9419 9420

9420

9419

Diag. Cht. No. 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-28(47) Office No. T-9419 T-9420

LOCALITY

State Alaska

General locality Kotzebue Sound, North

Locality Point Hope Area

194 50

CHIEF OF PARTY

L. G. Taylor, Chief of Field Party

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

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

LIBRARY & ARCHIVES

DATE March 10, 1958

8-1870-1 (1)

DATA RECORD

T-9419 and 20

Project No. (II): Ph-28(47) Quadrangle Name (IV): T-9419 = MARRYAT INLET
T-9420 = KUKPUK RIVER

Field Office (II): Kotzebue Sound, Alaska Chief of Party: Lorne G. Taylor

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

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, model "B"

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): JUL 15 1952 Date reported to Nautical Chart Branch (IV): ~~JUL 21 1952~~ DEC 9 1952

Applied to Chart No. Date: Date registered (IV): 7 June 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:

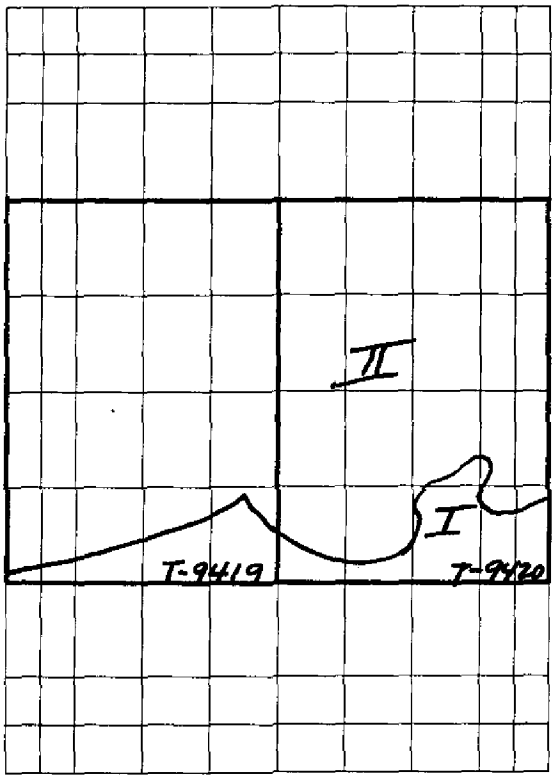
Y= X=

MILITARY GRID = Universal Transverse Mercator, Zone 3, with 2500 meter 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.

M-2618-12(4)



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

I 100% compiled on the Reading Plotter, model "B", by Louis Levin assisted by Arthur B. Zimmerli as student operator.

II 100% compiled on the Reading Plotter, model "B", by the team of Louis Levin and Orvis N. Dalbey.

DATA RECORD

Field Inspection by (II): H. R. Spies — Date: June - Sept. 1950

Planetable contouring by (II): None — Date:

Completion Surveys by (II): None — Date:

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

The MHWL is dated 1950. It was delineated on the plotting instrument guided by 1950 field identification of the shoreline on field photographs.

Projection and Grids ruled by (IV): Theodore L. Jangon on the Reading Ruling Machine — Date: 7 Mar 51

Projection and Grids checked by (IV): Howard D. Wolfe — Date: 6 Jul 51

Control plotted by (III): Albert Queen — Date: 8 Oct 51

Control checked by (III): Frank J. Tarcza — Date: 17 Oct 51

Radial Plot ~~or Stereoscopic~~ Control extension by (III): I- Frank J. Tarcza — Date: 26 Oct 51
II- ELMER L. WILLIAMS — Aug 53

delineation by: Planimetry & Contours
Stereoscopic Instrument compilation (III): Louis Levin — Date: 27 May 52

Manuscript compiled by (III): I- David F. Romero — Date: 10 Jun 52
II- Robert L. Sugden — 21 Oct 53

Photogrammetric Office Review by (III): Louis J. Reed — Date: 11 Jul 52
23 Nov 53

Elevations on Manuscript checked by (III): Louis J. Reed — Date: 11 Jul 52
23 Nov 53

M-2618-12(4)

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

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
27727	22 Jul 50	14:42	1: 20,000	None appreciable tide
27728	"	14:43	"	"
27637	"	12:35	"	"
27638	"	12:36	"	"
27639	"	12:37	"	"
27640	"	12:38	"	"
II 37914-17	17 Jul 52	7:55	"	"
37926-27	"	8:10	"	"
22724-26	23 Aug 48	12:35	"	"

* Mr Disney of Tides and Currents states that no tide exists in this area, for all practical purposes.

Tide (III)

diurnal

Ratio of Ranges	Mean Range	Spring Range
		~~xxx~~ .6

Reference Station: ~~Icy Cape~~

Subordinate Station:

Subordinate Station:

Washington Office Review by (IV): B. J. Colner Date: 4/29/54

Final Drafting by (IV): P. Lach T-9419 Date: 6-11-56
J Johnson T-9420 6-19-56

Drafting verified for reproduction by (IV): Wm O. Hallin Date: 8-6-56

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III): T-9419 = 11 sq mi
T-9420 = 72 " "

Shoreline (More than 200 meters to opposite shore) (III): T-9419 = 38 mi; T-9420 = 6 mi

Shoreline (Less than 200 meters to opposite shore) (III): " = none " = 22 "

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II): Recovered: Identified: ~~X~~ 4

Number of BMs searched for (II): None Recovered: Identified:

Number of Recoverable Photo (Hydro Topo) Stations established (III): T-9419 = none; T-9420 = 4

Number of Temporary Photo (Hydro Topo) Stations established (III): T-9419 = 2; T-9420 = 1

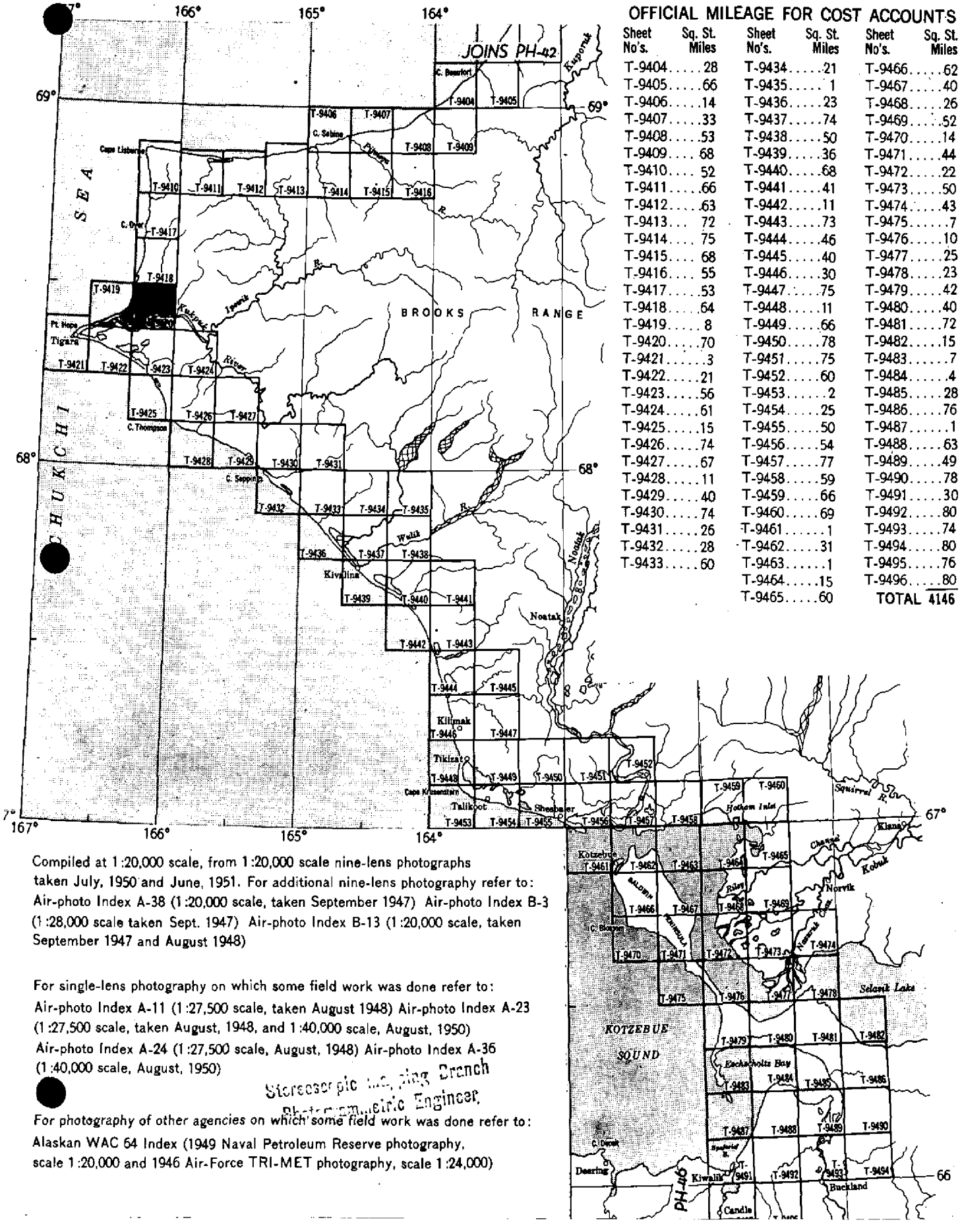
Remarks:

M-2618-12(4)

TOPOGRAPHIC MAPPING PROJECT PH-28

ALASKA, Chukchi Sea, Kiwalik to C. Beaufort

MAP LAYOUT SKETCH



OFFICIAL MILEAGE FOR COST ACCOUNTS

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	62
T-9405	66	T-9435	1	T-9467	40
T-9406	14	T-9436	23	T-9468	26
T-9407	33	T-9437	74	T-9469	52
T-9408	53	T-9438	50	T-9470	14
T-9409	68	T-9439	36	T-9471	44
T-9410	52	T-9440	68	T-9472	22
T-9411	66	T-9441	41	T-9473	50
T-9412	63	T-9442	11	T-9474	43
T-9413	72	T-9443	73	T-9475	7
T-9414	75	T-9444	46	T-9476	10
T-9415	68	T-9445	40	T-9477	25
T-9416	55	T-9446	30	T-9478	23
T-9417	53	T-9447	75	T-9479	42
T-9418	64	T-9448	11	T-9480	40
T-9419	8	T-9449	66	T-9481	72
T-9420	70	T-9450	78	T-9482	15
T-9421	3	T-9451	75	T-9483	7
T-9422	21	T-9452	60	T-9484	4
T-9423	56	T-9453	2	T-9485	28
T-9424	61	T-9454	25	T-9486	76
T-9425	15	T-9455	50	T-9487	1
T-9426	74	T-9456	54	T-9488	63
T-9427	67	T-9457	77	T-9489	49
T-9428	11	T-9458	59	T-9490	78
T-9429	40	T-9459	66	T-9491	30
T-9430	74	T-9460	69	T-9492	80
T-9431	26	T-9461	1	T-9493	74
T-9432	28	T-9462	31	T-9494	80
T-9433	60	T-9463	1	T-9495	76
		T-9464	15	T-9496	80
		T-9465	60	TOTAL	4146

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)

Stereoscopic Mapping Branch
Photogrammetric Engineer

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-9419 and T-9420

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-9419 and T-9420 are topographic surveys which contain the area in the vicinity of Marryat Inlet and the mouth of Kukpuk River.

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 REPORTS

2-20.

PART I: All of T-9419 except the NE tip, and only that portion of T-9420 south of the Kukpuk River, are covered by separate report entitled:

PROJECT REPORT

AERIAL PHOTOGRAPH CONTROL AND INSPECTION

CAPE KRUSENSTERN TO POINT HOPE, ALASKA

Project Ph-28(47) June to Sep 1950
Lorne G. Taylor, Chief of Party

PART II:

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

RADIAL PLOT REPORTS

21-30. PART I (Area south of the Kukpuk River):

Refer to Radial Plot Report beginning on page 8 of the Descriptive Report for quads T-9421 thru T-9429 The area of the two quads of this report is included in the area covered by that report.

PART II (Area north of the Kukpuk River):

The Radial Plot Report covering this portion of the area of the two quads of this report, is to be found in the Descriptive Report for quads T-9417 and T-9418, a combined report.

COMPILATION REPORT

PART I (Area south of the Kukpuk River):

31. Delineation:

Contours and cultural features were delineated simultaneously on the Reading Plotter, model "B". Only the land area south of the river is covered in this part, and it has been delineated in its entirety.

32. Control:

For details, see side-heading 23 of the Radial Plot Report. In general, both types of control were adequate. Both were established and identified in the field, the vertical control being mostly datum at the identified MHHWL and elevations on inland peaks and water surfaces.

33. Supplemental Data:

a. Plotting Instrument Photos: (metal-mounts)
27637, 638, 639, 640, 727, and 728.

b. Field Inspection Photos:
20604,5, 22711,13,14,15,17,18, 27639,42, 27720,2,3,7.
and one single lens photo, 8-1-50-0 No.1919(w/ratio)

c. Vertical Control Brochure:
"TABULATION OF ELEVATIONS AND COMPUTATIONS OF ELEVATIONS BY MAP MANUSCRIPTS FOR VERTICAL CONTROL STATIONS IN THE AREA OF MAP MANUSCRIPTS T-9419-T-9427"

34. Contours and Drainage:

Photograph quality was very good for contouring use and no areas of questionable contours remain.

35. Shoreline and Alongshore Details:

Shoreline inspection was adequate. It was used as a guide during instrument delineation. Inspection on the single lens photo was transferred directly to the manuscript from a ratioed enlargement of it; it was of the area on the north shore of Point Hope. No MHHWL exists on T-9420 in Part I.

36. Offshore Details: None exist.

37. Landmarks and Aids:

No aids exist and no landmarks were recommended.

38. Control for Future Surveys: See side-heading 49.

39. Junctions:

All junctions are in agreement since all adjoining quads have been compiled simultaneously with the two quads of this report. Refer to page 5, MAP LAYOUT SKETCH.

40. Horizontal and Vertical Accuracy:

Both maps are considered to meet the requirements set up by National Map Accuracy Standards. Map scale is 1: 20,000 and the contour interval is 50ft. The 25ft contour is more accurate due to its nearness to shoreline datum.

46. Comparison with Existing Maps:

"ALASKA RECONNAISSANCE TOPOGRAPHIC SERIES, SECOND JUDICAL DIVISION, TIGARA, 1:250,000, USGS, 1951 edition."
Name changed to "Point Hope" JMM

47. Comparison with Nautical Charts:

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

b. Provisional chart, CAPE PRINCE OF WALES TO POINT BORROW, CHUKCHI SEA, Alaska-Arctic Coast, No.9402, 1:750,000, May 1950, 1st edition.

48. Geographic Name List: See separate numbered page, following.

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

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

Submitted By:

Orvis N. Dabey

Orvis N. Dabey,
Cartographer-Photogrammetric

Approved and Forwarded by:

Louis J. Reed

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

COMPILATION REPORT

PART II (Area north of the Kukpuk River) October 1953

31. Delineation:

The land area of Part II was compiled completely from delineation on the Reading Plotter, model "B".

32. Control:

The Radial Plot Report states that horizontal control was adequate. Vertical control, also adequate, consisted of datum elevation at the MHHWL, and field established elevations on inland peaks and water surfaces.

33. Supplemental Data:

a. Plotting instrument photos: 22724,25,26,37914,15,16,17,26,27.

b. Field Inspection photos: 22718, 24, 25, and 26.

c. Vertical Control brochure: Same as for Part I.

34. Contours and Drainage:

Photograph quality was very good and no areas of questionable contours remain.

35. Shoreline and Alongshore Details:

Inspection was adequate; it was used as aguide during instrument operation and compilation. No low-water or shoal lines were located, field or office.

36. Offshore Details: None exist.

37. Landmarks and Aids:

No aids exist and no landmarks were recommended.

38. Control for Future Surveys:

T-9419: Topo stations BAIL 1950 and CARD 1950.
T-9420: Topo Sta GABE 1950, and Hydro stations 156, 7, 8, 9.

39. Junctions:

All junctions,(see page 4) are in agreement.

40. Horizontal and Vertical Accuracy:

Both quads meet map accuracy standards for maps of 1:20,000 with 50ft contours. 25ft supplementals are to be considered as meeting 50ft standards; they were drawn to better picture areas where the 50ft contours were separated too far to show it.

46. Comparison with Existing Maps: See Part I

47. Comparison with Nautical Charts: See Part I

48. Geographic Name List:

Original list, page 13, has been completed.

49. Notes for the Hydrographer:

See separate un-numbered page.

50. Compilation Office Review:

See page 15, Part II.

Submitted by:

Orvis N. Dalbey

Orvis N. Dalbey, Chief,
Nine-lens Plotting Section

Approved and Forwarded by:

Louis J. Reed

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

49. Notes for The Hydrographer:

PART I:

a. Photo-Hydro Stations: None

b. Photo-topo Stations:

T-9419 = BAIL 1950 identified on photo 27642
" = CARD 1950 " 27639
T-9420 = None.

PART II:

a. Photo-hydro stations

T-9419 = none
T-9420 = No. 156 identified and described on photo 22724
No. 157 " " " 22724
No. 158 " " " 22725
No. 159 " " " 22725

b. Photo-topo stations:

T-9419 = See Part I above.
T-9420 = GABE 1950, identified on photo 22724

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

GEOGRAPHIC NAMES

Survey No.

T-9419 and T-9420

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-9419										1
ARCTIC OCEAN										2
KUKPUK RIVER										3
MARRYAT INLET ✓	(apply name only to inside lagoon leaving entrance unnamed. Question of spelling with 1 or 2 "t" has been referred to B.G.N.)									4
NOOVOUGAHLAWK Point ✓										5
PIGOO Bluff ✓	(shift name slightly to northeastward to apply to 20' bluff and ridge back of it.)									6
SOOLOOPOAGAKTUK CHANNEL										7
CHUKCHI SEA										8
										9
										10
T-9420										11
ARCTIC OCEAN										12
KUKPUK RIVER										13
AKALOOLICK CREEK ✓	(Per supplement to original Project Names Report the name should be Akaloolik)									14
CHUKCHI SEA										15
KOWTUK POINT										16
										17
										18
According to Project Names Report, the name Tuckfield on U.S.G.S. "Point Hope" should be deleted (T9419)										19
										20
										21
										22
										23
										24
Names approved 4-14-54. L. Heck										25
Approved names applied to manuscripts 4/15/54 John M. Neal										26
										27

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW (PART I & II)

T-9419 and 9420

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 ✓

✓ = checked
N = non-existent

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 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 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-9419 through T-9420
Topographic Maps
April 29, 1954

62. Comparison with Registered Topographic Surveys. - None

63. Comparison with Maps of Other Agencies.-

USGS Alaska Map, Point Hope 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

Chief, Nautical Chart Branch
Division of Charts

Chief, Div. of Coastal Surveys