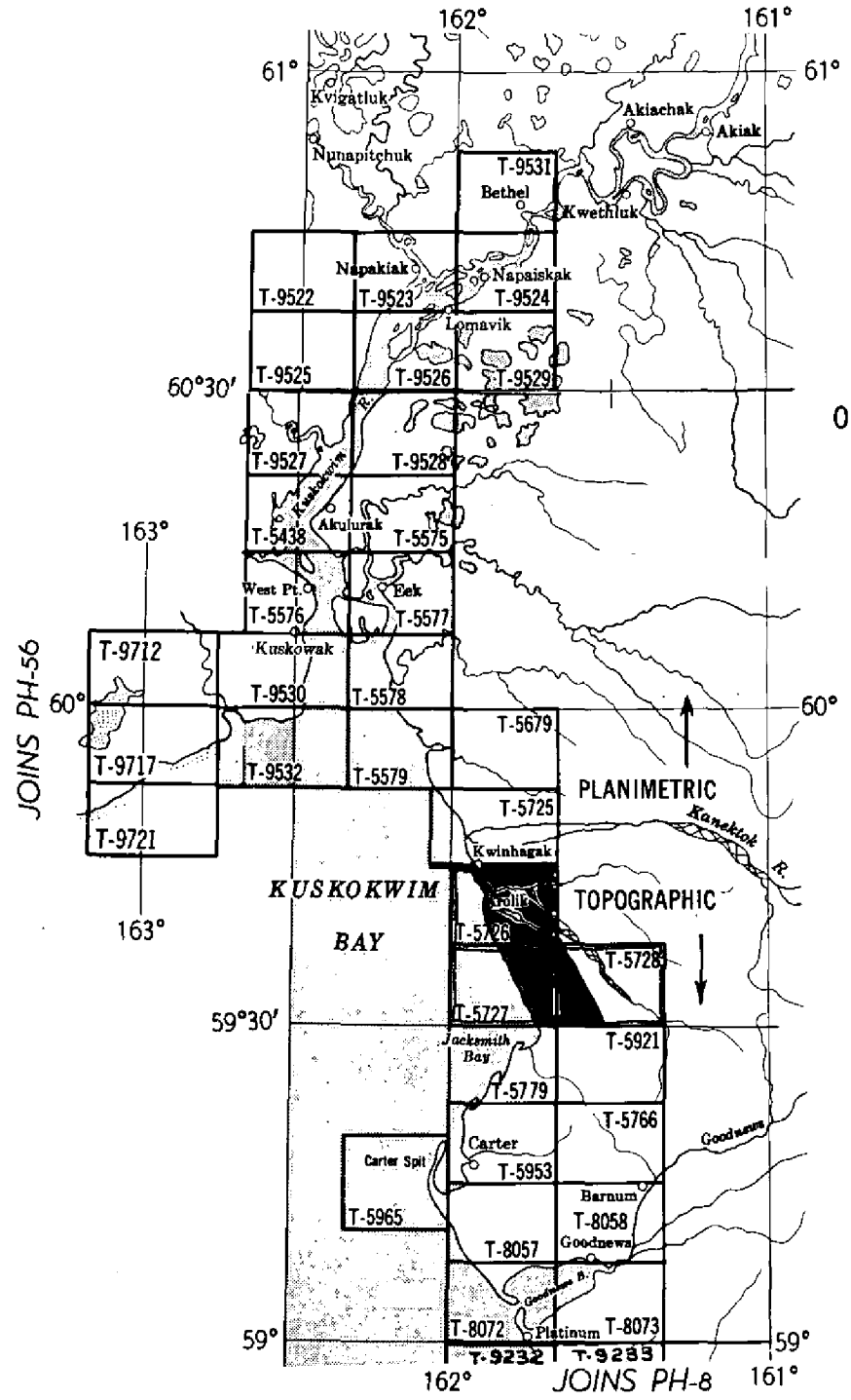
Land Area (Sq. Statute Miles) (III): See table in Remarks below
Shoreline (More than 200 meters to opposite shore) (III): "
Shoreline (Less than 200 meters to opposite shore) (III): "
Control Leveling - Miles (II): none
* Number of Triangulation Stations searched for (II): Recovered: Identified: 3
* Number of BMs searched for (II): Recovered: Identified: 0
Number of Recoverable Photo Stations established (III): 5
Number of Temporary Photo Hydro Stations established (III): 0

Remarks: See Project Report, section TOPOGRAPHIC SHEETS.

	AREA	SHORELINE 200m+	SHORELINE 200m⁻
T-5726 =	56 sq mi	10 miles	8 miles
T-5727 =	18 sq mi	0 miles	0 miles
T-5728 =	33 sq mi	10 miles	0 miles

PLANIMETRIC AND TOPOGRAPHIC MAPPING PROJECT PH-41

ALASKA-BERING SEA, Kuskokwim Bay to Goodnews Bay



OFFICIAL MILEAGE FOR COST ACCOUN

PLANIMETRIC

Sheet No's.	Sq. St. Miles
T-5438	55
T-5575	54
T-5576	65
T-5577	80
T-5578	45
T-5579	35
T-5679	108
T-5725	104
T-9522	18
T-9523	65
T-9524	76
T-9525	65
T-9526	65
T-9527	54
T-9528	45
T-9529	82
T-9530	88
T-9531	100
T-9532	18
T-9712	80
T-9717	91
T-9721	6
TOTALS	1399

TOPOGRAPHIC

Sheet No's.	Sq. St. Miles
T-5726	80
T-5727	40
T-5728	104
T-5779	45
T-5921	104
T-5953	90
T-5965	15
T-5766	104
T-8057	104
T-8058	104
T-8072	20
T-8073	90
TOTALS	900

PLANIMETRIC MAPS: Maps T-5438, T-5575 to T-5579, T-5725, T-9522 to T-9532, T-9712, T-9717 and T-9721.
TOPOGRAPHIC MAPS: Maps T-5726 to T-5728, T-5766, T-5779, T-5953, T-5965, T-8057, T-8058, T-8072 and T-
T-5921 8073

Compiled at 1:20,000 scale, from 1:20,000 scale nine-lens photographs taken August 1950 and 1:27,000 scale single-lens photographs taken August 1948.
(Refer to Air-photo Index B-52-53 and E-1-2).

For field work done on 1945 photography (See Air-Photo Index E
For field work done on Tri-Met photography (See Tri-Met Index).

Summary to Accompany Descrptive Report
T-5726, T-5727 and T-5728

Topographic maps T-5726, T-5727 and T-5728 are three of 12 similar maps in project PH-41. These three maps cover the coastal area of Kuskokwin Bay, from Kwinhagak south to Jacksmith Bay. Project PH-41, in addition to 12 topographic maps, includes 22 planimetric maps for a project total of 34 maps. These maps were compiled on the 9-lens Reading Plotter. Field operations preceding compilation included field inspection, the recovery of horizontal control and the determination of elevations required to control a stereo-instrument project vertically. Compilation was at a scale of 1:20,000. Contours were drawn at a 50-foot interval with 25-foot interval supplemental contours. The maps were not field edited.

A cloth-backed lithographic print of each map at manuscript scale and the combined descriptive report will be registered and permanently filed in the Bureau Archives.

FIELD INSPECTION REPORT

2-20. See separate report entitled:

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

KUSKOKWIM BAY, ALASKA

Project Ph-41(49) May to July 1949

A. Newton Stewart Chief of Party

Filed in library as Project Completion report Ph41.

RADIAL PLOT REPORT

21-30. See separate Descriptive Report (T-8072-73 combined)

A single radial plot covered the area of the quads of this report along with the area of several other quads, and the single report for that plot is now a part of Descriptive Report, T-8072 & 73.

COMPILATION REPORT

31. Delineation:

Delineation was accomplished on the Reading 9-lens plotter as outlined on page 2. Not all of the neat line area was completed; missing areas are also shown on page 2.

32. Control:

In general, both horizontal and vertical control was adequate as indicated in side-heading 23 of the Radial Plot Report. However, one additional flight strip across T-5728 was not delineated since vertical control was considered to be too weak in the area.

33. Supplemenatl Data:

Special brochure of computed elevations.

34. Contours and Drainage:

The quality of the photography was suitable for contouring purposes and no areas of questionable contours remain.

35. Shoreline and Alongshore Details:

The shoreline in this vicinity is very smmoth and regular requiring a minimum of field inspection. Approximate low water was instrument delineated.

36. Offshore Details: Not applicable.

37. Landmarks and Aids: (in this area; two landmarks only)

T-5727 = Shelter cabin, W.shore, Jacksmith Bay (also JACK'49)
T-5728 = Peak, N.Yoke Mtn, also a Δ.

38. Control for Future Surveys:

Five topo stations were positioned by the radial plot and are shown on the manuscripts in proper symbol, as follows:

T-5726	= PINK 1949,	identified on photo	14703	Forms 524
T-5727	= JACK 1949,	"	22966	in Div. of
"	= JAKE 1949,	"	22966	Photogrammetry
"	= KING 1949,	"	14702	general files.
"	= YOKE 1949,	"	22968	

39. Junctions:

All junctions common to this project are in agreement. No contemporary surveys exist on the west. T-5725 to the north was compiled, planimetric, on a different grid which required an adjustment as indicated by three black circles on the north junction line on T-5726. Holding the adjusted corners, the detail is in agreement.

40. Horizontal and Vertical Accuracy:

The 50ft contours of this compilation are correct to within one half this contour interval, and the 25ft supplemental contours used in the low areas are considered to be even more accurate, although this is not required. Horizontal accuracy also meets accuracy standards.

46. Comparison with Existing Maps:

Prior to this project, no other large scale maps of this area have ever been compiled.

47. Comparison with Nautical Charts:

No. 9103, KUSKOKWIM BAY, 1:200,000, is the largest scale Chart of this area.

48. Geographic Name List: See page 11.

49. Notes for the Hydrographer: See side-heading 38.

50. Compilation Office Review: See T-2 form, page 12.

submitted by:

Orvis N. Dalbey

Orvis N. Dalbey, Chief,
9-lens Plotter Section

Forwarded by:

Louis J. Reed

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

GEOGRAPHIC NAMES

Survey No.
T-5726
T-5727
T-5728

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	
T-5726										1
AROLIK (Abandoned)										2
KIKKU CREEK										3
KUSKOKWIM BAY										4
KWINHAGAK										5
NAKEE CREEK										6
NORTH MOUTH Arolik River										7
SOUTH MOUTH Arolik River										8
TSINGIGKALIK LAKE										9
ITHAGTSUTLEK LAKE										10
T-5727										11
KUSKOKWIM BAY										12
SAYALIK CREEK										13
Jacksmith Bay										14
T-5728										15
NORTH YOKE MT or Mountain										16
SOUTH YOKE MT or Mountain										17
Canyon Creek (flows northeasterly)										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

this is form approved by B.G.N.

Names approved 1-4-55. L. Heck

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-5726, 27, 28

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

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line ✓ 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 ✓ 22. Planetable contours N 23. Stereoscopic instrument contours ✓ 24. Contours in general ✓ 25. Spot elevations ✓ 26. Other physical features ✓

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 Branch
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

62. Comparison with Registered Topographic Surveys:

T-3399 1:40,000 1913

A comparison of the new surveys with the old survey indicates that changes have occurred in the shoreline at Kwinhagak and at the entrance to the North Mouth Arolik River and the entrance to the South Mouth Arolik River. The balance of the shoreline, which is mostly fronted by bluffs, has remained relatively stable in position and configuration.

63. Comparison with Maps of Other Agencies:

Goodnews, Alaska (Reconnaissance)
1:250,000 1951

No effective comparison can be made between these maps and the U.S.G.S. map since the small scale U.S.G.S. survey is only of reconnaissance value.

64. Comparison with Contemporary Hydrographic Surveys:

There are no contemporary hydrographic surveys in the area of these maps. The only hydrographic survey is H-3569 at scale 1:60,000, dated 1913.

65. Comparison with Nautical Charts:

9103 1:200,000 corrected to 2/18/52

There are no critical differences between the maps and the chart. The small scale of the chart precludes a detailed comparison.

66. Adequacy of Results and Future Surveys:

These maps are adequate for use in hydrographic surveys and the construction of nautical charts. These maps meet the National Standards of Map Accuracy.

Reviewed by:

K. N. Maki

K. N. Maki

APPROVED:

L C Lande

Chief, Review Section
Div. of Photogrammetry

Chief, Nautical Chart Branch
Div. of Charts

Chief, Div. of Photogrammetry

Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T 5726

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1958	9103	L.S.S.	~~Before~~ After Verification and Review SMW
			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. 5727

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1958	9103	L.S.S.	~~Before~~ After Verification and Review JMA
			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-5728

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1958	9103	L.S.S.	~~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.