9404 THRU 9409

9404 THRU 9409

2114

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-9404 thru T-9409

LOCALITY

State Alaska

General locality Chukchi Sea

Locality Cape Beaufort

194 51-52

CHIEF OF PARTY

Paul Taylor, Chief of Field Party
L.J.Reed, Div. Photo., Wash., D.C.

LIBRARY & ARCHIVES

DATE July 1, 1957

B-1870-1 (1)

T- 9404, 9405, 9408, 9409 Grand Jct 9455 3-10-58 RKD
T. 9406, 9407, 9408, " " " 9454 1958 AJM

DATA RECORD

T- 9404 thru T-9409

Project No. (II): Ph-28(47) Quadrangle Name (IV): See Manuscripts

Field Office (II): Portland, Oregon Chief of Party: Paul Taylor

Photogrammetric Office (III): Stereoscopic Mapping Branch, Wash., D.C. Officer-in-Charge: Louis J. Reed

Instructions dated (II) (III): Supplement 3 dated 4/12/51 Copy filed in Division of Photogrammetry (IV) Office Files

Method of Compilation (III): Nine-Lens Plotters

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): AUG 18 1954 Date reported to Nautical Chart Branch (IV): SEP 1 3 1954

Applied to Chart No. Date: Date registered (IV): 5-24-57

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

Geographic Datum (III): NA 1927 Vertical Datum (III): (Unadjusted)

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

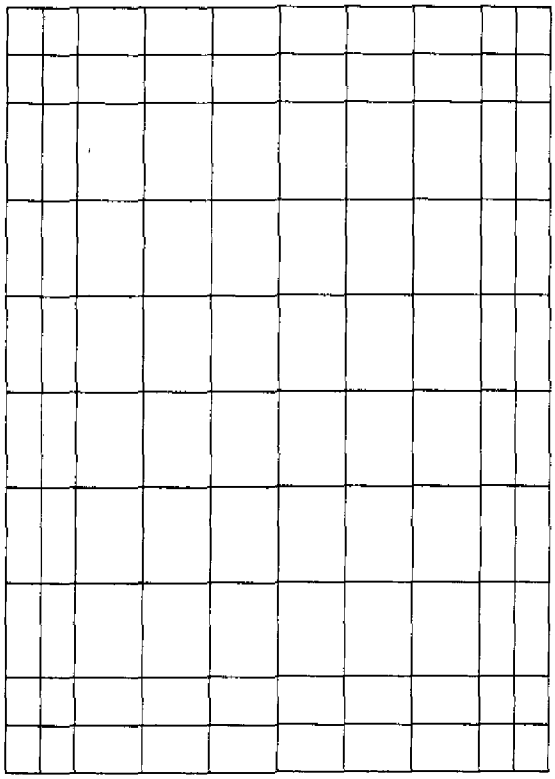
Plane Coordinates (IV): State: Zone:

Y= X=

Universal Transverse Mercator Grid, Zone 3, 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)
(I) (II) (III)

Quad	Compiled by	Plotter Used
T-9404	Louis Levin	Model "B", 9-lens
T-9405	"	"
T-9406	"	"
T-9407	"	"
T-9408	Clarence E. Misfeldt	Model "A", 9-lens
T-9409	"	"

DATA RECORD

Field Inspection by (II): G. B. Torbert and C.H.Bishop Date: August 1951

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 1951 since it was delineated on the plotting instruments guided by 1951 field inspection of the shoreline on nine-lens field photographs.

Projection and Grids ruled by (IV): Austin Riley on the Reading Ruling Machine Date: 12 Oct 52

Projection and Grids checked by (IV): Howard D. Wolfe Date: 13 Oct 52

Control plotted by (III): Albert Queen 9 Jun 53

Control checked by (III): Elmer L. Williams Date: 19 Aug 53

Radial Plot ~~or Stereoscopic~~ Control extension by (III): Elmer L. Williams Date: 1 Dec 53

verified by: Frank J. Tarcza 1 Dec 53

Stereoscopic Instrument ~~compilation~~ delineation by (III): Planimetry Louis Levin and Contours Clarence E. Misfeldt Date: 14 Apr 54

Manuscript ~~delineated~~ by (III): John B. McDonald Date: 12 Aug 54

Photogrammetric Office Review by (III): Louis J. Reed Date: 18 Aug 54

Elevations on Manuscript checked by ~~(1)~~ (III): Louis J. Reed Date: 18 Aug 54

M-2618-12(4)

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

PHOTOGRAPHS (III)

Number	Date	Time	Inst. Scale	Stage of Tide
37962 thru 37968	17 July 52		1:20,000	None
37990 thru 37997	"		"	"
37972 thru 37974	"		"	"
38052 thru 38055	"		"	"

Tide (III) diurnal

Ratio of Ranges	Mean Range	~~Spring~~ Range
		0.6'

Reference Station: Icy Cape
Subordinate Station:
Subordinate Station:

Washington Office Review by (IV): K. N. Maki Date: 24 Feb 1955

Final Drafting by (IV): John H. Frazier T-9409 | John H. Frazer T-9404 Date: 8-3-56 6-26-56
John H. Frazier T-9406 | P. Tech T-9407 7-5-56
John H. Frazier T-9405 | F. Johnson T-9408 7-11-56 7-9-56

Drafting verified for reproduction by (IV): W. O. Hallein Date: 8-23-56 7-9-56

Proof Edit by (IV): Date:

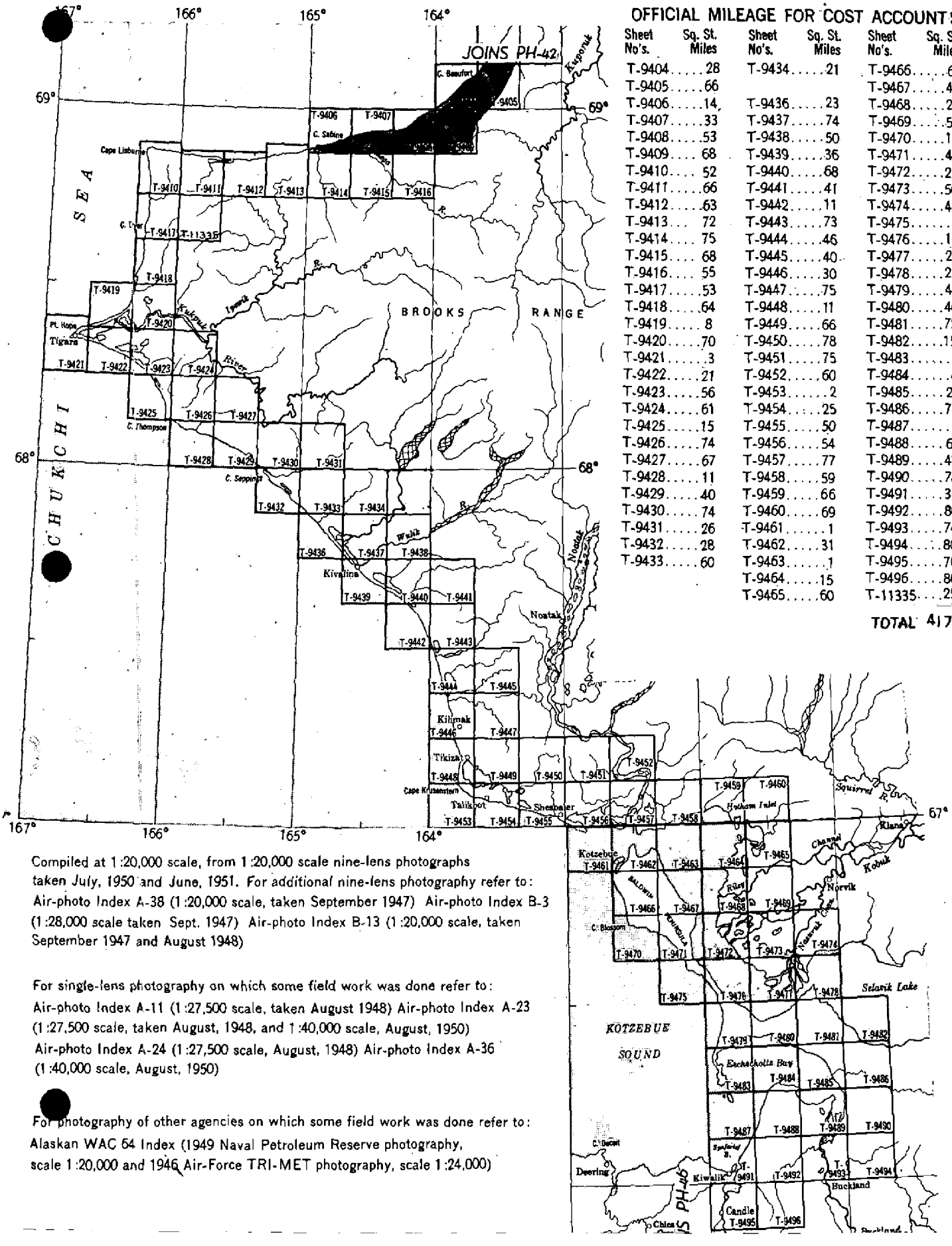
Land Area (Sq. Statute Miles) (III): See table below in Remarks
Shoreline (More than 200 meters to opposite shore) (III): See table below in Remarks
Shoreline (Less than 200 meters to opposite shore) (III): None
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): Recovered: Identified: 13
Number of BMs searched for (II): None Recovered: Identified:
Number of Recoverable Photo Stations established (III): 4
Number of Temporary Photo Hydro Stations established (III): 3

Remarks:

Quadrangle	Area	Shore
T-9404	18 sq mi	8 miles
T-9405	46 sq mi	4 miles
T-9406	12 sq mi	8 miles
T-9407	25 sq mi	8 miles
T-9408	43 sq mi	9 miles
T-9409	83 sq mi	3 miles

TOPOGRAPHIC MAPPING PROJECT PH-28

ALASKA, Chukchi Sea, Kiwalik to C. Beaufort



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-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	T-11335	25

TOTAL 4170

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 Descriptive Report
T-9404 through T-9409

Topographic maps T-9404 through T-9409 in project Ph-28 cover the coastal area of the Chukchi Sea, from longitude 165° 00', eastward to approximately 163° 22'. These maps were compiled on the 9-lens Reading Plotter. Field operations preceding compilation included field inspection, establishment 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 with title as follows:

SEASON'S REPORT

and

FIELD INSPECTION REPORT

Marryatt Inlet to Cape Beaufort, Alaska

Project Ph-28(47)

Season 1951

Paul Taylor Chief of Party

RADIAL PLOT REPORT
(consolidation)

The radial plot report for the area of this report, except for quads T-9406 and T-9407, is contained in the next few pages.

The report for T-9406 and T-9407 is included in the Descriptive Report for T-9410 thru T-9416, a consolidated report.

PHOTOGRAMMETRIC PLOT REPORT

PROJECT Ph-28

SURVEYS T-9404, T-9405, T-9408,
T-9409 and T-9416

21. AREA COVERED

This radial plot covers the area of surveys T-9404, T-9405, T-9408, T-9409 and T-9416. These are topographic surveys situated along the shore of the Arctic Ocean from Cape Sabine to Cape Beaufort.

22. METHOD - RADIAL PLOT

Vinylite sheets with polyconic projections in black and Universal Transverse Mercator grids in red, at a scale of 1:20,000, were furnished by the Washington office. No base sheets were used.

All control stations and substitute stations were plotted using beam compass and meter bar.

A sketch showing the layout of these surveys and the distribution of photograph centers and control is attached to this report.

Photographs

Nine-lens metal mounted photographs at a scale of 1:20,000 were used in this plot. The twenty-three (23) photographs used in this radial plot are numbered as follows:

37967
37968
37972 thru 37974
37979
37989 thru 37997
38037
38038
38052 thru 38057

The symbols used on the photographs were given in special instructions for all radial plots using nine-lens photographs which will be used with a Reading Plotter.

Templets

Vinylite templets were made from all photographs, using a master templet furnished by the Washington office, to adjust for errors due to chamber displacements. Radial lines were scratched on the templets with a needle point and the scratches filled with china marking pencil. Red pencil was used for all shoreline (rectification) pass points and black pencil for all other radial lines.

22. METHOD - RADIAL PLOT (cont'd)

Closure and Adjustment to Control

The radial plot was constructed directly on the map manuscripts. A preliminary plot was laid to determine which photographs were badly tilted. Photographs 37967, 37997 and 38052 thru 38055, were found to be tilted. No tilt determinations were made.

The final plot was started at the northern end of survey T-9416 where positions of pass points and photograph centers had been established in the previous radial plot. The plot was extended north and eastward holding all control points to surveys T-9402 and T-9403 where a tie was made. In order to tie into the control on surveys T-9402 and T-9403 which had been plotted and compiled in the Barrow datum it was necessary to replot the control on the N.A. 1927 datum. Therefore, each control station is plotted on surveys T-9402 and T-9403 twice. The stations plotted on the Barrow datum are shown on the manuscripts with a solid-line symbol. A dashed symbol is used for the N.A. 1927 datum.

Transfer of Points

The positions of all centers, pass points and control stations were pricked on the templets and circled with 3 mm. blue circles. Those positions were established on the remaining templets and on the map manuscript by drilling down through them with a 0.01 inch jewelers drill. All prints were circled on each templet as it was removed. The points were then circled on the back of the manuscripts with 6 mm. circles.

No pass points or photograph centers from this plot are circled on surveys T-9402 and T-9403. The templets falling on these surveys are pricked and circled; and all photograph centers, vertical elevation points and rectification points were drilled. These drill holes can be found on the manuscripts.

23. ADEQUACY OF CONTROL

There is adequate control throughout this plot.

Sub. Pt. MORMON, 1950 is pricked differently on the K-20 photograph from the way it is pricked on field photo No. 22792. The pricking on photo. No. 22792 agrees with the distance as measured in the field. Therefore, the sub. pt. as identified on field photograph No. 22792 was used and held to in the plot.

All control stations were held except as follows:

A radially-plotted position was obtained for Sub. Pt. "A" WALNUT, 1950. Sub. Pt. "A" is described as a knob of tundra, which had the vegetation torn off revealing the black subsoil. This had probably grown over by the date of photography used in this plot and was no longer a good image point.

23. ADEQUACY OF CONTROL (cont'd)

Sub. Pt. "B" WALNUT, 1950 was held in the plot. A radially plotted position was obtained for Sub. Pt. CURLY, 1951. CURLY, 1951 was held in the plot.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

Photographic coverage was adequate for all areas in this plot.

The definition of all photography is good.

26. VERTICAL CONTROL

The elevation of PIGLUT ECCENTRIC, 1951 was assumed to be of the same elevation as PIGLUT, 1951. The pricking card shows that the distance from PIGLUE to PIGLUT ECC. was a horizontal measurement.

The following discrepancies were noted during computations of elevations following the establishment of their positions in the radial plot:

PEAK 856 - The elevation obtained from STARVE, 1951 was arbitrarily rejected.

PEAK 857 - The elevation obtained from ALMOST was rejected because it seemed to be too low as compared to the elevations of nearby points. In addition, there is a discrepancy of 1½ degrees between the "left" reading and "right" readings of the vertical angle. (See Vol. 2, page 25 of Observations of Double Zenith Distance). The elevation of PEAK 857 was computed using the "right" reading of the vertical angle from ALMOST. The elevation so obtained still did not agree with that from STARVE by - 46 meters.

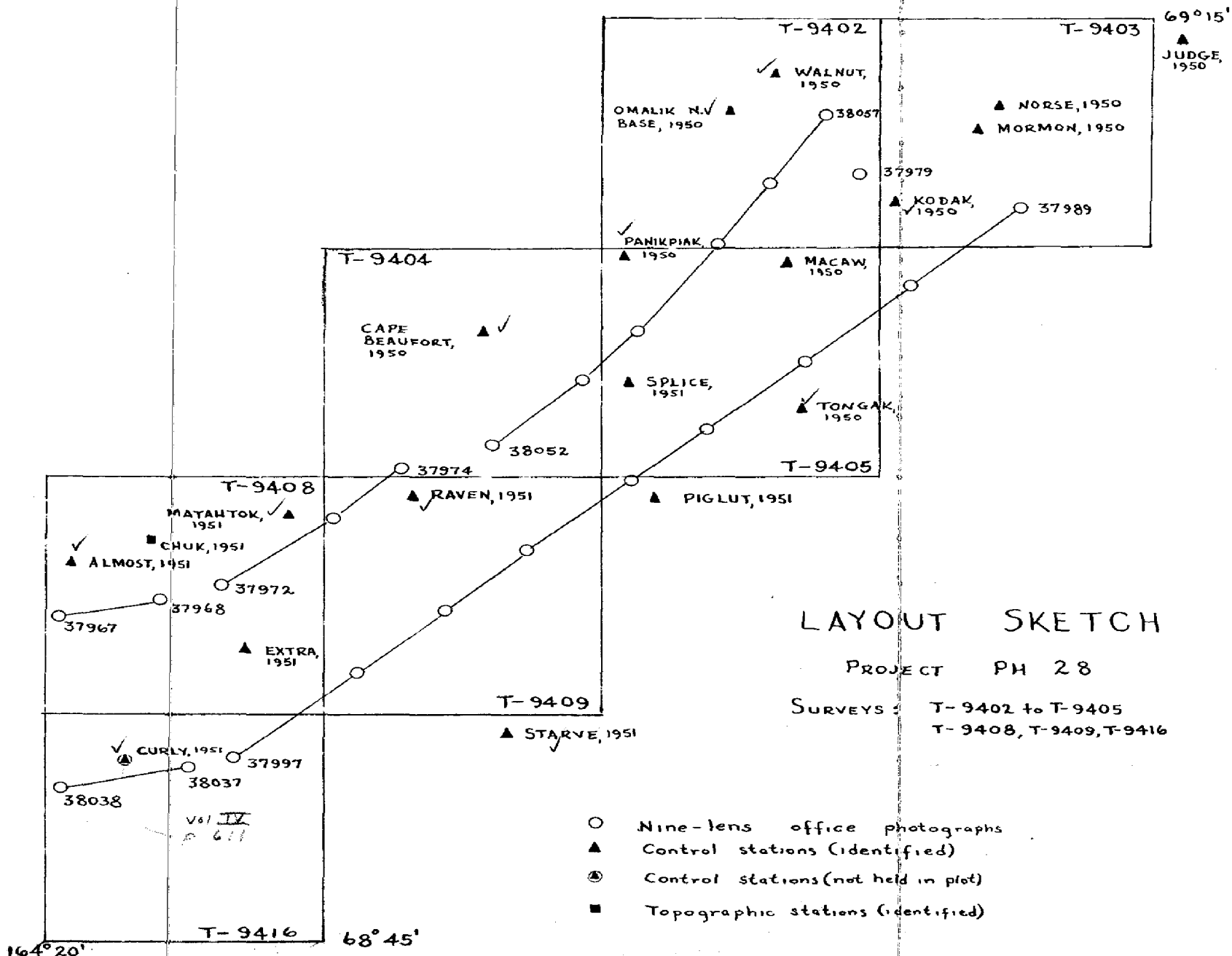
PEAKE 862 - The elevation obtained for this peak from MORMON was rejected because the horizontal angle was off about 800 meters. It can be assumed that a different point was observed upon.

Respectfully submitted
3 December 1953

E. L. Williams
E. L. Williams,
Carto. Photo. Aid

Approved and Forwarded
3 December 1953

E. H. Kirsch
E. H. Kirsch,
Comdr. U.S.C. & G. S.
Officer in Charge
Baltimore Photo. Office



LAYOUT SKETCH

PROJECT PH 28

SURVEYS : T-9402 to T-9405
T-9408, T-9409, T-9416

○ Nine-lens office photographs
▲ Control stations (identified)
◬ Control stations (not held in plot)
■ Topographic stations (identified)

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Photogrammetry

MAP T- 9402 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM (Preliminary) 2/11/58 DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
Sub. Pt. "A" WALNUT, 1950		Point Barrow	69 12	655.0	(1204.3)	+ 48.3	703.3	(1156.0)		
			163 26	110.1	(550.5)	-164.2	606.5	(54.1)		
Sub. Pt. "B" WALNUT, 1950		"	69 12	499.1	(1360.2)	+ 48.3	547.4	(1311.9)		
			163 26	75.9	(584.7)	-164.2	572.3	(88.3)		
WALNUT, 1950	G-8697 p. 2	"	69 12 19.801	613.6	(1245.7)	+ 48.3	661.9	(1197.4)	651.7 Adjusted NA 1927 ✓	
			163 26 09.269	102.1	(558.5)	-164.2	598.5	(62.1)	598.3	
Sub. Pt. "A" OMALIK NORTH BASE, 1950		"	69 09	1799.6	(59.6)	+ 48.3	1847.9	(11.3)		
			163 29	602.1	(59.6)	-164.5	437.6	(224.1)		
Sub. Pt. "B" OMALIK NORTH BASE, 1950		"	69 09	1800.0	(59.2)	+ 48.3	1848.3	(10.9)		
			163 29	642.9	(18.8)	-164.5	478.4	(183.3)		
OMALIK NORTH BASE, 1950	G-8697 p. 2	"	69 09 59.893	1856.0	(3.3)	+ 48.3	45.0	(1814.3)	34.8 Adjusted NA 1927 ✓	
			163 29 54.549	601.7	(60.1)	-164.5	437.2	(224.6)	436.9	

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1 FT. = .3048006 METER

COMPUTED BY: W. L. Lineweaver DATE 13 May 1953 CHECKED BY: E. L. Williams DATE 19 May 1953

M-2388-12

MAP T-9403 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	Preliminary N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	McGlinden 2/11/58 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Sub. Pt. MORMON, 1950		N.A. 1927	69 10 163 14			1129.3 (730.0) 542.8 (118.7)	
MORMON, 1950	G-8697 p. 2	Point Barrow	69 10 34.970 163 15 08.610	1083.7 (775.6) 94.9 (566.6)	+ 48.3 -164.4	1132.0 (727.3) 592.0 (69.5)	1122.0 Adjusted NA 1927 591.8
Sub. Pt. NORSE, 1950		N. A. 1927	69 11 163 11			1302.6 (556.6) 210.7 (450.3)	
NORSE, 1950	G-8697 p. 1	Point Barrow	69 11 39.688 163 11 39.530	1229.8 (629.4) 435.5 (225.5)	+ 47.1 -164.3	1276.9 (582.3) 271.2 (389.8)	1268.2 Adj. 271.0 1927 NA
Sub. Pt. "1" KODAK, 1950		N.A. 1927	69 08 163 18			1432.7 (426.6) 657.8 (4.6)	
Sub. Pt. "2" KODAK, 1950		"	69 08 163 18			1412.9 (446.4) 575.0 (87.4)	
KODAK, 1950	G-8697 p. 2	Point Barrow	69 08 43.643 163 19 06.408	1352.4 (506.9) 70.7 (591.7)	+ 48.3 -164.6	1400.7 (458.6) 568.6 (93.8)	✓
Sub. Pt. "A" JUDGE, 1950		N.A. 1927	69 14 162 59			835.6 (1023.7) 434.9 (224.6)	
Sub. Pt. "B" JUDGE, 1950		Point Barrow	69 14 162 59	605.9 (1253.4) 611.8 (47.7)	+ 47.1 -163.9	653.0 (1206.3) 447.9 (211.6)	
JUDGE, 1950	G-8697 p. 1	"	69 14 25.264 162 59 53.957	782.9 (1076.4) 593.1 (66.4)	+ 47.1 -163.9	830.0 (1029.3) 429.2 (230.3)	821.4 Adj. 429.3 NA 1927

1 FT. = .3048006 METER

COMPUTED BY: W. L. Lineweaver DATE 13 May 1953 CHECKED BY: E. L. Williams DATE 21 May 1953

M-2388-12

Photogrammetry

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MAP T- 9404 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	Preliminary — N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	McAlinden 2/11/58 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Sub Pt. CAPE BEAUFORT, 1950		N.A. 1927	69 03			523.8 (1335.4)	
			163 43			458.2 (207.0)	
CAPE BEAUFORT, 1950 ✓	G-9180 p. 5	"	69 03 14.904			461.8 (1397.4)	451.1
			163 43 37.471			415.4 (249.8)	414.6 ✓

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1 FT. = .3048006 METER

COMPUTED BY: W. L. Lineweaver DATE 14 May 1953 CHECKED BY: E. L. Williams DATE 21 May 1953

M-2388-12

Photogrammetry

CONFIDENTIAL

MAP T-9405 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID OR PROJECTION LINE IN FEET, OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	Preliminary — McAlinden 2/11/58 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)
MACAW, 1950 ✓	G-8697 p. 2	Point Barrow	69 06 32.482	1006.6	(852.7)	+ 48.3	1054.9	(804.4)	1044.8	
			163 25 47.236	522.4	(141.2	-164.9	357.5	(306.1)	357.0	
Sub. Pt. TONGAK, 1950		N.A. 1927	69 03				636.8	(1222.4)		
			163 25				387.3	(277.8)		
TONGAK, 1950 ✓	G-9180 p. 5	"	69 03 20.500				635.2	(1224.0)	624.6 Adjusted NA 1927	
			163 25 29.708				329.3	(335.8)	329.1 NA	✓
Sub. Pt. "A" PANIKPIAK, 1950		"	69 06	1549.0	(310.3)	+ 48.3	1597.3	(262.0)		
			163 35	556.0	(107.3)	-164.9	391.1	(272.2)		
Sub. Pt. "B" PANIKPIAK, 1950		"	69 06				1619.4	(239.8)		
			163 35				381.8	(281.6)		
PANIKPIAK, 1950 ✓	G-9180 p. 5	"	69 06 51.898				1608.2	(251.0)	1597.3 Adjusted NA 1927	
			163 35 36.033				398.4	(265.0)	397.8	
Sub. Pt. PIGLUT, 1951		"	68 59				760.0	(1099.2)		
			163 35				336.7	(330.6)		
PIGLUT, 1951	G-9180 p. 4	"	68 59 17.894				554.5	(1304.7)	South of map limits.	
			163 35 32.044				356.4	(310.9)		
PIGLUT ECCENTRIC, 1951	Unmarked Stat. See Form M-2226-12	"	68 59				593.3	(1265.9)		
			163 35				306.6	(360.7)		
SPLICE, 1951 ✓	G-9180 p. 7	"	69 00 14.503				449.4	(1409.8)		
			163 39 49.606				551.2	(115.5)		

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1 FT. = .3048006 METER

COMPUTED BY: W. L. Lineweaver DATE 14 May 1953 CHECKED BY: E. L. Williams DATE 21 May 1953

M-2388-12

Photogrammetry

MAP T-9406 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	Preliminary — N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	McAlpden 2/11/58 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Sub Pt. "1" THETIS, 1951		N.A. 1927	68 53 164 47			1234.5 (624.7) 624.3 (45.8)	
Sub Pt. "2" THETIS, 1951		N.A. 1927	68 53 164 47			1135.0 (724.2) 586.0 (84.1)	
THETIS, 1951	G-9180 p. 6	"	68 53 39.187 164 47 54.658			1214.3 (644.9) 610.4 (59.7)	1204.1 607.2
Sub Pt. KIGIK, 1951		"	68 52 164 41			1215.8 (643.4) 656.4 (14.2)	
KIGIK, 1951	G-9180 p. 3	"	68 52 37.435 164 41 57.696			1160.0 (699.2) 644.9 (25.7)	1149.8 641.8

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1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: W. L. Lineweaver DATE 14 May 1953 CHECKED BY: E. L. Williams DATE 22 May 1953

CONFIDENTIAL

Photogrammetry

MAP T- 9407 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927-DATUM (Preliminary) DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	McClinton 2/11/58 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
SABINE ASTRO, 1951 ✓	G-9180 p. 4	N.A. 1927	68 54 41.148			1275.1 (584.1)	1264.8 ✓
			164 33 30.933			345.2 (324.4)	342.4
PUNUK, 1951 ✓	"	"	68 54 29.132			902.7 (956.5)	892.4
			164 26 23.857			266.3 (403.4)	263.8 ✓

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1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: W. L. Lineweaver DATE 14 May 1953 CHECKED BY: E. L. Williams DATE 22 May 1953

CONFIDENTIAL

Photogrammetry

MAP T-9408 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID OR PROJECTION LINE IN FEET OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	Preliminary — McAlpden 2/11/58 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Sub. Pt. MATAHTOK, 1951		N.A. 1927	68 58 164 04			159.9 (1699.3) 189.8 (478.0)	
MATAHTOK, 1951 ✓	G-9180 p. 4	"	68 58 05.941 164 04 16.142			184.1 (1675.1) 179.7 (488.1)	173.6 ✓ 178.0
Sub. Pt. ALMOST, 1951		"	68 55 164 15			738.3 (1120.9) 187.0 (482.2)	
ALMOST, 1951 ✓	G-9180 p. 6	"	68 55 22.004 22.335 164 14 55.937 55.214			692.1 (1167.1) 615.8 (53.4)	681.4 ✓ 613.8
Sub. Pt. EXTRA, 1951		"	68 53 164 04			1737.8 (121.4) 119.3 (550.6)	
EXTRA, 1951 ✓	G-9180 p. 7	"	68 53 58.242 164 04 22.496			1804.7 (54.5) 251.2 (418.7)	1794.6 249.5

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1 FT. = 3048006 METER

M-2388-12

COMPUTED BY: W. L. Lineweaver DATE 14 May 1953 CHECKED BY: E. L. Williams DATE 22 May 1953

CONFIDENTIAL

Photogrammetry

MAP T-9409 PROJECT NO. Ph-28(47) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE ° ' "	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	Preliminary N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	M. Alinden 2/11/58 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Sub Pt. RAVEN, 1951		N.A. 1927	68 59 163 53			1291.7 (567.5) 322.4 (344.6)	
RAVEN, 1951 ✓	G-9180 p. 5	"	68 59 40.289 163 53 31.775			1248.4 (610.8) 353.2 (313.8)	1237.9 ✓ 352.0
Sub Pt. STARVE, 1951		"	68 52 163 51			260.9 (1598.2) 654.0 (17.0)	
STARVE, 1951 ✓	G-9180 p.4 D 6 11	"	68 51 51.192 163 51 43.157			1576.4 1586.2 (272.9) 482.6 (188.4)	Adj. 1927 NA. On south limits of map
Pigiut, 1951							East of map

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: W. L. Lineweaver DATE 14 May 1953 CHECKED BY: E. L. Williams DATE 22 May 1953

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COMPILATION REPORT

31. Delineation:

All features were delineated simultaneously on the Reading Plotters. The coverage diagram on page 5 indicates that the land area of all but two quads has been mapped, the two quads being T-9405 and T-9409. The missing areas are due to a lack of control and photo coverage.

32. Control: Adequate - see side-heading 23 in both plot reports.

33. Supplemental Data:

See separate brochures accompanying each radial plot report involved, the brochures being entitled:

"TABULATION OF ELEVATIONS AND COMPUTATIONS OF ELEVATIONS BY MAP MANUSCRIPT FOR VERTICAL CONTROL STATIONS."
Filed in general files of Div. of Photogrammetry.

34. Contours and Drainage:

Photograph quality was good for delineation purposes and no areas of questionable contours remain.

35. Shoreline and Alongshore Details:

Shoreline inspection in this area was adequate and was used as a guide during instrument delineation. No low-water or shoal lines were field indicated; shoal lines were instrument compiled inside two small stream mouths.

36. Offshore Details: Not applicable - none exist.

37. Landmarks and Aids:

No aids exist in the area, but the field inspector recommended three separated cabins on the shore as landmarks to be located. Two were plotted, one on T-9404 and the other on T-9407, but the third was not sufficiently well identified to be sure of it.

38. Control for Future Surveys:

Four photo-topo stations, and three hydros, were field established and photo identified. They have been positioned by the radial plot and are listed in side-heading 49.

39. Junctions:

All junctions are in agreement within the area and with formerly completed quads of the same project. This is the north end of this project, Ph-28, where it joins with a planimetric project, Ph-42, also recently completed. But Ph-42 was worked on the Point Barrow datum rather than the

39. Junctions: continued

1927 datum of Ph-28, this project, and therefore the junction between T-9402 and T-9405 does not appear to agree. However, it does agree since the sheet corners on T-9402 have been plotted on the 1927 datum and features made to agree. It is suggested that Ph-42 may someday be translated to the newer 1927 datum.

40. Horizontal and Vertical Accuracy:

The maps of this report meet the requirements established by National Map Accuracy Standards for maps having a scale of 1:20,000 and showing relief by means of 50ft contour interval. Supplemental contours used on these quads in the low areas must be considered to be of the same accuracy.

46. Comparison with Existing Maps: Alaska Reconnaissance Topo series, Second Judicial Division, 1:250,000, USGS, titled:

a. POINT HOPE, ALASKA, 1952
b. DE LONG MOUNTAINS, 1951
c. POINT LAY, 1951

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 BARROW, CHUKCHI SEA, Alaska-Arctic Coast, No.9402, 1:750,000, May 1950, 1st edition.

48. Geographic Names: See next page, page 23.

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

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

Submitted by:

Orvis N. Dalbey

Orvis N. Dalbey, Chief, Kone-Lens
Plotting Instrument Section

Approved and Forwarded by:

Louis J. Reed

Louis J. Reed, Chief
Stereoscopic Mapping Branch
Photogrammetric Engineer

GEOGRAPHIC NAMES

Survey No.

T-9404 thru T-9409

Name on Survey

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-9404										1
AMOOKTOOSUK HILLS										2
ARCTIC OCEAN										
CAPE BEAUFORT										3
CHUKCHI SEA										
~~KAHKATAK RIVER~~ stet Matahtok River Kahkatak River										4
KAHKATLAKROOK ~~RIVER~~ CREEK										
TOOLOOGUK CREEK										5
T-9406										6
ARCTIC OCEAN										7
CHUKCHI SEA			Thetis Creek							
KIGIKTOWK CREEK										8
~~OMALIK RIVER~~ THETIS MINE										
T-9405										9
ARCTIC OCEAN										10
CHUKCHI SEA										
KAHKATLAKROOK CREEK										11
OMALIK RIVER										
T-9407										12
ARCTIC OCEAN										13
CAPE SABINE										
CHUKCHI SEA										14
PITMEGEA RIVER										
PUNUK CREEK										15
T-9408										16
ARCTIC OCEAN										17
CHUKCHI SEA										
MATAHTOK RIVER										18
MUGEELU CREEK										
PUNUK CREEK										19
PUNUK HILLS										
PUNUK LAGOON										20
T-9409										21
~~AMOOKTOOSUK HILLS~~ Amooktoosuk Hills (as on T-9404) (also title)										
ARCTIC OCEAN										22
CHUKCHI SEA										23
MATAHTOK RIVER										
TOOLOOGUK CREEK K										24
					Names approved 2-16-66. L. Heck					25
										26
										27

49. Notes for the Hydrographer:

a. Photo-Topo Stations:

T-9404 = None
T-9405 = None
T-9406 = None
Form *524
T-9407 = PUNUK AZ MK, 1951 Photo 48-0-241
T-9408 = CHUK, 1951 " 22804
T-9409 = FORT, 1951 " 22802
" = RAVEN AZ MK, 1951 " 48-0-251

* Filed in general files Div. of Photogrammetry.

b. Photo-Hydro Stations:

T-9404 = No.171 identified on photo 22802 and described as NW corner of a house at a creek SW of Cape Baeufort.
T-9405 = None
T-9406 = No.169 identified on photo 48-0-235 and desvribed as the SE gable of the southerly of two sod houses at the Thetis Mine.
T-9407 = No.170 identified an photo 48-0-239 and described as the NE corner of a house at the Pitmegea River
T-9408 = None
T-9409 = None

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T-9404 thru 9409

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. ✓ 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 N 22. Planetable contours N 23. Stereoscopic instrument contours ✓ 24. Contours in general ✓ 25. Spot elevations ✓ 26. Other physical features ✓

CULTURAL FEATURES

27. Roads N 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. _____

Reviewed

Supervisor, Review Section or Unit

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-9404 through T-9409
Topographic Maps
24 February 1955

62. Comparison with Registered Topographic Surveys:

T-2337 rec. 1:1,000,000 1898

The area of these surveys is covered by T-2337 which is a reconnaissance sketch credited to the work of a native attached to the survey party.

63. Comparison with Maps of Other Agencies:

Point Hope, Alaska (Reconnaissance)
U.S.G.S., 1:250,000, 1952
DeLong Mountains, Alaska (Reconnaissance)
U.S.G.S., 1:250,000, 1951
Point Lay, Alaska (Reconnaissance)
U.S.G.S., 1:250,000, 1951

No effective comparison can be made between these surveys and the U.S.G.S. surveys because of the small scale and generalized detail of the latter.

64. Comparison with Contemporary Hydrographic Surveys:

No hydrographic surveys by the Bureau have been accomplished in the area of these maps.

65. Comparison with Nautical Charts:

9400 1:1,587,870, corrected to 6/30/52

There are no critical differences between the maps and the chart.

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
Photogrammetry Division

Chief, Nautical Chart Branch
Charts Division

Chief, Photogrammetry Division
28 June '57

Chief, Coastal Surveys Division