9475 9476
9477 9478

Diag. Cht. No. 9400.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-27(48) *Office No.* T-9475, T-9476, T-9477, T-9478

LOCALITY

State Alaska

General locality Kotzebue Sound

Locality Baldwin Peninsula and Nazuruk Channel Areas.

1948-51

CHIEF OF PARTY

A.N.Stewart, Chief of Field Party

H .A.Paton, Chief B'more Photo. Office

~~E.J.Reed, Div. of Photo. Wash.,D.C.~~

LIBRARY & ARCHIVES

DATE January 22, 1958

B-1870-1 (1)

9475 9476 9477 9478

DATA RECORD

T-9475, 76, 77, 78

Project No. (II): Ph-28(47) Quadrangle Name (IV): T-9475 = TOPO STATION CHAR
T-9476 = TRIANGULATION STATION INLET
T-9477 = MOUTH NAZURUK CHANNEL
T-9478 = ATTIUNIK POINT

Field Office (II): Portland, Oregon Chief of Party: A.Newton Stewart

Photogrammetric Office (III): Baltimore, Md Radial Plot Officer-in-Charge: Hubert A.Paton, Chief
Washington, D.C. Compilation Louis J.Reed, Chief Stereo-Map Section

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

(II) = 21 Apr 48
(III) = 23 Oct 50

Method of Compilation (III): R eading 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): DEC 16 1952 Date reported to Nautical Chart Branch (IV): DEC 22 1952

Applied to Chart No. Date: Date registered (IV): 13 May 1957

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

Geographic Datum (III): NA 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):

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

Plane Coordinates (IV): State: Zone:

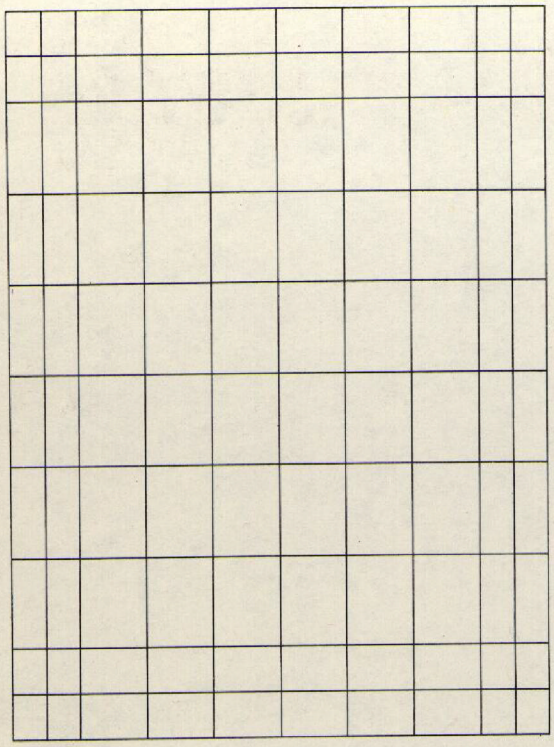
Y= X=

MILITARY GRID: Universal Transverse Mercator,
Zone 3 = T-9475
Zone 4 = T-9476, 77, 78.

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)

100% compiled on the Reading Plotter,
model "B" by the team of:

Louis Levin
and
Arthur B. Zimmerli

M-2618-12(4)

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):

This MHWL might be considered as dated 1951 since it was compiled using 1951 photographs, but the compilation was guided by 1948 field indications of the MHWL on 1947 photographs, and therefore it is a 1948 shoreline. Essentially 1951 1947

Projection and Grids ruled by (IV): Jack Allen on the Reading Ruling Machine Date: 3 Oct 51

Projection and Grids checked by (IV): Howard D.Wolfe Date: 4 Oct 51

Control plotted by (III): Ruth Hartley Date: 11 Dec 51

Control checked by (III): Grover B.Torbert Date: 11 Dec 51

Radial Plot ~~or Stereoscopic~~ Control extension by (III): Ruth Hartley Verified by Frank J. Tarcza Date: 17 Jul 52

Stereoscopic Instrument compilation (III): delineation

Planimetry: Louis Levin and Arthur B. Zimmerli Date: 20 Sep 52

Contours: Date:

Manuscript delineated by (III): Arthur B.Zimmerli Date: 4 Dec 52

Photogrammetric Office Review by (III): Louis J. Reed Date: 9 Dec 52

Elevations on Manuscript checked by (III): Louis J. Reed Date: 9 Dec 52

M-2618-12(4)

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

Instrument PHOTOGRAPHS (III) Number	Date	Time	Scale	Stage of Tide
33 859-62		1325 - 1329		
33903-05	27 Jun 51	1426 - 1428	20,000	~~No tide~~ -1 ft.
33929-33		1453 - 1458		

Tide (III)

diurnal

Ratio of Ranges	Mean Range	~~Spring~~ Range
		~~6.1~~
		2.7

Reference Station: ~~Icy Cape~~ KiwaliK
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): B.J.Colner Date: 11-10-53

Final Drafting by (IV): Pat Lach Date: 1-3-56

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

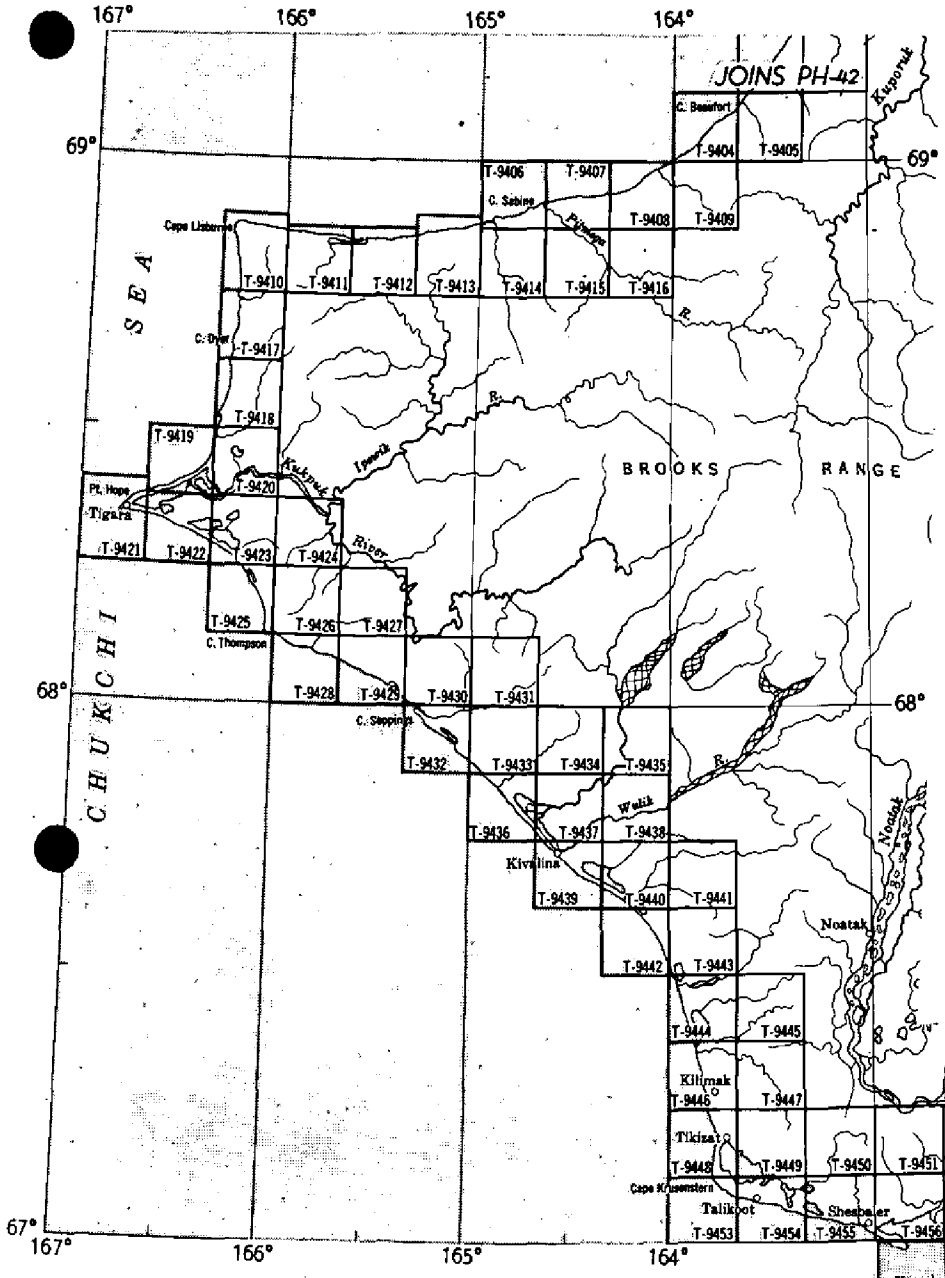
Land Area (Sq. Statute Miles) (III): See remarks below
Shoreline (More than 200 meters to opposite shore) (III): See remarks below
Shoreline (Less than 200 meters to opposite shore) (III): See remarks below
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): Recovered: Identified: 4
Number of BMs searched for (II): None Recovered: Identified:
Number of Recoverable Photo Stations established (III): eleven
Number of Temporary Photo Hydro Stations established (III): four

Remarks:

	LAND AREA	200m+ SHORELINE	200m- SHORELINE
T-9475 =	6 sq mi	.3 miles	none
T-9476 =	9 sq mi	1.4 miles	none
T-9477 =	44 sq mi	1.5 miles	4 miles
T-9478 =	29 sq mi	1.6 miles	5 miles

M-2618-12(4)

ALASKA, Chukchi Sea, Kiwalik to C. Beaufort



OFFICIAL MILEAGE FOR COST ACCOU

Sheet No's.	Sq. St. Miles	Sheet No's.	Sq. St. Miles	Sheet No's.
T-9404	28	T-9434	21	T-9466
T-9405	66	T-9435	1	T-9467
T-9406	14	T-9436	23	T-9468
T-9407	33	T-9437	74	T-9469
T-9408	53	T-9438	50	T-9470
T-9409	68	T-9439	36	T-9471
T-9410	52	T-9440	68	T-9472
T-9411	66	T-9441	41	T-9473
T-9412	63	T-9442	11	T-9474
T-9413	72	T-9443	73	T-9475
T-9414	75	T-9444	46	T-9476
T-9415	68	T-9445	40	T-9477
T-9416	55	T-9446	30	T-9478
T-9417	53	T-9447	75	T-9479
T-9418	64	T-9448	11	T-9480
T-9419	8	T-9449	66	T-9481
T-9420	70	T-9450	78	T-9482
T-9421	3	T-9451	75	T-9483
T-9422	21	T-9452	60	T-9484
T-9423	56	T-9453	2	T-9485
T-9424	61	T-9454	25	T-9486
T-9425	15	T-9455	50	T-9487
T-9426	74	T-9456	54	T-9488
T-9427	67	T-9457	77	T-9489
T-9428	11	T-9458	59	T-9490
T-9429	40	T-9459	66	T-9491
T-9430	74	T-9460	69	T-9492
T-9431	26	T-9461	1	T-9493
T-9432	28	T-9462	31	T-9494
T-9433	60	T-9463	1	T-9495
		T-9464	15	T-9496
		T-9465	60	TOTAL

Compiled at 1:20,000 scale, from 1:20,000 scale nine-lens photographs taken July, 1950 and June, 1951. For additional nine-lens photography refer to: Air-photo Index A-38 (1:20,000 scale, taken September 1947) Air-photo Index B-3 (1:28,000 scale taken Sept. 1947) Air-photo Index B-13 (1:20,000 scale, taken September 1947 and August 1948)

For single-lens photography on which some field work was done refer to: Air-photo Index A-11 (1:27,500 scale, taken August 1948) Air-photo Index A-23 (1:27,500 scale, taken August, 1948, and 1:40,000 scale, August, 1950) Air-photo Index A-24 (1:27,500 scale, August, 1948) Air-photo Index A-36 (1:40,000 scale, August, 1950)

For photography of other agencies on which some field work was done refer to: Alaskan WAC 64 Index (1949 Naval Petroleum Reserve photography, scale 1:20,000 and 1946 Air-Force TRI-MET photography, scale 1:24,000)

Summary to Accompany T-9475 through T-9478

Ph-28(47) covers the eastern shore of the Chukchi Sea in Alaska and runs from Candle on the Kiwalik River on the south to Cape Beaufort to the north.

There are ninety-four topographic quadrangles (T-9402 to T-9434 and T-9436 to T-9496) in this project.

T-9475 through T-9478 are topographic surveys which contain the lower portion of the Baldwin Peninsula and the mouth of the Nazuruk Channel, and they border on the Kotzebue Sound, Hotham Inlet, and Selawik Lake.

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 ~~cloth~~, cronar backed ~~lithographic~~ print of each map at the compilation scale will be registered with the descriptive report in the Bureau of Archives.

FIELD INSPECTION REPORT

2-20:

See separate report entitled:

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

KOTZEBUE SOUND, ALASKA

Project Ph-28(47) July to Sept 1948

A.Newton Stewart, Chief of Party

RADIAL PLOT REPORTS

21-30:

The area of the three quads of this report was controlled as the junction area of three separate radial plots, one down the long narrow neck of the Baldwin Peninsula, one of the south portion of the Kobuk River Delta, and the third as the northern portion of the peninsula forming the south shore of Eschscholtz Bay. The first two were laid first and separately, and then both were tied into the third when it was laid.

Therefore, for information concerning the radial plot for the area being reported, see three separate Descriptive Reports each of which contains a Radial Plot Report that is involved, as follows:

Baldwin Peninsula area in combined report T-9466 and T-9467.

Kobuk River Delta area in combined report T-9468 and T-9479.

Elephant Point Area in combined report T-9479 thru 82.

COMPILATION REPORT

31. Delineation:

Contours and cultural features were delineated on the Reading Plotter, model "B", simultaneously. the entire land area of all four quads has been mapped.

32. Control:

Horizontal control was adequate for satsifactory radial plots according/to side-heading 23 of both Radial Plot Reports involved. Vertical control was also adequate, more than adequate because the majority of the area is very low, very near sea-level datum, furnishing many points of elevation along the shoreline. One V-station was supplied by the field party, V-1108 on T-9478. An elevation was computed for it following the radial plot and this elevation agreed with the datum of the model in which it fell.

33. Supplemental Data:

a. Elevation Computations:

"TABULATION OF ELEVATIONS AND COMPUTATION OF ELEVATIONS BY MAP MANUSCRIPTS FOR VERTICAL CONTROL STATIONS IN THE AREA OF MAP MANUSCRIPTS T-9465, T-9468, T-9469, T-9473, T-9474, T-9476, T-9477, and T-9478."

b. Field Inspection Photographs:

20564,20692,20693,20694,20857,20858,20859,20860,20891, 20892,20893, and 20894.

34. Contours and Drainage:

The photographs were of good quality photographically and no areas of questionable contours are left.

35. Shoreline and Alongshore Details:

Shoreline inspection was adequate as an indication of the location of the MHWL relative to the tide stage. A few shoal areas were delineated on T-9477 and T-9478 during instrument operations.

36. Offshore Details: Not applicable.

37. Landmarks and Aids: None recommended - None exist.

38. Control for Future Surveys:

Eleven Topo Stations and four Hydro stations were selected and photo identified in the field. All have been positioned by the radial plot and appear on the manuscripts in proper name and symbol as follows:

(See next page)

38 Control for Future Surveys(continued):

	TOPO STATIONS	HYDRO STATIONS
T-9475	CHAR, 1948.	No 765, No 766
T-9476	BAIT 1948, CHOP 1948, EARL 1948, FA ME1948.	No 767, No 768
T-9477	BASS 1948, SAND 1948.	None
T-9478	BLOW 1948, PLUM 1948, PRIM 1948, VEST 1948.	None

39. Junctions: All are in agreement - see page 5 for quad nimbers.

40. Horizontal and Vertical Accuracy:

These maps have been compiled at a scale of 1:20,00 and they meet the requirements of Map Standards (horizontal) for maps of that scale. The 25ft contour has been delineated thruout and is believed to be accurate to half 25ft. However, these maps have been contoured as 50ft contour interval maps and they are accurate to the degree specified by Map Accuracy Standards for a map of 50ft contour interval.

46. Comparison with Existing Maps: No maps of comparable csale exist, but the following two do cover the same area:

"SELAWIK and KOTZEBUE, Alaska, Reconnaissance Topographic Series, Second Judicial Division, USGS, 1:250,000, 1951 Ed."

47. Comparison with Nautical Charts: No charts of comparable scale exist but the following one does cover the area:

"ARCTIC COAST, Alaska, No 9400, 1:1,587,870, May 1946, 6th edition, last correction date of 27 November 1950."

48. Geographic Name List: See separate page.

49. Notes for the Hydrographer: See separate unnumbered page.

50. Compilation Office Review: See separate page, following.

Submitted by

Orvis N. Dalbey

Orvis N.Dalbey,
Cartographer-Photogrammetric

Approved by

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

49. Notes for The Hydrographer:

T-9475

a. Topo Stations:

CHAR, 1948 - identified on photo 20894 - see 524 card

b. Hydro Stations:

No 765 - identified and described on photo 20894; "SW tip of bluff on NE side of the N'ly of two large gullys about 120 meters apart. SW tip of tundra on top of bluff was pricked."
No 766 - identified and described on photo 20892; "Center of bare spot on face of bluff on N side of gully."

T-9476

a. Topo Stations:

EARL, 1948 - identified on photo 20892 - see 524 card
FAME, 1948 - identified on photo 20891 - see 524 card
CHOP, 1948 - identified on photo 20564 - see 524 card
BAIT, 1948 - identified on photo 20564 - see 524 card

c. Hydro Stations:

No 767 - identified and described on photo 20892; "NW tip of sharp-pointed bluff on S side of large gully that runs at a SE angle to the shoreline. Base pricked."
No 768 - identified and described on photo 20892; "Center of large bare patch on bluff about 130 meters S of large gully. A clump of grass is in the center of the patch. Clump of grass picked."

T-9477

a. Topo Stations:

BASS, 1948 - identified on photo 20857 - see 524 card
SAND, 1948 - identified on photo 20858 - see 524 card

b. Hydro Stations: None.

T-9478

a, Topo Stations: b. Hydro Stations: None.
BLOW, 1948 - identified on Photo 20694 - see 524 card
PLUM, 1948 on 20860, PRIM,1948 on 2-693, VEST,1948(20694)

GEOGRAPHIC NAMES

Survey No.

T-9475,76,77,78

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-9475										1
BALDWIN PENINSULA										2
HOTHAM INLET										3
KOTZEBUE SOUND										4
										5
T-9476										6
BALDWIN PENINSULA										7
HOTHAM INLET										8
KOBUK RIVER DELTA										9
KOTZEBUE SOUND										10
										11
T-9477										12
HOTHAM INLET										13
NA ZURUK CHANNEL										14
										15
T-9478										16
ATTIUNIK POINT										17
BALDWIN PENINSULA										18
HOTHAM INLET										19
NAZURUK CHANNEL										20
SELAWIK LAKE										21
			Names approved 11-10-53 L. Heck							22
										23
										24
										25
										26
										27

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-9475, 76, 77, 78

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. N 15. Bridges N 16. Aids to navigation N 17. Landmarks N 18. Other alongshore physical features N 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 N

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. _____ 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-9475 through T-9478
Topographic Maps
November 10, 1953

62. Comparison with Registered Topographic Surveys.- None

63. Comparison with Maps of Other Agencies.-

USGS Alaska Map, Selawik	1:250,000	1951 edition
" " " Kotzebue	"	" "

Comparison not feasible because of scale difference.

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

9400	1:1,587,870	June 1952
9402	1:750,000	May 1950

Scale difference precludes satisfactory comparison.

66. Adequacy of Results and Future Surveys.-These maps comply with project instructions and are adequate as bases for hydrographic surveys and the construction of nautical charts.

Reviewed by:

B. J. Colner

APPROVED

Chief, Review Branch
Div. of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Photogrammetry

Chief, Div. of Coastal Surveys

8 January 1958