

9713 THRU 9716

9713  
THRU  
9716

Diag. Cht. No. 9302.

Form 504	
U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
<b>DESCRIPTIVE REPORT</b>	
Type of Survey <u>Topographic</u>	
Field No. <u>Ph-56</u>	Office No. <u>T-9713 thru T-9716</u>
<b>LOCALITY</b>	
State <u>Alaska</u>	
General locality <u>Etolin Strait (Bering Sea)</u>	
Locality <u>Kikegtek Island to Vicinity</u>	
<u>East of Kinak Bay</u>	
<u>1950-52</u>	
<b>CHIEF OF PARTY</b>	
<u>M.J. Tonkel, Chief of Field Party</u>	
<u>E.W. Kirsch, Balto. Photo. Office</u>	
<u>L.W. Swanson, Div. of Photo. Wash., D.C.</u>	
<b>LIBRARY &amp; ARCHIVES</b>	
DATE	<u>December 1960</u>





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): **From field inspection on nine-lens photographs**

Projection and Grids ruled by (IV): **Austin Riley**

Date: **10-18-54**

Projection and Grids checked by (IV): **Austin Riley**

Date: **10-26-54**

Control plotted by (III): **David Williams**

Date: **6-28-55**

Control checked by (III): **Joseph Steinberg**

Date: **6-28-55**

Radial Plot ~~on Stereoscopic~~

Date: **2-21-58**

Control extension by (III): **Leroy A. Senasack**

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

Date: **Aug. 1958**

Contours **W. Heinbaugh**

Date: **Aug. 1958**

Manuscript delineated by (III): **W. Heinbaugh**

Date: **Aug. 1958**

Photogrammetric Office Review by (III): **L. Levin**

Date:

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

Date:

Camera (kind or source) (III):

T-9713

Number  
28699-28700  
28698

Date  
8/13/53-56  
8/13/53 50

PHOTOGRAPHS (III)  
Time  
\*14.30  
\*14.25

Scale  
1:20,000  
1:20,000

Stage of Tide  
3.1 above MLLW  
3.0 above MLLW

\*Approximate time - clock stopped

Tide (III)

Reference Station: Kodiak  
Subordinate Station: none-general area  
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):

Recovered:  
Recovered:

Identified:  
Identified:

Remarks:

Ratio of Ranges	Mean Range	Diurnal
		Spring Range
		8.5
1.3		11.0

Date: April 1959  
Date: Aug 19, 1969  
Date: 10-5-59  
Date:

T-9714

Camera (kind or source) (III):

Number	Date	Time	Scale	Stage of Tide
28709-28710	8/13/50	*14:30	1:20,000	4.6 above MLLW
28548-28549	8/13/50	*12:20	1:20,000	3.6 above MLLW
28550-28553	8/13/50	*12:25	1:20,000	3.0 above MLLW
28695-28698	8/13/50	*14:20	1:20,000	3.0 above MLLW

\* approximate time - clock stopped

Tide (III)

Diurnal

Reference Station: **Kodiak**  
 Subordinate Station: **general a rea of sheet**  
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.2		10.2

Washington Office Review by (IV): *S. Stuefeler*  
 Final Drafting by (IV): *John H. Prosser*  
 Drafting verified for reproduction by (IV): *Wm O. Hallum*  
 Proof Edit by (IV):

Date: *April 19 59*  
 Date: *Sept 29, 1959*  
 Date: *10-5-59*  
 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):  
 Number of BMs searched for (II):  
 Number of Recoverable Photo Stations established (III):  
 Number of Temporary Photo Hydro Stations established (III):

Recovered:                      Identified:  
 Recovered:                      Identified:

Remarks:

Camera (kind or source) (III):

T-9715

Number  
28707-28709  
38166-38169

Date  
8/13/50  
7/19/52

PHOTOGRAPHS (III)

Time  
\*14:30  
14:45

Scale  
1:20,000  
1:20,000

Stage of Tide  
4.6 above MLLW  
3.2 above MLLW

\*Approximate time - clock stopped

Tide (III)

Reference Station: Kodiak  
Subordinate Station: none - general area  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.1		9.4

Washington Office Review by (IV):

*W. Steinfel*

Date: *April 1959*

Final Drafting by (IV):

*John A. Luzzio*

Date: *Sept 22, 1959*

*Dec 30, 1959*

Drafting verified for reproduction by (IV):

*Wm O. Halluin*

Date: *3-2-60*

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:

T-9716

Camera (kind or source) (III):

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
		Time			
28284-28288	8/13/50			1:20,000	
38159-38152	7/19/52	14:30		1:20,000	6.7 above MLLW

Tide (III)

Reference Station: **Kodiak**  
 Subordinate Station: **none-general area**  
 Subordinate Station:

Washington Office Review by (IV): *[Signature]*

Final Drafting by (IV): *[Signature]*

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):

Recovered:                      Identified:  
 Recovered:                      Identified:

Remarks:

Diurnal

Ratio of Ranges	Mean Range	Spring Range
		8.5
1.1		10.2

Date: *April 1959*

Date: *Nov 18, 1959*

Date:

Date:



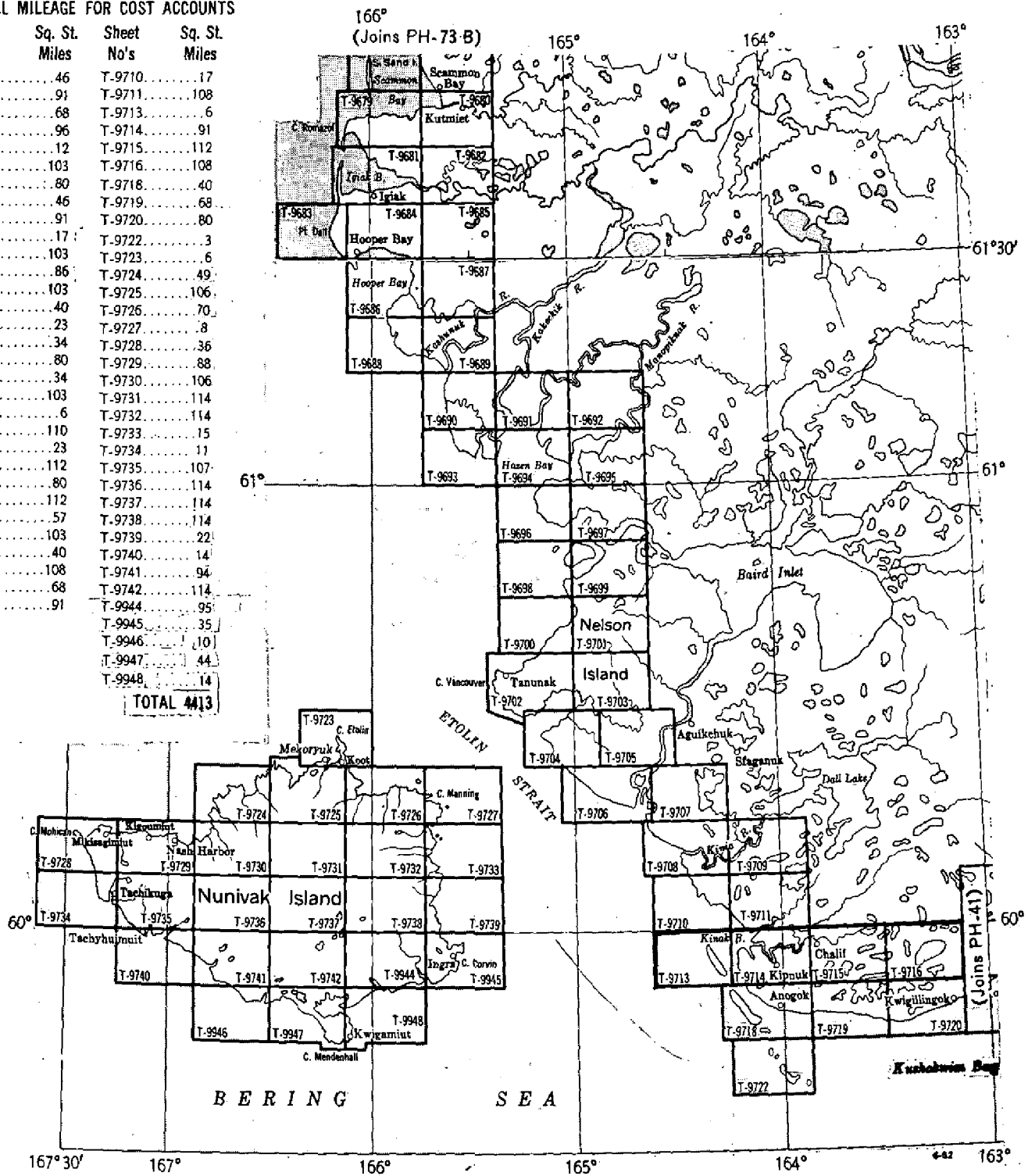
# TOPOGRAPHIC MAPPING PROJECT PH-56

B

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

### OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No's	Sq. St. Miles	Sheet No's	Sq. St. Miles
T-9679	46	T-9710	17
T-9680	91	T-9711	108
T-9681	68	T-9713	6
T-9682	96	T-9714	91
T-9683	12	T-9715	112
T-9684	103	T-9716	108
T-9685	80	T-9718	40
T-9686	46	T-9719	68
T-9687	91	T-9720	80
T-9688	17	T-9722	3
T-9689	103	T-9723	6
T-9690	86	T-9724	49
T-9691	103	T-9725	106
T-9692	40	T-9726	70
T-9693	23	T-9727	8
T-9694	34	T-9728	36
T-9695	80	T-9729	88
T-9696	34	T-9730	106
T-9697	103	T-9731	114
T-9698	6	T-9732	114
T-9699	110	T-9733	15
T-9700	23	T-9734	11
T-9701	112	T-9735	107
T-9702	80	T-9736	114
T-9703	112	T-9737	114
T-9704	57	T-9738	114
T-9705	103	T-9739	22
T-9706	40	T-9740	14
T-9707	108	T-9741	94
T-9708	68	T-9742	114
T-9709	91	T-9944	95
		T-9945	35
		T-9946	10
		T-9947	44
		T-9948	14
		<b>TOTAL</b>	<b>4413</b>



Compiled at 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-9713 thru T-9716

These four surveys are part of Topographic Mapping Project PH-56 (24090). The project covers the coastal area from Scammon Bay southward to Kuskokwim Bay and Nunivak Island on the Bering Sea in Alaska. T-9713 thru T-9716 cover an area of 72 1/2 minutes of latitude and starting with an off-shore group of islands south of Kinak Bay known as Kikegtek Island runs eastward to longitude 163°07'30", which is a common junction line with project PH-41.

The area covered by subject surveys is low and inundated with marsh and tundra and interlaced with streams, lakes and ponds. The highest ground elevation is only 22 feet.

Project instructions originated in 1949. Wide-lens photography is from August 1950 and July 1952. Field inspection was accomplished during season of 1951 and the radial plot at the Baltimore District Office in 1958. During the latter part of 1958 subject surveys were compiled by stereoscopic instruments (Reading Plotter) and by graphic methods at the Washington Office.

There are no registered topographic surveys recorded nor are there any contemporary hydrographic surveys of this 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.

April 1959

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

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The Radial Plot Report is filed with the Descriptive  
Report for T-9718 thru T-9720

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

MAP T. 2714 PROJECT NO. Ph-56 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		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)	FORWARD	(BACK)
KIPNUK ASTRO (USAF), 1949	IV p. 388	N.A. 1927	59	56	21.188			655.7	(1201.2)		
Sub. Pt. KIPNUK ASTRO (USAF), 1949		"	164	02	24.310			377.5	(554.2)		
VICUN, 1951	IV p. 378	"	59	56	49.733			667.9	(1189.0)		
Sub. Pt. "A" VICUN, 1951		"	164	02	45.564			405.4	(526.3)		
Sub. Pt. "B" VICUN, 1951		"	59	54				1539.1	(317.8)		
KIPNUK, 1949	IV p. 378	"	164	08				708.1	(224.4)		
Sub. Pt. "A" KIPNUK, 1949		"	59	54				1556.6	(300.3)		
Sub. Pt. "B" KIPNUK, 1949		"	164	08				723.7	(208.8)		
KIPNUK N.E. BASE 1949	IV p. 378	"	59	56	21.490			1484.9	(372.0)		
Sub. Pt. "A" KIPNUK N.E. BASE 1949		"	164	02	27.004			689.5	(243.0)		
Sub. Pt. "B" KIPNUK N.E. BASE 1949		"	59	56				665.1	(1191.8)		
KIPNUK N.E. BASE 1949	IV p. 378	"	164	02				419.3	(512.4)		
Sub. Pt. "A" KIPNUK N.E. BASE 1949		"	59	56				668.2	(1188.7)		
Sub. Pt. "B" KIPNUK N.E. BASE 1949		"	164	02				405.6	(526.1)		
KIPNUK N.E. BASE 1949	IV p. 378	"	59	57	22.100			616.4	(1240.5)		
Sub. Pt. "A" KIPNUK N.E. BASE 1949		"	164	11	23.256			356.0	(575.7)		
Sub. Pt. "B" KIPNUK N.E. BASE 1949		"	59	57				684.0	(1172.9)		
KIPNUK N.D. BASE 1949	IV p. 378	"	164	11				361.0	(570.3)		
Sub. Pt. "A" KIPNUK N.D. BASE 1949		"	59	57				668.2	(1188.7)		
Sub. Pt. "B" KIPNUK N.D. BASE 1949		"	164	11				423.9	(507.4)		
KIPNUK N.D. BASE 1949	IV p. 378	"	59	57				663.1	(1193.8)		
Sub. Pt. "A" KIPNUK N.D. BASE 1949		"	164	11				460.0	(471.3)		
Sub. Pt. "B" KIPNUK N.D. BASE 1949		"									





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

MAP T. 2716 PROJECT NO. Ph-56 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE LONGITUDE OR $\alpha$ -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		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)	FORWARD	
FLUFF, 1949	IV p. 377	N.A. 1927	59	54	45.103			1395.9	( 461.0)	
Sub. Pt. FLUFF		"	163	22	47.998			746.0	( 186.5)	
SNARE, 1949	IV p. 377	"	59	56	27.868			1380.1	( 476.8)	
Sub. Pt. SNARE, 1949		"	163	14	56.992			794.5	( 138.0)	
KANE, 1949	IV p. 376	"	59	56				862.5	( 994.4)	
Sub. Pt. KANE, 1949		"	163	10	14.659			885.0	( 46.7)	
ANOGOK, 1949	IV p. 377	"	60	00	23.556			907.4	( 949.5)	
Sub. Pt. ANOGOK, 1949		"	163	10				922.0	( 9.7)	
		"	59	53	11.118			729.0	(1127.9)	
		"	163	29	54.690			227.2	( 702.7)	
		"	59	53				914.5	( 942.4)	
		"	163	29				262.1	( 667.8)	
		"	59	53				345.0	(1511.9)	
		"	163	29				850.6	( 82.6)	
		"	59	53				332.1	(1524.8)	
		"	163	29				885.5	( 47.7)	



COMPILATION REPORT

T-9713, T-9714, T-9715, T-9716

31. Delineation

The Reading nine-lens plotter was used to draw shoreline and to obtain elevation above sea level with the balance of the details being drawn by graphic methods using rectified nine-lens photographs.

No field inspection was obtainable for any inland area except in the vicinity of Kipnuk.

32. Control

See Radial Plot Report for horizontal control.

No field established vertical control was used for control of the models on the Reading plotter. The elevations of the triangulation stations as shown on the List of G.P.s were found to be 6-8 feet above the elevations read on the Reading plotter. Because of the numerous tidal streams & lakes available for leveling the models, the instrument elevations were shown on the manuscript. (See Radial Plot Report T-9704 thru T-9710 for a discussion of this discrepancy).

33. Supplemental Data

Tri-Met photos nos. 46 1-V53, 46 1V-56

34. Contours and Drainage

No comment

35. Shoreline and alongshore details

Although proper tide stage photographs were not available, an attempt was made to interpret the approximate low-water line in Kinak Bay from the lowest tide stage photographs available ( 3 ft above MLLW).

36. Offshore details

No comments

37 Landmarks and aids

Field party lists one landmark SPIRE, church at Kipnuk, (T-9714). The position was scaled from the manuscript and forwarded to Nautical Chart Division.

38. Control for future surveys

The following photo topo station was established:

FATE 1951 T-9714

No hydro stations were established.

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

See Radial Plot Report and paragraph 32.

46. Comparison with existing maps

~~USGS map, Baird Inlet, Alaska, N 6000-W16200/60x180,  
1:250,000, 1951 Edition~~  
USGS map, Kuskokwim Bay, Alaska, N5900-W16200/60x180,  
1:250,000, 1951 Edition

47 Comparison with nautical charts

Manuscript was compared with chart 9302.

Items to be applied to nautical charts immediately - none

Items to be carried forward - none

48. Geographic name list

See appended name lists.

Approved

Submitted

*Louis Levin*  
\_\_\_\_\_  
Louis Levin  
Supervisory Cartographer

*Wallace Heinbaugh*  
\_\_\_\_\_  
Wallace Heinbaugh  
Cartographer (Photo)



Review Report of  
Topographic Surveys T-9713 thru T-9716  
April 1959

62. Comparison with Registered Topographic Surveys:

There are no registered topographic surveys of this area.

63. Comparison with Maps of Other Agencies:

KUSKOKWIM BAY, ALASKA, 1:250000, Ed. of 1951, US Geological Survey

This reconnaissance topographic survey shows KIKEGTEK ISLAND as one, about 4 statute miles west of the west shore. T-9713 and T-9714 of subject surveys places this island as a group of several and approximately 3 3/4 statute miles west of the west coast. This is the only notable difference that scale difference permits to disclose.

64. Comparison with Contemporary Hydrographic Surveys:

None!

65. Comparison with Nautical Charts:

9302                      1:1534076                      Revised to 9/29/58

In reference to the disagreement mentioned under item no. 63 concerning KIKEGTEK ISLAND, the above listed nautical chart portrays this island differently yet. However, for a sailing chart of stated scale such disagreement is far from being critical.

66. Adequacy of Results and Future Surveys:

These surveys comply with project instructions and meet the requirements for adequacy and accuracy.

Reviewed by

*Josef J. Streifler*  
Josef J. Streifler

Approved by:

*L. C. Landy*  
Chief, Review & Drafting Section  
Photogrammetry Division

*L. W. Dawson*  
Chief, Photogrammetry Division  
22 Nov 1960

*J. E. Waugh*                      12/27/60  
Chief, Nautical Chart Branch  
~~Charts~~ Division

*J. Bowie*  
Chief, Coastal Surveys Division  
OPERATIONS.

T-9713

Geographic Name List

Bering Sea

Etolin Strait

Kikegtek Island

Kinak Bay

Names approved 1-20-59  
L. Heck

T-9714

## Geographic Name List

Kinak BayKinak RiverKipnukKoguklik River

Names approved 1-20-59  
L. HECK

T-9715

Geographic Name List

Koguklik River

Names approved 1-20-59  
L. Heath

