

9696

9697

Diag. Cht. No. 9302.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey TopographicField No. Ph-56 Office No. T-9696
T-9697

LOCALITY

State AlaskaGeneral locality Hazen BayLocality Ningaluk River1950-51

CHIEF OF PARTY

M.J. Tonkel, Chief of Field Party

E.H. Kirsch, Balto. Photo. Office

~~L.W. Swanson, Div. of Photo. Wash, D.C.~~

LIBRARY & ARCHIVES

DATE September 1960

USCOMM-DC 5087

9696

9696

DATA RECORD

T-9696
T-9697

Project No. (II): PH 56

Quadrangle Name (IV):

Field Office (II): Portland, Oregon

Chief of Party: *M. J. Tonkel*

Photogrammetric Office (III): Baltimore, Maryland
Washington, D. C.

Officer-in-Charge: E. H. Kirsch

L. W. Swanson

Instructions dated (II) (III):

Copy filed in Division of
Photogrammetry (IV)

8 Sept. 1949

14 Dec. 1951

2 April 1951

21 Dec. 1951

21 May 1951

Method of Compilation (III): Reading Nine Lens Plotter

Manuscript Scale (III): 1:20,000

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

Scale Factor (III):

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): *19 May 1959*

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N. A. 1927 adj.

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-9696 and T-9697

C. Misfeldt

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

No Contours - spot elevations only

3

DATA RECORD

Field Inspection by (II): V. E. Serena

Date: May-Sept 1951

Planetable contouring by (II): *NONE*

Date:

Completion Surveys by (II): *NONE*

Date:

Mean High Water Location (III) (State date and method of location): From nine lens photos and 1951 Field Inspection.

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

Date: Feb. 1955

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

Date: Feb. 1955

Control plotted by (III): David W. Williams

Date: 14 June 1955

Control checked by (III): Joe Steinberg

Date: 12 July 1955

Radial Plot or Stereoscopic Control extension by (III): Leroy A. Senasack

Date: 14 December 1955

Planimetry

Stereoscopic Instrument compilation (III): C. Misfeldt
Contours

Date:
November 1957
Date:

Manuscript delineated by (III): C. Misfeldt

Date: November 1957

Photogrammetric Office Review by (III): L. Levin

Date: 11 December 1957

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

Date: 11 December 1957

Camera (kind or source) (III): Nine Lens Camera Model "B"

Number	Date	Time	Scale	Stage of Tide
28514-517	8/13/50	11:35*	1:20,000	6.0 above MLLW
28847-850	8/14/50	12:15	1:20,000	6.7 above MLLW
38087-091	7/19/52	9:10	1:20,000	4.2 above MLLW
38097-100	7/19/52	9:25	1:20,000	3.8 above MLLW

* approximate time

Tide (III) *

Reference Station: Kodiak
Subordinate Station: T-9696
Subordinate Station: T-9697

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: The tide stages and ranges are based on approximate values furnished by the Division of Tides and Currents.

Diurnal

Ratio of Ranges	Mean Range	Spring Range
		8.5
0.9		7.6
0.8		6.8

Date:

Date:

Date:

Date:

TOPOGRAPHIC MAPPING PROJECT 6056

5

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

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No. Area sq.miles

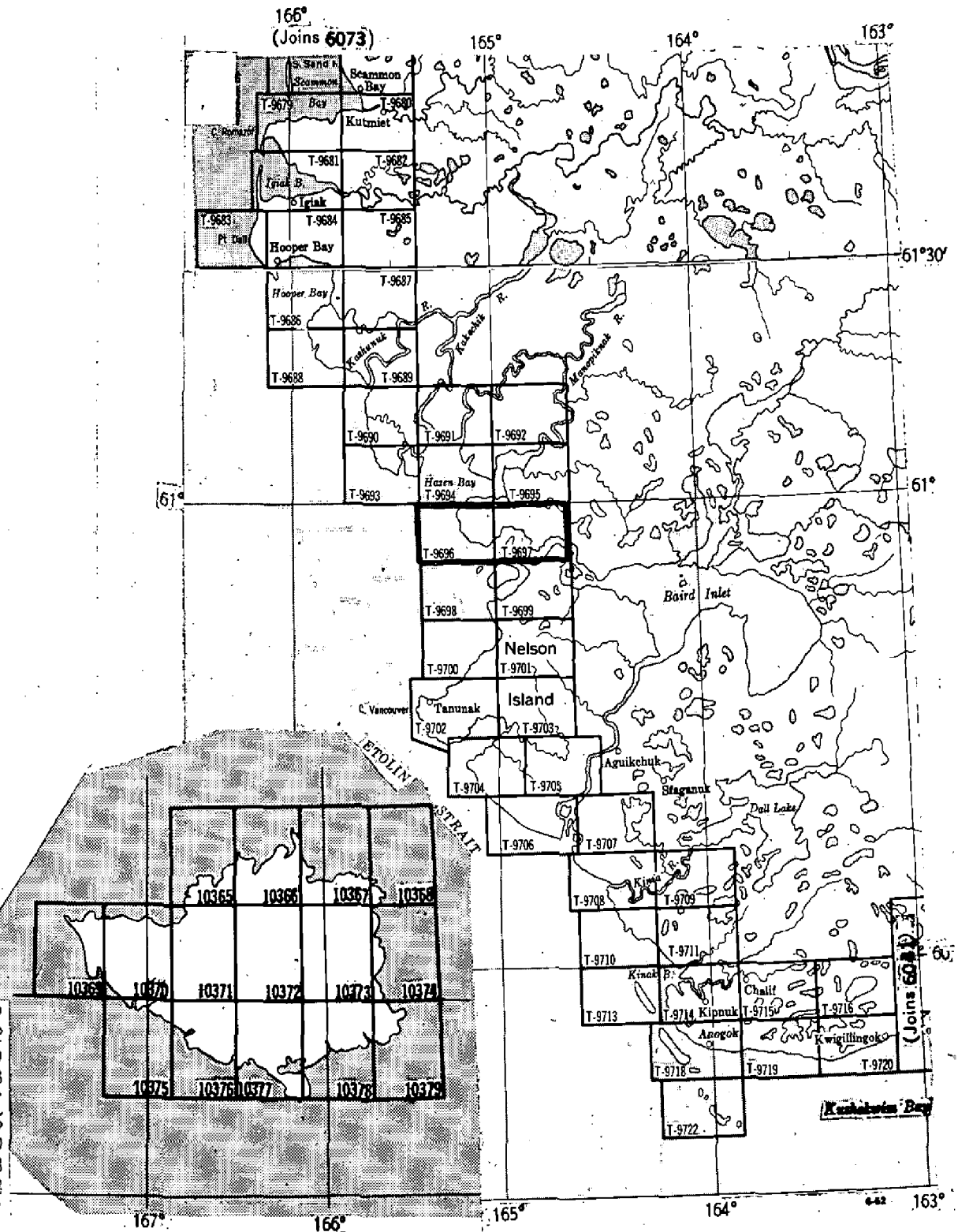
9679	46
9680	91
9681	68
9682	96
9683	12
9684	103
9685	80
9686	46
9687	91
9688	17
9689	103
9690	86
9691	103
9692	40
9693	23
9694	34
9695	80
9696	34
9697	103
9698	6
9699	110
9700	23
9701	112
9702	80
9703	112
9704	57
9705	103
9706	40
9707	108
9708	68
9709	91
9710	17
9711	108
9712	6
9713	91
9714	112
9715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



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-10)

Summary

to accompany topographic surveys T-9896 and T-9697

Subject surveys are two of Topographic Mapping Project PH-56 (24090). This project covers the coastal area from Scammon Bay to Kuskokwim Bay and Nunivak Island on the Bering Sea in Alaska. The specific area covered by T-9696 and T-9697 is between Hazen Bay and Ningaluk River and the north limits of the two surveys coincides with the projected line of 61° of latitude.

This portion of the coastal land area is marsh and tundra with a maximum ground elevation of twenty feet. With an established contour interval of 50 feet for this topographic project there are, consequently, no contours within the limits of subject surveys and only a limited number of elevations were added by the Reading Nine-Lens Plotter during compilation.

Original project instructions date back to 1949. Field inspection was accomplished during season of 1951 with 1950 nine-lens photography. Radial plot was done in the Baltimore District Office in 1955 and the compilation in 1957 by stereoscopic instruments (Reading Plotter) and graphically at the Washington Office.

There are no previously registered topographic maps nor contemporary hydrographic surveys 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.

Dec. 1958

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

PHOTOGRAMMETRIC PLOT REPORT

Project 6056

Surveys T-9691, T-9692 & T-9694 thru T-9697

(Original report is filed with the Descriptive Report T 9690-95)

21. AREA COVERED

This radial plot covers the area of Surveys T-9691, T-9692 and T-9694 thru T-9697. These surveys cover the area between Kakechik River and Ningaluk River in Hazen Bay on the west coast of Alaska. 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. Thirty-eight (38) photographs were used in the plot - numbered as follows:

28514 thru 28519
28843 thru 28852
38083 thru 38092
38096 thru 38107

Templets:

Vinylite templets were made from all photographs using a master templet to adjust for errors due to chamber displacements. Radial lines were scratched on the templets and scratches were filled in with china marking pencils. Red pencil was used for all shoreline (Rectification) pass points and 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 38083 and continuing southeasterly to photograph 38092. Then the flight starting with photograph 38107 was laid extending it southeasterly to photograph 38096. These two flights were continuous and adequately controlled; and, offered a good base for adding the two flights 28843 thru 28852 and 28514 thru 28519 to the west.

The flights laid for this plot resulted in a rigid plot. No difficulty was encountered in extending from the previous plot for surveys T-9686 thru T-9690 and T-9693 to the north and east of this plot to control station INLET, 1951; SLUMP, 1951; and FRONT, 1951 at the southern end of this plot.

22. METHOD - RADIAL PLOT (cont'd)

Closure and Adjustment to Control: (cont'd)

An effort was made to extend this plot to the southerly end of the flights laid as listed under sub-paragraph headed "PHOTOGRAPHS", and to effect a tie between these north-south flights and flight 28522 thru 28528 which is an east-west flight. However, control station GRASS, 1951 and PATCH, 1951 could not be held. This difficulty could not be resolved without the addition of more map manuscripts and flights of photographs for which the plot table was not large enough. For this reason, the plot was stopped at control stations which could be held with certainty. The pass points and photograph centers were pricked off only to the southern limits of surveys T-9696 and T-9697. It is felt that the positions of these pass points are all within the standards of accuracy and that the difficulty in the area around GRASS, 1951 and PATCH, 1951 will be resolved to the next plot.

Transfer of Points:

The position of all centers, pass points and control stations were pricked on the top templates and circled with a 3 mm circle. They were then established on the remaining templates and map manuscripts by drilling down through them with a small (.01 inch) jewellers drill. All points were circled on each remaining template 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.

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 because the degree of tilt was not enough to affect the plot.

One of the fiducial marks was missing in chamber 4 and one in chamber 8 on all the 1952 photographs.

Some conjugate centers were pricked in the Washington Office before the photographs were received in this office. It was noted that many of the circles were not round as if made by a faulty pen. Those circles on conjugate centers in line of flight were corrected.

26. VERTICAL CONTROL

No field identified V-points in this area were pricked in the office because there are sufficient shoreline pass points for rectification, and V-points are all in marsh.

The elevation of STUMP, 1951 is 4.8 meters (16 feet). In a stereoscopic study of the area, this elevation appears to be too high.
See #32 Compilation Report

27. RECOVERABLE TOPOGRAPHIC STATIONS

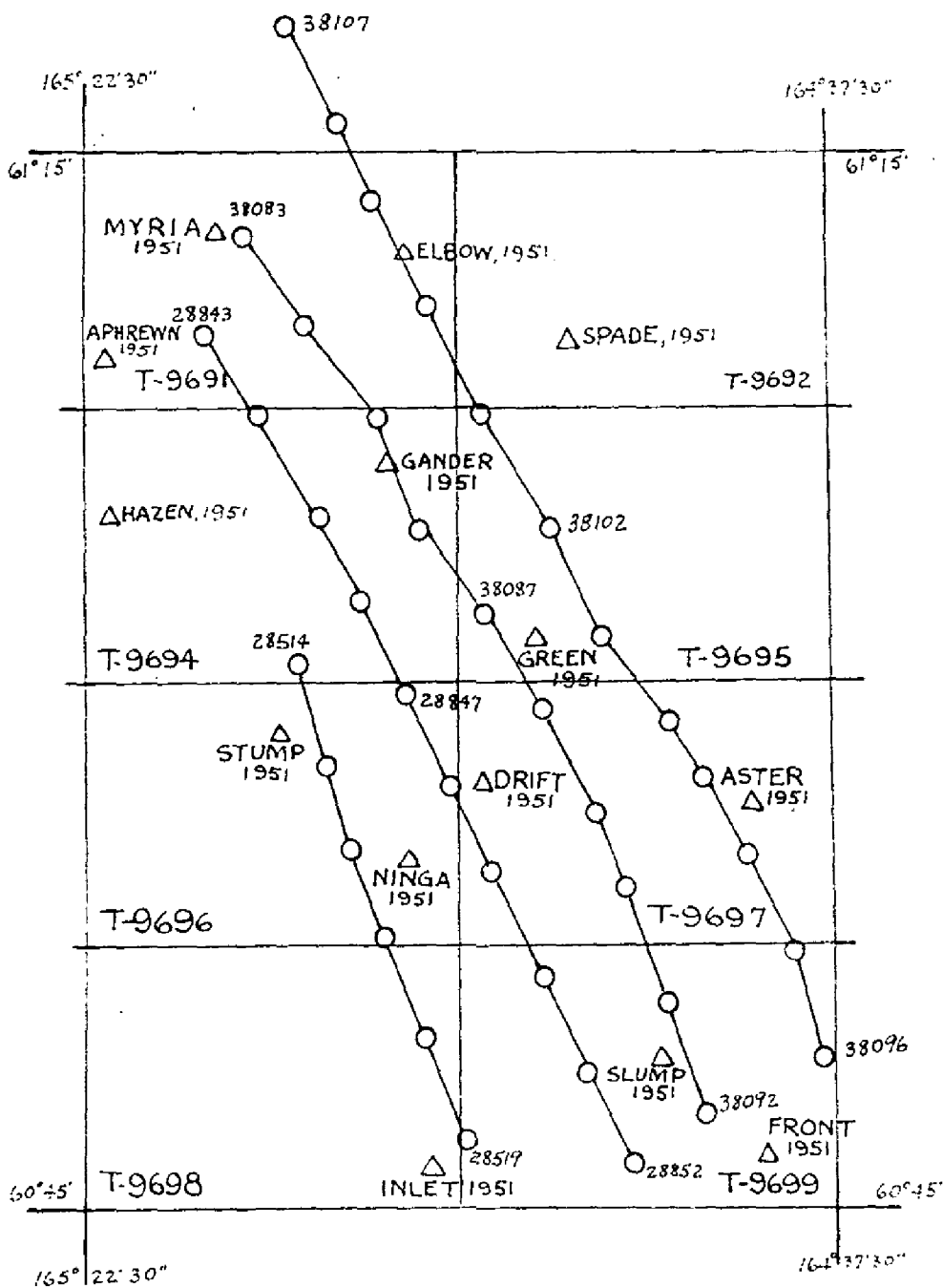
The positions of all recoverable topographic stations which were identified were established in the radial plot. Those identified by a substitute point were plotted with a steel protractor and meter bar before the map manuscripts were disassembled.

Respectfully submitted
14 December 1955

Approved and forwarded

Leroy A. Senasack
Carto. Photo. Aid

E. H. Kirsch
Comdr. U.S.C. & G.S.
Officer in charge
Baltimore District Office



LAYOUT SKETCH

PROJECT 6056

SURVEYS T-9691, T-9692 & T-9694 thru T-9697

- Nine lens office photographs
- △ Control stations identified

SCALE FACTOR

1 FT = 30.48006 METER
COMPUTED BY: J. Steinberg
DATE: 5/9/55
CHECKED BY: H. R. Rudolph
DATE: 6 June 1955
COMM. DC. 578043

SCALE FACTOR

[illegible]

6 June 1955

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COMPILATION REPORT
T-9696 and T-9697

31. Delineation:

The manuscripts were delineated from rectified metal mounted nine-lens photographs. The MHWL was delineated on the Reading nine-lens plotter. The interior detail was delineated directly from the rectified photos, holding to pass points. No photography was available for a small area in the northeast corner of T-9697.

32. CONTROL:

See radial plot report. The numerous tidal streams were used exclusively for vertical control. The elevation (16') of triangulation station STUMP (as shown in the list of geographic positions) is apparently in error. The elevation as determined on the Reading plotter is 9 feet. The stereoscopic instrument elevations agreed with the published elevations of all other triangulation stations within 2 feet.

33. Supplemental Data:

None.

34. Contours and Drainage:

The entire area of the manuscripts is below the elevation of the supplemental contour.

35 & 36. Shoreline Alongshore and Offshore Details:

The field inspection of the shoreline was adequate. An approximate L.W.L. was delineated, where visible, from the series of photos which were taken nearest MLLW.

37. Landmarks and Aids:

None.

38. Control for Future Surveys:

Form 524 was submitted for topographic station SAND (T-9696).

No photo hydro stations were established.

39. Junctions:

Junctions were made with all contemporary surveys as shown on attached index.

40. Horizontal and Vertical Accuracy:

See radial plot report.

46. Comparison with Existing Maps:

BAIRD INLET - USGS, 1:250,000, 1951
NUNIVAK ISLAND - USGS, 1:250,000, 1951

47. Comparison with Nautical Charts:

No. 9302 1:1, 534,076 1952 corr. to 12/24/56
Items to be carried forward immediately: None.
Items to be applied to nautical charts immediately:
None.

Submitted by

Clarence Misfeldt

Clarence Misfeldt

Approved by

Louis Levin

Louis Levin
Supervisory Cartographer
Nine Lens Stereo Unit

Review Report of
Topographic Surveys T-9696 and T-9697
December 1958

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, 1:250,000 Ed. of '57, " "

These two charts are of reconnaissance type and scale difference does not allow adequate comparison.

64. Comparison with Contemporary Hydrographic Surveys:

None!

65. Comparison with Nautical Charts:

9302 1:534076 Revised to 9/29/58

This is the only nautical chart coverage of this area and scale difference precludes a detailed comparison.

66. Adequacy of Results and Future Surveys:

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

Reviewed by:

Joseph J. Streifler
Joseph J. Streifler

Approved by:

Lester A. Landy
Chief, Review & Drafting Section
Photogrammetry Division

J.E. Waugh 11/8/60
Chief, Nautical Chart Branch
Charts Division

W. J. [Signature]
Chief, Photogrammetry Division

J. Bowie
Chief, Coastal Surveys Div.

1 Sept 60

GEOGRAPHIC NAMES

Survey No. T9697

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	17
KEALAVIK										1
KEALAVIK RIVER										2
KUMLUNAK RIVER										3
NEWTOK										4
NINGALUK RIVER										5
KIGIGAK ISLAND										6
HAZEN BAY NATIONAL WILDLIFE REFUGE										7
										8
										9
										10
										11
										12
										13
										14
										15
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										26
										27

Names approved 1-20-59
W. Heck

GEOGRAPHIC NAMES
Survey No. T-9696

GEOGRAPHIC NAMES												18
Survey No. T-9696												
Name on Survey		A	B	C	D	E	F	G	H	K		
		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			
BERING SEA											1	
KIGIGAK ISLAND											2	
NASKONAT PENINSULA											3	
HAZEN BAY NATIONAL WILDLIFE REFUGE											4	
											5	
											6	
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											27	

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9696 & T-9697

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.