

9704 THRU 9710

Diag. Cht. No. 9302.

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-56 Office No. T-9704 thru T-9710

LOCALITY

State Alaska

General locality Etolin Strait (Bering Sea)

Locality Kangirlvar Bay (Tooksook Bay)

To Kinak Bay

1950-52

CHIEF OF PARTY

M.J. Tonkel, Chief of Field Party

E.W. Kirsch, Balto. Photo. Office

F.W. Swanson, Div. of Photo. Wash., D.C.

LIBRARY & ARCHIVES

DATE December 1960

USCOM-DC 5087

9704 THRU 9710

DATA RECORD

T

T-9704
T-9705
T-9706
T-9707
T-9708
T-9709
T-9710

Project No. (II): PH-56

Quadrangle Name (IV):

Field Office (II): Alaska

Chief of Party: M. J. Tonkel

Baltimore, Md.

E. W. Kirsch

Photogrammetric Office (III):

Washington, D. C. Officer-in-Charge: L. W. Swanson

Instructions dated (II) (III):

8 Sept. 1949

14 Dec. 1951

Copy filed in Division of
Photogrammetry (IV)

2 April 1951

21 Dec. 1951

21 May 1951

Method of Compilation (III): Reading nine-lens plotter and graphic

Manuscript Scale (III): 1:20,000

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

Scale Factor (III):

Date received in Washington Office (IV): NOV 3 1951

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 19 May 1951

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N. A. 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=

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.

T-9704 thru T-9710

W Heinbaugh

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

DATA RECORD

Field Inspection by (II): V E Serena

Date: May-Sept 1951

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): ¹⁹⁵¹ From field inspection
¹⁹⁵⁰ on nine lens photos

Projection and Grids ruled by (IV): A. Riley

Date: Jan 1955

Projection and Grids checked by (IV): A. Riley

Date: Jan 1955

Control plotted by (III): D. Williams

Date: June 1955

Control checked by (III): J. Steinberg

Date: June 1955

Radial Plot or Stereoscopic

Date: October 1957

Control extension by (III): L. A. Senasack

Stereoscopic Instrument compilation (III): W. Heinbaugh
 Planimetry
 Contours

Date:

June 1958

Date:

Manuscript delineated by (III): W. Heinbaugh

Date: June 1958

Photogrammetric Office Review by (III): L. Levin

Date: July 1958

Elevations on Manuscript
 checked by (II) (III): L. Levin

Date: July 1958

Camera (kind or source) (III): Nine lens

PHOTOGRAPHS (III)

Number	Date	*Time	Scale	Stage of Tide	MLLW
28534-537	8/13/50	*12:10	1:20,000	4.9 above	
28558-559	8/13/50	*12:35	1:20,000	2.0 "	"
38118-120	7/19/52	10:15	1:20,000	6.7 "	"

*approximate time - clock stopped

Tide (III)

Reference Station: Kodiak
 Subordinate Station: none - (general area of sheet)
 Subordinate Station:

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III):

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

diurnal

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.2		10.2

Date:

Date:

Date:

Date:

Camera (kind or source) (III): Nine lens

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
		Time			
28720-721	8/13/50	*17:10		1:20,000	3.8 above MLLW
38180-183	7/19/52	15:00		1:20,000	3.4 " "

* Approximate time - clock stopped

Tide (III)

diurnal

Reference Station: Kodiak

Subordinate Station: none - (general area of map)

Subordinate Station:

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III):

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Number of BMs searched for (II):

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.1		9.35

Date:

Date:

Date:

Date:

Recovered:

Recovered:

Identified:

Identified:

Camera (kind or source) (III): Nine lens

Number	Date	Time	Scale	Stage of Tide
28537-541	8/13/50	*12:10	1:20,000	4.9 above MLLW
28719	8/13/50	*17:10	1:20,000	3.8 " "

* approximate time - clock stopped

Tide (III)

diurnal

Reference Station: Kodiak

Subordinate Station:

Subordinate Station: none (general area of sheet)

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III):

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Number of BMs searched for (II):

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.2		10.2

Date:

Date:

Date:

Date:

Recovered:

Recovered:

Identified:

Identified:

T-9707

Camera (kind or source) (III): Nine lens

7

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
28716-717	8/13/50	*17:00	1:20,000	3.7 above MLLW
38177-180	7/19/52	14:55	1:20,000	3.2 " "

*approximate time - clock stopped

Tide (III)

diurnal

Reference Station: Kodiak
 Subordinate Station:
 Subordinate Station: none - (general area of sheet)

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.0		8.5

Washington Office Review by (IV): *D. Streifer*Date: *March 1959*Final Drafting by (IV): *John A. Frasier*Date: *August 11, 1959*

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III):

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Camera (kind or source) (III): Nine lens

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
28541-545	8/13/50	*12:15	1:20,000	4.0 above MLLW
28714-716	8/13/50	*17:00	1:20,000	3.7 " "
38176	7/19/52	14:55	1:20,000	3.2 " "

* approximate time - clock stopped

Tide (III)

diurnal

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.0		8.5

Reference Station: Kodiak

Subordinate Station:

Subordinate Station: none - (general use once of sheet)

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III):

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Recovered:

Identified:

Number of BMs searched for (II):

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Camera (kind or source) (III): **Nine lens**

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
			Time		
28713-714	8/13/50	*17:00		1:20,000	3.7 above MLLW
38173-176	7/19/52	14:55		1:20,000	3.2 " "

*approximate time - clock stopped

Tide (III)

diurnal

Reference Station: **Kodiak**

Subordinate Station:

Subordinate Station: **None - (general area of sheet)**

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III):

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Number of BMs searched for (II):

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.0		8.5

Date:

Date:

Date:

Date:

Recovered:

Recovered:

Identified:

Identified:

Camera (kind or source) (III):

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
28545-547	8/13/50	12:20	1:20,000	4.0 above MLLW

Tide (III)

diurnal

Reference Station: Kodiak

Subordinate Station:

Subordinate Station: none - (general area of sheet)

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III):

Shoreline (More than 200 meters to opposite shore) (III):

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II):

Number of BMs searched for (II):

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.2		10.2

Date:

Date:

Date:

Date:

TOPOGRAPHIC MAPPING PROJECT PH-56

ALASKA-BERING SEA, Scammon Bay to Kuskokwim Bay and Nunivak Island

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No. Area sq.miles

9679	16
9680	91
9681	68
9682	96
9683	12
9684	103
9685	80
9686	46
9687	91
9688	17
9689	103
9690	86
9691	103
9692	40
9693	23
9694	34
9695	80
9696	34
9697	103
9698	6
9699	110
9700	23
9701	112
9702	80
9703	112
9704	57
9705	103
9706	40
9707	108
9708	68
9709	91
9710	17
9711	108
9712	6
9713	91
9714	112
9715	108
9716	40
9717	68
9718	80
9719	3

Sub-total...2,685

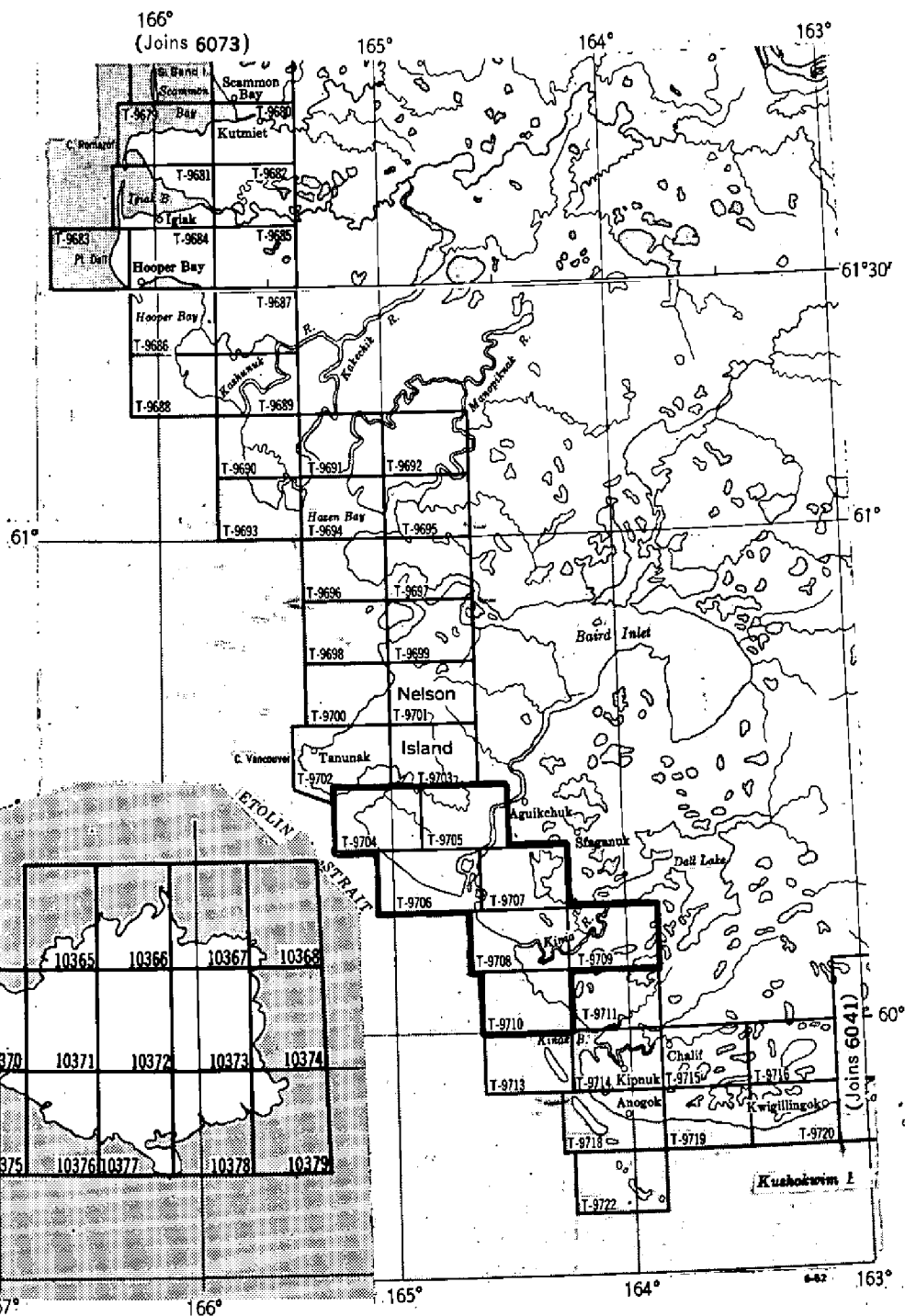
Nunivak Island

10365	49
10366	112
10367	70
10368	8
10369	47
10370	195
10371	220
10372	228
10373	228
10374	37
10375	14
10376	104
10377	158
10378	109
10379	35

Sub-total 1,614

Sub-total 2,685

TOTAL 4,299



Compiled 1:20,000 scale, from 1:20,000 scale nine-lens photographs taken August 1950 and June, 1951;

additional nine-lens photography to be taken Season 1952.

(Refer to Air-Photo Indexes B-42, 50, 51, 52 and E-1).

Summary

to accompany topographic surveys T-9704 thru T-9710

These seven surveys are a part of Topographic Mapping Project PH-56 (24090). The project covers the coastal area from Scammon Bay southward to Kuskokwim Bay as well as Nunivak Island on the southwest coast of Alaska. Subject surveys extend from Kangirlvar Bay to Kinak Bay east of Etolin Strait.

The area covered is almost all marsh interlaced with streams and ponds. Areas above the elevation of 25 feet, that could be delineated by contours are the exceptions.

Project instructions originated in 1949. Nine-lens photography dates from August 1950 and July 1952, and field inspection was accomplished during the season of 1951. The radial plot was done in the Baltimore District Office in 1957 and the compilations in 1958 by stereoscopic instruments (Reading Plotter) at the Washington Office.

No previously registered topographic surveys nor contemporary hydrographic surveys are on record of subject area.

A cronar film positive at the compilation scale of 1:20000 and the Descriptive Report will be registered and filed in the Bureau Archives.

March 1959

The Field Inspection Report is filed with the
Descriptive Report for T-9679.

14

PHOTOGRAMMETRIC PLOT REPORT
Project Ph-56
Surveys T-9704 thru T-9710

21. AREA COVERED

This radial plot covers the area of Surveys T-9704 thru T-9710. These topographic surveys cover the area along the east side of Etolin Strait from the southern part of Nelson Island, Tooksook Bay, southward to Kinak Bay. The surveys will be compiled with the Reading Plotter.

22. METHOD-RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and Universal Traverse Mercator grids in red, at a scale of 1:20,000, were furnished by the Washington office.

All control stations and substitute stations were plotted using the 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:

All photographs used were nine-lens metal mounted photographs at a scale of 1:20,000. Forty-one (41) photographs were used in the plot, numbered as follows:

28536 thru 28548,
28710 thru 28717,
38119 thru 38124,
38170 thru 38183.

Templets:

Vinylite templets were made from all photographs using a master templet to adjust for errors due to chamber displacement. Radial lines were scratched on the templets and scratches were filled in with china marking wax pencils. Red pencil was used for pass points along shoreline and in the marshy areas (rectification points). Black pencil was used for all other radial lines.

Closure and Adjustment to Control:

This radial plot was laid directly on the map manuscripts beginning with photograph 38119 and continuing to the end of the flight, photograph 38124. At this point another flight was continued starting with 28717 and laid southeastward to photograph 28710. Then the other two flights were laid starting with photographs 38183 thru 38170 and 28536 thru 28548, and tied into control stations MANY, 1949; SHORE, 1949; KINAK, 1951; CURLEW, 1949 and PLAIN, 1951. A rigid plot was obtained and no difficulty was encountered.

Transfer of Points:

The positions of all centers, pass points and control stations were pricked on the top templets and circled with a 3 mm circle. They were then established on the remaining templets and map manuscripts by drilling down through them with a small (.01 inch) jewelers drill. All points were circled on each remaining templet as it was removed and finally on the map manuscripts.

23. ADEQUACY OF CONTROL

The horizontal control was adequate for a satisfactory radial plot in the area covered by this report. All control stations were held except as follows:

TOOKSOOK, 1951 - This station falls outside of the area of 1950 photography available at the time of field inspection. The station was pricked in the office with the aid of the stereoscope and information available on the identification card made in the field in 1951. It is believed that sometime between the time the station was marked on the ground and the photographs taken in 1952, the markings disappeared. The radially plotted position falls 0.4 mm east of the plotted position. This point is not needed for rectification. An abundance of rectification points in this area are on the photographs. No attempt was made to re prick this station.

24. SUPPLEMENTAL CONTROL

None.

25. PHOTOGRAPHY

The definition of the photographs was good, and the coverage was adequate for the area of this report.

Though several tilted photographs were used in this plot, no tilt determination was necessary. All of the pass points are very low in elevation.

One of the fiducial marks was missing in chamber four and one in chamber eight on all 1952 photographs.

Some conjugate centers were pricked in the Washington Office before the photographs were received in this office. It was noted on photographs 28534 thru 28549 that many of the points had been pricked and re pricked so many times the photographs were damaged in these areas.

26. VERTICAL CONTROL

The elevations for stations HV-001, 002, 003, 004 and 006 were rejected because the computed elevations range from -12.2 meters to +9.1 meters. These stations are in marshy areas and with the "R" points around them they are not needed for rectification.

It was noted while doing the stereoscopic pricking of the control stations and recoverable topographic stations, that there appears to be some error in the published elevations of the triangulation stations along the shoreline. Refer to the list of "Discrepancy in Elevation of Triangulation Stations" which is attached to this report.

None of the "V" points that were identified in the field, with the exception of one, were located. This area in general is marshy and there are sufficient "R" points for rectification of the photographs.

V-0100, A and B - These points appear on the two photographs to be used with stereoscopic instruments for compiling the contours in this area. The two points identified were at the base of a bluff and were too difficult to transfer to other photographs. Also, only two cuts were needed to give the position as a common pass point was placed near this lake to control the radial plot. This V point is not needed for rectification of the photographs.

SLOUGH, 1951 - There is no published elevation for this station but since the Sub. Pts. were tips of marsh they were made "R" points for rectification of the photographs.

27. RECOVERABLE TOPOGRAPHIC STATIONS

The positions of all recoverable topographic stations which were identified were established in the radial plot. Those identified by a substitute point were plotted with the use of a steel protractor and meter bar before the map manuscripts were disassembled.

Respectfully submitted
15 October 1957

Leroy A. Senasack

Leroy A. Senasack
Carto. Photo. Aid

Approved and forwarded

William F. Deane
William F. Deane,
CDR C&GS
Baltimore District Officer

Project Ph-56
Surveys T-9704 thru T-9710

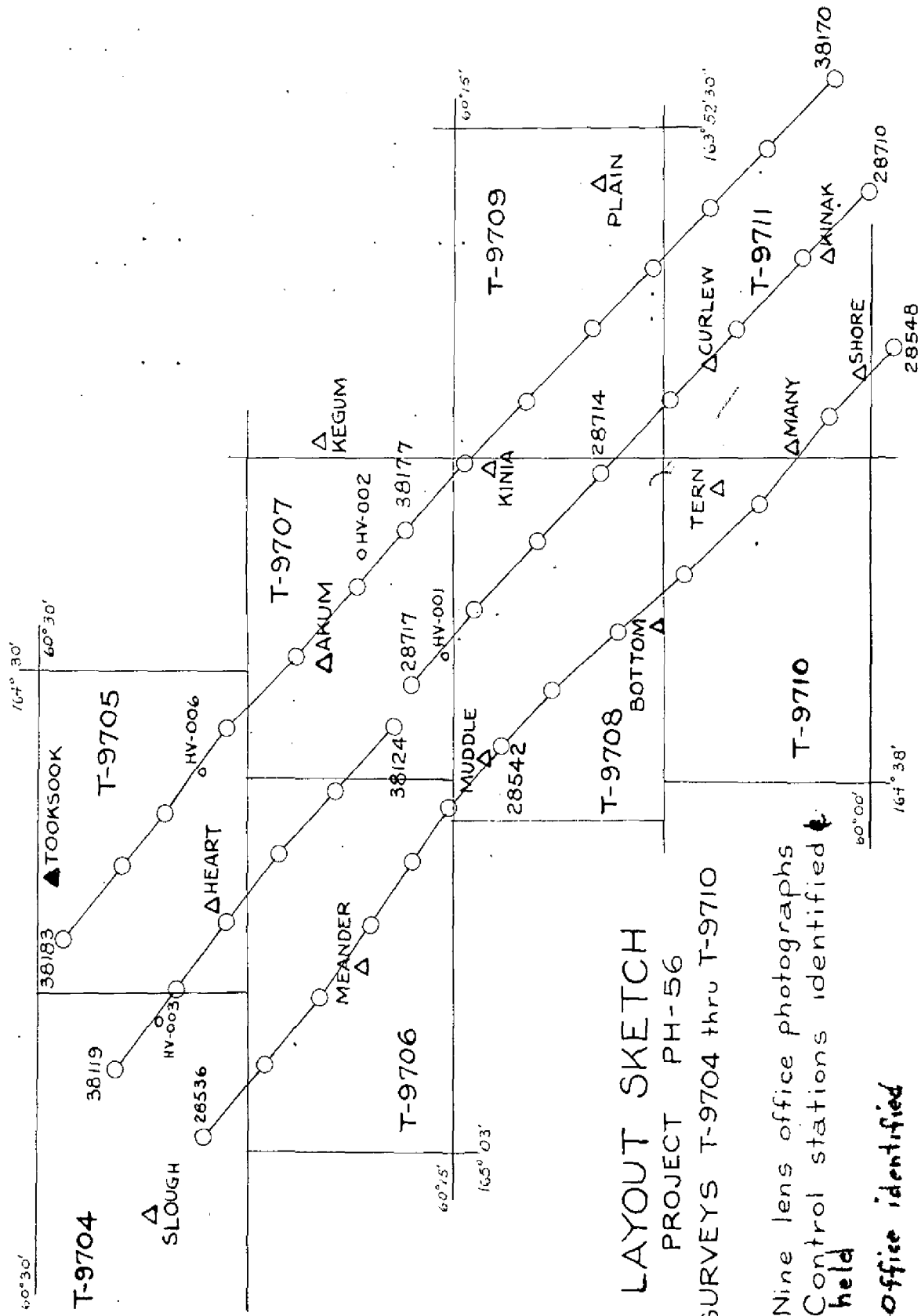
Discrepancy in Elevation of Triangulation Stations

It was noted while pricking these stations stereoscopically and evaluating data supplied by the field party, that there appeared to be errors in the published elevations (or Sea Level Datum) of the stations. This area in general is very low and marshy. The following estimated elevations are listed assuming the MHW to be three feet above MSL.

Name of Station	Field Notes	Published Elevation
SLOUGH, 1951	The Sub. Pts. are tips of marsh and same elevation as station. Field pencil notes state: "station 2.3' higher than river level at 15:42 hour, 7 June 1951." Estimated station elevation is 4 ft. (6 ft)	None
MEANDER, 1951	This station is in the marsh and looks very similar to the areas around topographic stations DOZE, PEAS & ANDY which are 3' above MHW. Estimated elevation of station is 6 ft. (10 ft)	12 ft.
MUDDLE, 1951	The lake at Sub. Pt. B appears on the photographs as a tidal lake. The field man states on the identification card the "lake is 2' lower than station". Estimated elevation of station is 5 ft. (7 ft)	13 ft.
BOTTOM, 1951	The Sub. Pts. are tips of old drains in marsh and same elevation as the station. The lake beside the station appears to be a tidal lake. Estimated elevation of station is 6 ft. (9 ft)	16 ft.
MANY, 1949	This station is right beside and only slightly higher than a swamp or marshy area beside a tidal stream. The station appears to be very similar in elevation to triangulation station SHORE, 1949 which is 3' above MHW and topographic station BITE, 1949 which is 2 ft. above MHW. Estimated elevation of station is 6 ft. (9 ft)	17 ft.
SHORE, 1949	The field man states on the identification card, "the station is 3 ft above MHW". This station appears on the photographs to be in an area very similar to topographic stations BITE, 1949 and FATE, 1949 which have an elevation of 2 ft. above MHW. Estimated elevation of station is 6 ft. (10 ft)	17 ft.

Elevations in "Purple" were read on the Reading Stone Plotter. See P 40 of Compilation Report

Name of Station	Field Notes	Published Elevation
KINAK, 1951	Sub. Pts. are tips of marsh on a lake in a large marshy area between a "Y" in a tidal stream. Identification card states the Sub. Pts. are 2.1 ft lower than station. Estimated elevation for station is 7 ft. (60 ft)	16 ft.
KIPNUK N. E. BASE, 1949	The field man (C.A. Annis) in 1949 identified a tip of marsh on a tidal slough as a Sub. Pt., same elevation as station. Estimated elevation of station is 5 ft. (7 ft)	13 ft.
KIPNUK S. W. BASE, 1949	In cahier Alaska No. 95, Description of Station, it states the mark projects 6 inches (above ground). In 1949 the identification card made out by C. A. Annis states under "Remarks" the station is about 15 ft. above Sea Level, yet in the sketch on the same card he shows the mud flats on the ocean side of the station and states "Low flat about 3 ft. lower than station ground". Upon stereoscopic examination of the photographs it is believed the sketch is correct. Estimated elevation of station is 5 ft. (7 ft)	13 ft.



LAYOUT SKETCH
PROJECT PH-56
SURVEYS T-9704 thru T-9710

- Nine lens office photographs
- Δ Control stations identified
- ▲ Office identified

SCALE FACTOR

1 FT. = 3048006 METER

COMPUTED BY: J. Steinberg

DATE 17 MAY 1955

CHECKED BY: **H. R. Rudolph**

DATE 7 June 1955

CONFIDENTIAL - DC - 57843

MAP T-9705

PROJECT NO. Ph-56

SCALE OF MAP 1:20,000

SCALE FACTOR

[illegible]

1 FT = 3048006 METER

COMPUTED BY: J. Steinberg,

DATE 17 May 1955

CHECKED BY: H. H. Rudolph

DATE 8 June 1955

COMM-DC-57843

COAST AND GEODETIC SURVEY
CONTROL RECORD

MAP T- 9706

PROJECT NO. Ph-56

SCALE OF MAP..... 1:20,000

SCALE FACTOR

[illegible]

1 FT. = 3048006 METER

COMPUTED BY: J. Steinberg

DATE.....17 May 1955.....

CHECKED BY:.....H. R. Rudolph

DATE:

8 June 1955

COMM-DC-57843

22

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T-9707

PROJECT NO. PH-56

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ϕ -COORDINATE LONGITUDE OR λ -COORDINATE " " " "		DISTANCE FROM GRID 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)		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	
AKUM, 1951	IV p. 379	N.A. 1927	60 19	48.728				1508.1	(348.9)		
			164 30	19.561				300.2	(620.6)		
Sub. Pt. "A" AKUM, 1951		"	60 19					1483.6	(373.4)		
			164 30					304.8	(616.0)		
Sub. Pt. "B" AKUM, 1951		"	60 19					1565.2	(291.8)		
			164 30					348.3	(572.5)		
KEGUM, 1951	IV p. 379	"	60 19	03.902				120.8	(1736.2)		
			164 16	02.086				32.0	(889.1)		
Sub. Pt. KEGUM, 1951		"	60 19					113.8	(1743.2)		
			164 16					32.0	(889.1)		
HV-001		"	60 15	12.05				372.9	(1484.1)		
			164 27	34.55				531.4	(391.5)		
Sub. Pt. "A" HV-001		"	60 15					353.1	(1503.9)		
			164 27					513.4	(409.5)		
Sub. Pt. "B" HV-001		"	60 15					426.1	(1430.9)		
			164 27					531.0	(391.9)		
HV-002		"	60 18	33.00				1021.4	(835.6)		
			164 21	31.65				486.0	(435.3)		
Sub. Pt. "A" HV-002			60 18					1049.4	(807.6)		
			164 21					432.0	(489.3)		
Sub. Pt. "B" HV-002			60 18					1115.9	(741.1)		
			164 21					581.4	(339.9)		

1 FT. = 3048006 METER

COMPUTED BY: J. Steinberg

DATE 17 May 1955

CHECKED BY: H. R. Rudolph

DATE 8 June 1955

COMM. DC-57043

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 9708

PROJECT NO. Ph-56

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			°	'			FORWARD	(BACK)	
MIDDLE, 1951	IV p. 388	N.A. 1927	60	14	28.19		872.5	(984.5)	
			164	34	56.51		869.5	(53.7)	
Sub. Pt. "A" MIDDLE, 1951		"	60	14			879.9	(959.1)	
			164	34			890.7	(32.5)	
Sub. Pt. "B" MIDDLE, 1951		"	60	14			851.2	(1005.8)	
			164	34			778.7	(144.5)	
BOTTOM, 1951	IV p. 385	"	60	07	30.805		953.4	(903.6)	
			164	25	02.270		35.1	(891.5)	
Sub. Pt. "A" BOTTOM, 1951		"	60	07			948.1	(908.9)	
			164	25			82.5	(844.1)	
Sub. Pt. "B" BOTTOM, 1951		"	60	07			918.0	(939.0)	
			164	25			91.7	(834.9)	
KINIA, 1951	IV p. 385	"	60	14	07.033		217.7	(1639.3)	
			164	16	03.624		55.8	(867.6)	
Sub. Pt. "A" KINIA, 1951		"	60	14			216.0	(1641.0)	
			164	16			69.5	(853.9)	
Sub. Pt. "B" KINIA, 1951		"	60	14			157.9	(1699.1)	
			164	16			71.8	(851.6)	

1 FT. = 3048006 METER

COMPUTED BY: J. Steinberg

DATE

18 May 1955

CHECKED BY: H. R. Rudolph

DATE 8 June 1955

COMMA-DC-57B43

24

MAP T-9709

PROJECT NO. Ph-56

SCALE OF MAP 1:20,000

SCALE FACTOR

[illegible]

SCALE FACTOR

1 FT. - 3048006 METER COMPUTED BY: J. Steinberg	DATE: 18 May 1955 CHECKED BY: H. R. Rudolph	DATE: 8 June 1955 COMMA-DC-57R43
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COMPILATION REPORT

T-9704, T-9705, T-9706, T-9707, T-9708, T-9709 and T-9710

31. Delineation:

With the exception of shoreline and details above the plane of marshland which were drawn using stereo-instrument methods, all map manuscripts were delineated using graphic methods.

T-9705 Insufficient photographic coverage to completely delineate entire sheet.

T-9707 Insufficient photographic coverage to completely delineate entire sheet. Although the flat areas of the sheet were classified as "marsh" they are, in general, slightly higher than true marshland. They are cut into small tufts and masses by a myriad of lacy-edged ponds which were not practical to draw. No appreciable mass of high ground exists with the exception of Ingariak Hills near the west central portion SE of Kegum Kegati Lake.

T-9709 Insufficient photographic coverage to completely delineate entire sheet.

32. Control:

See Radial Plot Report and paragraph 40 this report.

33. Supplemental Data:

No comment

34. Contours and Drainage:

No comment

35. Shoreline and Alongshore Details:

Shoreline inspection was adequate. Low water details were not delineated by office interpretation of the photographs because of tide stage at time of photography with the exception of the Kinak Bay Area on T-9710 in which an effort was made to draw low water details from photography taken 3 feet above MLLW.

-2-

36. Offshore details

No comment

37. Landmarks and aids

Field party indicates no landmarks or aids

38. Control for future surveys

The following photo topo stations were established:

DOLT, 1951	T-9704
OOZE, 1951	T-9704
PEAS, 1951	T-9706
TYPE, 1951	T-9706
ANDY, 1951	T-9708
LITE, 1951	T-9710

A list of topographic stations has been prepared and entered in paragraph 49 of this report.

39. JUNCTIONS

All sheet junctions were made on all adjoining sheets as indicated by the project layout diagram included in this report.

40. Horizontal and vertical accuracy

The divergencies, or differences, in elevations on certain triangulation stations as noted on the Radial Plot Report were further substantiated in the process of compilation. Tidal information furnished by the Tides and Currents Division, afforded an excellent datum from which elevations could be read on the plotter. The area is, in general, low and interlaced with tidal rivers, streams and ponds, leaving no point distant from the tidal reference plane. Inland measurements from water level to apparent high-water line verified the range of tide and stage of tide as furnished by Tides and Currents. Because of the strength of the tidal data all published elevations of these control points have been ignored and instrument elevations substituted in their place.

In addition to the stations noted in the special section of the Radial Plot Report the following differences were noted:

Station	Sheet	Pub. Elev.	Instr. Elev.
CURLEW		297	283
FERN		443	427
KINIA		259	246
KEGUM		217	204
AKUM		170	165
TOOKSOOK		839	830

There are no known areas of questionable horizontal or vertical accuracy.

46. Comparison with Existing Maps:

USGS map Nunivak Island, Alaska N-6000-W16500/60X180, 1:250,000, 1951 Edition.

USGS map, Baird Inlet, Alaska N6000-W16200/60X180, 1:250,000, 1951 Edition.

Town of Chefornak is shown on T-9709 southwest and closer to the sea than indicated on Baird Inlet map.

As noted in paragraph 35 because of stage of tide at time of photography, the limits of the extensive mud flats sketched on these maps and indicated on field inspection were not delineated.

47. Comparison with Nautical Charts:

Compared with chart 9302.

48. Geographic Names List:

See Appended Lists.

Approved by

Submitted by

Louis Levin
Louis Levin
Superv. Cartographer
Nine-lens Instrument Unit

Wallace Heinbaugh
Wallace Heinbaugh
Cartographer

T-9704 thru T-9710

Notes to the Hydrographer

No photo hydro stations were established.

The following topographic stations were established
in the field and their positions determined by radial plot:

OOZE, 1951	T-9704
PEAS, 1951	T-9706
TYPE, 1951	T-9706
ANDY, 1951	T-9708
LITE, 1951	T-9710

Review Report of
Topographic Surveys T-9704 thru T-9710
March 1959

62. Comparison with Registered Topographic Surveys:

There are no registered topographic surveys of this area.

63. Comparison with Maps of Other Agencies:

BAIRD INLET, ALASKA, 1:250000, Ed. of 1951, US Geological Survey
NUNIVAK ISLAND, ALASKA, " " " " " " "

These are topographic reconnaissance-type charts and scale difference precludes a detailed comparison.

64. Comparison with Contemporary Hydrographic Surveys:

None!

65. Comparison with Nautical Charts:

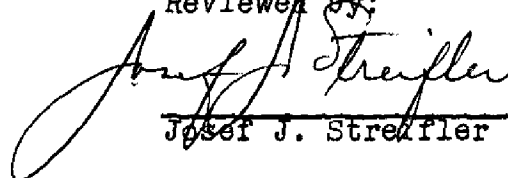
9302 1:1534076 Revised to 9/29/58

The small-scale chart is the only nautical chart coverage of subject area. Scale difference does not afford appropriate examination of agreement.

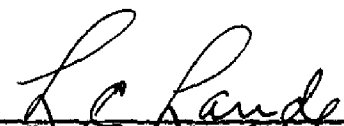
66. Adequacy of Results and Future Surveys:

Surveys T-9704 thru T-9710 have been compiled in accordance with project instructions and no deficiencies in accuracy or adequacy were noted.

Reviewed by:

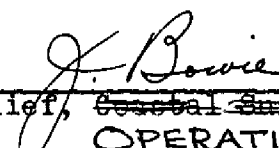

Josef J. Streifler

Approved by:


Chief, Review & Drafting Section
Photogrammetry Division

 12/27/60
Chief, Nautical Chart Branch
Charts Division


Chief, Photogrammetry Division
6 Dec. 1960


Chief, Coastal Surveys Div.
OPERATIONS

Survey No. T-9704

[illegible]

GEOGRAPHIC NAMES

Survey No. T-9705

GEOGRAPHIC NAMES											33
Survey No. T-9705											
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		
Kolovinerak River										1	
Nelson Island										2	
Nichtmiut										3	
Nvortulermiut										4	
Tooksook River										5	
Akumwake slough										6	
Names approved 1-2009 L. Heck										7	
										8	
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GEOGRAPHIC NAMES

Survey No. T-9706

GEOGRAPHIC NAMES																					
Survey No. T-9706																					
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											
Etolin Strait		*																		1	
Kolovinerak River		*																		2	
Nelson Island		*																		3	
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Names approved 1-20-59
L. Heer

34

GEOGRAPHIC NAMES

Survey No. **T-9707**

GEOGRAPHIC NAMES											35
Survey No. T-9707											
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		
Ingariak Hills										1	
Kegum ^a Kegati Lake										2	
Kolovinerak River										3	
ArkumwaKe slough										4	
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Names approved 1-20-59
L. Heck

GEOGRAPHIC NAMES

Survey No. T-9708

GEOGRAPHIC NAMES												36
Survey No. T-9708												
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				
Chefornak											1	
Chufuk ^u nuk River ✓											2	
Etolin Strait ✓											3	
Ooksokwak River ✓											4	
Names approved 1-20-59											5	
L. Heck											6	
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Names approved 1-20-59
L. Heck

GEOGRAPHIC NAMES

Survey No. T-9709

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Names approved 1-20-59
L. Heck

GEOGRAPHIC NAMES

Survey No. T-9710

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	
<u>Cheching Mt</u>										1
<u>Etolin Strait</u>										2
<u>Kinak Bay</u>										3
										4
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Names approved 1-20-59
L. H. Hark

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9704 thru T-9710

Record of Application to Charts

[illegible]

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.