

9495 9496

9496
9495

Diag. Cht. No. 9400.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

T-9495

Field No. Ph-28 (47) Office No. T-9496

LOCALITY

State Alaska

General locality Kotzebue Sound

Locality Candle

1948-51

CHIEF OF PARTY

A.N. Stewart, Chief of Field Party

H. A. Paton, Chief Baltimore Photo.

Office.

LIBRARY & ARCHIVES

DATE January 9, 1958

DATA RECORD

T-9495 and T-9496

Project No. (II): **Ph-28(47)** Quadrangle Name (IV): **T-9495 = CANDLE**
T-9496 = CLEM MOUNTAIN

Field Office (II): **Portland, Oregon** Chief of Party: **A. Newton Stewart**
Baltimore, Md Radial Plot **Hubert A. Paton, Chief**
 Photogrammetric Office (III): **Washington, D.C.** Officer-in-Charge: **Louis J. Reed, Chief,**
Stereoscopic Mapping Branch
 Instructions dated (II) (III): **Copy filed in Division of**
Photogrammetry (IV)

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

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):

JUN 29 1953

Date reported to Nautical Chart Branch (IV):

JUL 6 1953

Applied to Chart No.

Date:

Date registered (IV): **16 May 1957**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **NA 1927**

(adjusted)

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

XXXXXXXXXX

Plane Coordinates (IV):

State:

Zone:

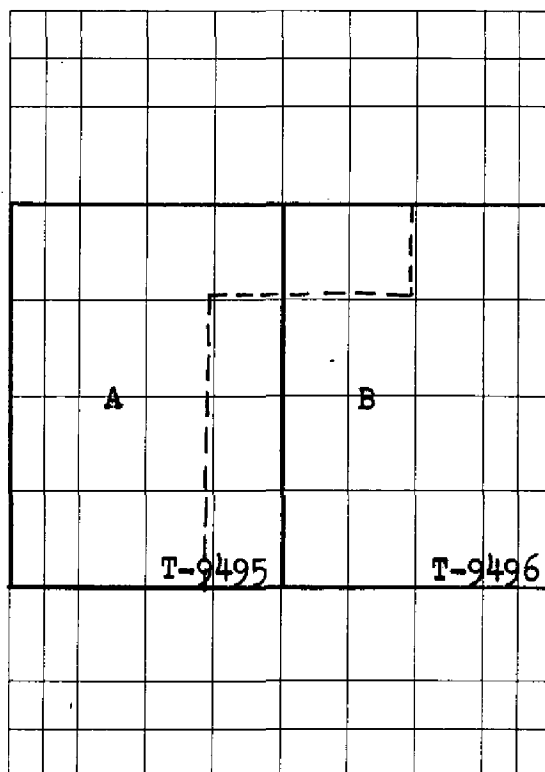
Y=

X=

Universal Transverse Mercator Grid, Zone 4, with 2500m interval

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)
 (X) (III)

A = Compiled on the Reading Plotter, model "A",
 by Clarence E. Misfeldt.

B = Compiled on the Reading Plotter, model "B",
 by Louis Levin and Orvis N. Dalbey.

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 compilation is dated 1948 since it was guided by 1948 field inspection of the MHWL on 1947 photographs. However, for all practical purposes, because the instrument photography used was taken in 1951, this compilation could be dated 1951.

Projection and Grids ruled by (IV):

Jack Allen on the Reading Ruling Machine

Date:

4 Jun 52

Projection and Grids checked by (IV):

Howard D. Wolfe

Date:

5 Jun 52

Control plotted by (III):

Albert Queen

Date:

24 Jul 52

Control checked by (III):

Joseph Stein berg

Date:

25 Jul 52

Radial Plot or Stereoscopic

Ruth HartleyDate: **12 Aug 52**

Control extension by (III):

Verified by Frank J. Tarcza**13 Aug 52**

delineation
Stereoscopic Instrument ~~provided~~ (III): **and** **Clarence E. Misfeldt**,
Planimetry **and Louis Levin, and**
Contours **Orvis N. Dalbey**

Date:

28 May 53

Manuscript delineated by (III): **Robert L. Sugden and**
Henri Lucas

Date: **26 June 53**Photogrammetric Office Review by (III): **Louis J. Reed**Date: **27 June 53**

Elevations on Manuscript **Louis J. Reed**
checked by (III):

Date: **27 June 53**

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

Number	Date	Time	Scale	Stage of Tide
33958		1539		
33959		41		
60		42		
61		43		
65		44 53		- 2 ft.
66	27 Jun 51	55	1:20,000	No tide
67		56		
68		58		
72		1605		
73		1607		
74		1608		
75		1609		
34003		1644		
4		Tide (III) 45		
5		1646		

Reference Station:

Subordinate Station:

Subordinate Station:

~~Icy Cape~~ Kiwalik

Ratio of Ranges	Mean Range	diurnal Spring Range
		2.6
		2.7

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

Date: 2/3/54

Final Drafting by (IV): John H. Frazier
John H. Frazier T-9496Date: 2/2/56
2/15/56

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 81 sq mi, each quad

Shoreline (More than 200 meters to opposite shore) (III): 13 miles on T-9495 (none on T-9496)

Shoreline (Less than 200 meters to opposite shore) (III): 76+ miles on T-9495 (none on T-9496)

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II):

Recovered:

Identified: 2 (both on

Number of BMs searched for (II): None

Recovered:

Identified: T-9495)

Number of Recoverable Photo Stations established (III): 2 (both on T-9495)

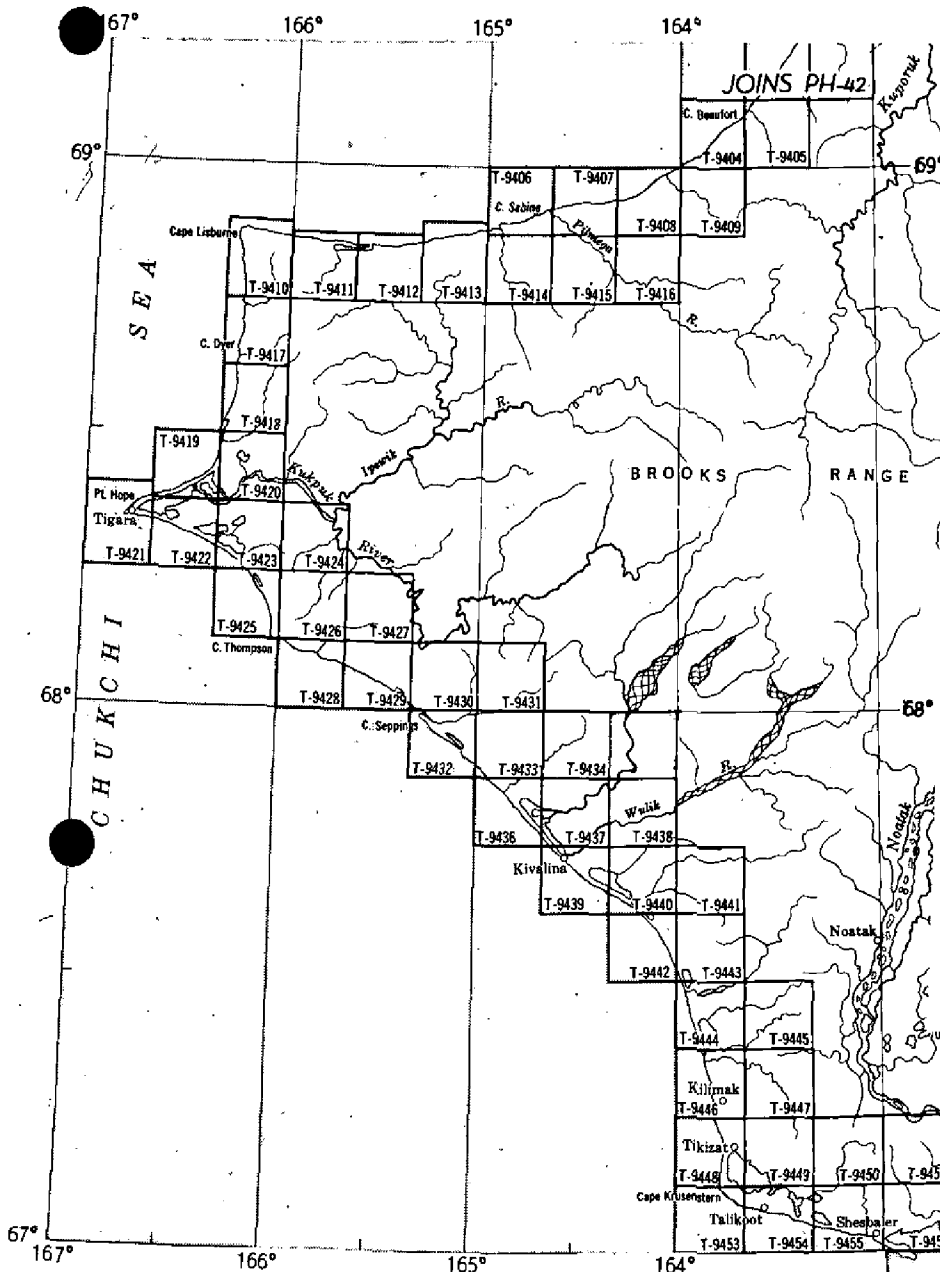
Number of Temporary Photo Hydro Stations established (III): 2 (both on T-9495)

Remarks:

TOPOGRAPHIC MAPPING PROJECT PH-28

ALASKA, Chukchi Sea, Kiwalik to C. Beaufort

Page 5



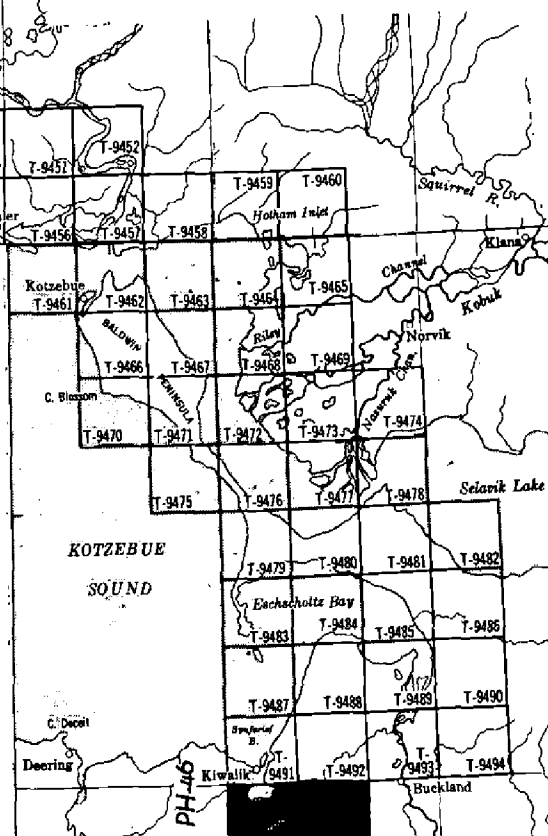
OFFICIAL MILEAGE FOR COST ACCOUNT

Sheet No's.	Sq. St. Miles	Sheet No's.	Sq. St. Miles	Sheet No's.	Sq. St. Miles
T-9404	28	T-9434	21	T-9466	
T-9405	66			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-9495 and T-9496

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-9495 and T-9496 are topographic surveys which contain the Kiwalik River, Jump and Duck Creeks, and the southern portion of Kiwalik Lagoon.

Each map manuscript consists of one sheet, $7\frac{1}{2}$ -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 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 REPORT

21-31:

A single radial plot covered the area of the two quads of this report along with several other quads. A single radial plot report was written for the entire area and this report has been included in the Descriptive Report for quads T-9484 thru T-9486 (combined).

COMPILATION REPORT

31. Delineation:

The cultural features and contours were delineated simultaneously on the Reading Plotters by areas; see page 2. The entire land area of both quads has been mapped.

32. Control:

The Radial Plot Report, side-heading 23, indicates that horizontal control was inadequate; vertical control was also below requirements. But since the radial plot was made it has been discovered that AMS had just completed a compilation of the area to the south, east, and west of the two quads being reported. Control bridged by AMS for their work was extended north into our area, and it served as additional control, both vertical and horizontal, for our compilation. With this supplement, control was adequate.

33. Supplemental Data:

a. Elevation Computations: Separate volumn entitled:

"COMPUTATIONS OF ELEVATIONS AND TABULATION OF VERTICAL CONTROL POINTS FOR SURVEYS T-9482, T-9484 thru T-9496."

b. Field Inspection Photos: 20651, 20871, and 20872.

c. AMS Junction Sheets: BENDLEBEN D1, CANDLE D6 and D5

34. Contours and Drainage:

The photographs were of good quality and no areas of questionable contouring remain.

35. Shoreline and Alongshore Details:

Shoreline appears on T-9495 only. Inspection was adequate. Considerable apparent shoreline has been shown in Kiwalik Lagoon, with grass and mud areas indicated.

36. Offshore Deatils: Not applicable.

37. Landmarks and Aids:

No aids exist but one landmark was recommended by the field inspector; CLEM MOUNTAIN on T-9496.

38. Control for Future Surveys:

Two topo and three hydro stations were field selected and photo-identified. They have been positioned on T-9495 by the radial plot, as follwos: SAGE 1948, WASP 1948, No.654, No.784, and No.786. No such points exist on T-9496.

39. Junctions:

All junctions are in agreement including the south borders of both quads and the west border of T-9495 and the east border of T-9496, where junction was made to recent AMS compilations without alteration to AMS details or contours.

40. Horizontal and Vertical Accuracy:

The inadequacy of control as reported in the Radial Plot Report indicates that this compilation does not meet the requirements for standard accuracy. However, with the additional AMS control (see side-heading 32), the resulting total is adequate, and these two manuscripts meet the accuracy requirements specified for 1:20,000 maps with a 50ft contour interval. The supplemental (25ft) contours delineated are to assist the 50ft contours in portraying the relief of the ground where the spacing is too great, and they must be considered as meeting the same 50ft contour interval standards even though the instrument operator believes they will meet the standards for a 25ft interval. The strength of this compilation is emphasized by the fact that our radial plot and the AMS bridging of control were completed separately without the knowledge of the others operation, and yet details along the junction plotted in almost perfect accord and the contours were equally good. An Engr A on Clem Mountain, the existence of which was unknown to our radial plot people, was plotted during instrument compilation, and it was held to within 0.3mm by our radial plot positioning of the model in which it fell, using AMS photo-identification of the point.

46. Comparison with Existing Maps:

CANDLE, Alaska Reconnaissance Topographic Series, U.S.G.S., 1:250,000, Edition of 1951.

47. Comparison with Nautical Charts:

ARCTIC COAST, Alaska, No.9400, 1:1,587,870, May 1946, 6th edition, last correction date of 27 Nov 50.

48. Geographic Name List: See page 11.49. Notes for the Hydrographer: See separate unnumbered page.50. Compilation Office Review: See page 12.

Submitted by:

Approved by:

William D. Harris
 William D. Harris, Chief,
 9-Lens Plotting Inst. Sect.

Louis J. Reed
 Louis J. Reed, Chief
 Stereoscopic Mapping Branch
 Photogrammetric Engineer

49. Notes for the Hydrographer:

The following topo and hydro stations were field selected and identified. They have been positioned on the T-9495 manuscript; none exist in the area of T-9496. Positioning was by radial plot.

a. Topo Stations:

SAGE 1948; identified on 20871; described on 524 card
WASP 1948: " " 20872; " "

c. Hydro Stations:

No. 654: identified and described on photo 20871
No. 784: " 20872
No. 786: " 20872

No. 645 W gable of small cabin.

No. 784 N tip of small marsh island.

No. 786 N tip of marsh on SW side of mouth of small
creek on SE side of larger creek.

GEOGRAPHIC NAMES

Survey No.

T-9495, 96

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
<u>T-9495</u>									1
<u>CANDLE (Village)</u>									2
<u>CANDLE (Field)</u>									3
<u>CANDLE No.2 (Field)</u>									4
<u>CANDLE CREEK</u>									5
<u>CANDLE DITCH</u>									6
<u>JUMP CREEK</u>									7
<u>KIWALIK LAGOON</u>									8
<u>KIWALIK RIVER</u>									9
<u>MIDDLE CHANNEL</u>									10
<u>MINNEHAHA CREEK</u>									11
<u>MUD CREEK</u>									12
<u>MUD CREEK CHANNEL</u>									13
<u>MUD CREEK DITCH</u>									14
<u>NORTH CHANNEL</u>									15
<u>WABASH CREEK</u>									16
									17
<u>T-9496</u>									18
<u>DUCK CREEK</u>									19
<u>CLEM MOUNTAIN</u>									20
									21
For titles:									22
<u>Alaska</u>									23
<u>Kotzebue Sound</u>									24
<u>Second Judicial Division</u>									25
									26
									27

Names approved
2-3-54. L. Heck

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9495 & 9496

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)

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. ☒

41. Remarks (see attached sheet)

Supervisor, Review Section or Unit

Louis J. Reed, Chief

Stereoscopic Mapping Branch
Photogrammetric Engineer

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:

Review Report T-9495 through T-9496
Topographic Maps
February 3, 1954

62. Comparison with Registered Topographic Surveys.- None

63. Comparison with Maps of Other Agencies.-

USGS Alaska Map, Candle 1:250,000 1951 edition

Comparison not feasible due to great difference in scale.

64. Comparison with Contemporary Hydrographic Survey.- None


65. Comparison with Nautical Charts.-

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

Scale difference precludes a 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, Div. of Photogrammetry

18 Dec 1957


Chief, Nautical Chart Branch
Division of Charts


Chief, Div. of Coastal Surveys