

7752



Diag. Cht. No. 9400

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. AR-2549-W Office No. H-7752

LOCALITY

State Alaska

General locality Arctic Coast, Kasegaluk Lagoon

Locality Kukpowruk Pass

1949-50

CHIEF OF PARTY

R.A. Earle

LIBRARY & ARCHIVES

DATE Feb. 21, 1950

B-1870-1 (1)

DECLASSIFIED BY NOAA  
PURSUANT TO DOC SYSTEMATIC REVIEW  
GUIDELINES AS DESCRIBED IN SECTION  
3.3(a), EXECUTIVE ORDER 12356.

7752



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY



HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-7752

Field No. AR-2549-W

State ALASKA

General locality Arctic Coast, <sup>Kasegaluk Lagoon</sup> Point Bar, Alaska

Locality Kukpowruk Pass

Scale 1:20,000 Date of survey July & Aug. 1949 (See 2<sup>nd</sup> Sheet)

Instructions dated 4 February 1948 and 15 February 1949

Vessel ARCTIC SHORE PARTY

Chief of party R. A. Earle

Surveyed by Francis X. Popper, David M. Whipp

Soundings taken by fathometer, graphic recorder, ~~hand lead, wire~~ graphic recorder

Fathograms scaled by Harold Hubbard, and C. D. Heatherington.

Fathograms checked by Roland C. Heatherington, and R. W. Westermann.

Protracted by David M. Whipp

Soundings penciled by David M. Whipp

Soundings in fathoms feet at ~~MLW~~ MLLW

REMARKS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER NO. H-7752

Field No. AR-2549-7

State Alaska

General locality Arctic Coast, <sup>Kasegaluk Lagoon</sup> ~~Point Barrow, Alaska~~

Locality Kukpowruk Pass

Scale 1:20,000 Date of survey 28 August 1950

Instructions dated 4 February 1948, 15 February 1949 & 8 March 1950

Vessel Arctic Field Party

Chief of party R. A. Earle

Surveyed by David M. Whipp

Soundings taken by fathometer, graphic recorder, ~~hand lead wire~~ graphic recorder

Fathograms scaled by Harold Hubbard

Fathograms checked by David M. Whipp

Protracted by \_\_\_\_\_

Soundings penciled by \_\_\_\_\_

Soundings in ~~25 FATHOMS~~ feet at ~~MLLW~~ MLLW \_\_\_\_\_

REMARKS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[REDACTED]

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY NO. H-7752 (Field No. AR-2549-W)  
POINT LAY - KASEGALUK LAGOON  
ARCTIC COAST OF ALASKA  
JULY - AUGUST - 1949  
SCALE 1:20,000

ROBERT A. EARLE  
KARL B. JEFFERS

CHIEF OF PARTY  
IN CHARGE OF FIELD WORK

A: PROJECT This sheet is part of Project CS-320, basic surveys along the Arctic Coast of Alaska, and was done under authority contained in supplemental instructions dated 4 February, 1948 and 15 February, 1949.

B: SURVEY LIMITS AND DATES This survey covers the Kasegaluk Lagoon from Latitude  $69^{\circ} 37'$  (about 8 miles south of Point Lay village) to Latitude  $69^{\circ} 47.5'$  (about 2 miles north of Point Lay village), and includes the bars and channels near the entrance to the lagoon. This entrance is labeled "Kukpowruk" Pass on the hydrographic sheet. Hydrography was started on 14 July 1949, and development was accomplished when weather would not permit work in more important areas. The last days work was completed on 7 August 1949. A junction was made with work shown on Hydrographic Sheet Nos. H-7754 & H-7755 (Field Nos. AR-4249-W & AR-4349-W). There is no prior survey of this area.

C: VESSELS AND EQUIPMENT The work on the shoals at the entrance to Kukpowruk Pass, and in the lagoon north of the pass was done with launch No. 1. The work in the lagoon south of the pass, and some development in the entrance to the pass was done by launch No. 5. Both launches were modified thirty-five foot rearming beats. Modification consisted of removal of fenders, construction of canvas canopies extending the full length of the well deck, construction of a plywood pilot house, raising of the steering wheel and clutch lever, and standard installation of an 808 fathometer and outboard fish. The turning radius of the launches was 25 meters. The sounding equipment consisted of 808J type fathometers Nos. 106S & 104S. Soundings were recorded to the nearest  $\frac{1}{2}$  foot. The party operated from the base camp located near the triangulation station "Camp Radio Mast (Flagpole), 1949".

D: TIDES AND CURRENT STATIONS The Powruk tide station, located at Point Lay Camp, was used to control this hydrography. The tide station was at Latitude  $69^{\circ} 38.35'$ , Longitude  $163^{\circ} 08.2'$ . A portable automatic tide gage was used. There was no time and range factor.

One current station was occupied at Latitude  $69^{\circ} 40.25'$ , Longitude  $163^{\circ} 11.8'$ .

E: SMOOTH SHEET The projection for the smooth sheet was made by hand in the Seattle processing office. The signals were plotted from the list of geographic positions. There were no topographic sheets of the area.



F: CONTROL STATIONS The basic control consisted of 2nd order triangulation, executed in 1949 by H. A. Paton. The topographic stations were located by geodetic methods. The signals plotted in blue were located by standard hydrographic methods.

G: SHORELINE AND TOPOGRAPHY The shoreline and topography are to be located by air photography at a later date. The omission of the shoreline from the hydrographic sheet was one of the handicaps which made the hydrography on this sheet difficult. The small piece of shoreline in the vicinity of hydrographic signal NED was sketched by eye, and will not be as accurate as the shoreline obtained by photogrametry. See Review for shoreline sources.

H: SOUNDINGS The soundings were obtained by a recording fathometer type 808J. No unusual corrections were required, and the soundings are believed to be accurate within 1/2 foot.

I: CONTROL OF HYDROGRAPHY The hydrography was controlled by visual 3-point fixes. A few positions were controlled by dead reckoning and a single angle.

J: ADEQUACY OF SURVEY There is a definite channel in the lagoon from Kukpowruk Pass to the Point Lay Camp site, with a small anchorage area opposite the camp. The depth curves to show this channel cannot be drawn from the hydrography. It might be possible to draw the curves from aerial photographs of the area, by reference to the shoreline, as stated in the note on the smooth sheet.

If time is available, it is recommended that existence of the channel be proved by running an additional mid-channel line in a northerly direction from a point south of the tide gage. A mid-channel line is difficult to run because of the narrow twisting nature of the channel. It is doubted if the area will ever be used by any boat larger than a whaleboat, therefore it is recommended that no additional work be done unless it can be accomplished without additional cost. 1950 work is plotted

The areas North of Kukpowruk Pass and south of hydrographic signal WE are in general too shoal for a whaleboat. It is recommended that no further survey be attempted in these areas.

It is possible that the location of channels and shoals, in areas similar to the above, could be located from air photographs prior to hydrography. This procedure would minimize the time lost by grounding and make it easier to locate a channel if one exists.

K: CROSS LINES An unusually large number of crossings exist on this sheet because of the several systems of sounding lines which interlace. All crossings were checked and found to agree within 0.5 foot or less with the exception of two crossings near position 41a and 47a (launch No. 1) with a line run by launch No. 5 near position 60b. The bottom as shown on the fathogram for Launch No. 5 is very steep in this vicinity. Launch No. 1 is running parallel to the depth curves and shows a regular bottom. Soundings on these lines differ by about 1 foot.

L: COMPARISON WITH PRIOR SURVEYS  
There are no prior surveys in this area.

M: COMPARISON WITH CHART NO. 9400 The existing chart shows no soundings in the area covered by this survey.

N: DANGERS AND SHOALS There are many shoals near the entrance to Kukpowruk Pass. These shoals were developed by closely spaced lines (about 70 meters) parallel to shore, with additional lines crossing at right angles to prove depth of the channels. An 8 foot curve was drawn to show a channel through the pass with more than 8 feet of water. The line 65b to 68b (launch No. 5) carries a depth in excess of 8 feet across the bar. A depth of less than 8 feet appeared in the scanning close to position 65b, but the Launch was slightly south of the channel at the time.

O: COAST PILOT INFORMATION  
See Special Report on Coast Pilot Notes.

P: AIDS TO NAVIGATION There are no "Aids to Navigation" in the area of the survey.

Q: LANDMARKS FOR CHARTS The only landmark appearing on this sheet is "BELFRY, PT. LAY SCHOOL HOUSE, 1949". The height of the belfry was not measured in the field, but it is about 35 feet above ground and about 50 feet above mean high water.

R: GEOGRAPHIC NAMES A study of "Geographic Names" has not been completed for this area. Some new names which appear on the smooth sheet, are recommended by the hydrographer for use pending a complete study in 1950.

S: SILTED AREAS No silted areas were disclosed by the sounding equipment. The entire area is subject to annual change occasioned by the flooding of the Kukpowruk river in the spring. River currents, which are influenced by the annual position of the sea ice, continually scour new channels and deposit material in different places.

Z: TABULATION OF APPLICABLE DATA

(a) Attached hereto:

1. Tabulation of Statistics
2. Tide Note
3. Velocity Correction Abstract
4. List of Signals

(b) Special Reports submitted under separate cover

1. Geographic Names
2. Coast Pilot Notes
3. Temperature & Salinity Observations
4. Landmarks for Charts
5. Fathometer Report - See H-7754

*David M. Whipp*  
David M. Whipp  
Lieut. USC&GS

Statistics

for

Hydrographic Survey No. H-7752 (Field No. AR 2549W)

<u>Date</u>	<u>Day Letter</u>	<u>Vol.</u>	<u>No. Pos.</u>	<u>St. Mi. Sdgs.</u>	<u>H. L. Sdgs.</u>
-------------	-------------------	-------------	-----------------	----------------------	--------------------

Launch No. 1.

7-14-49	a	1	136	26.0	0
7-29-49	b	2	<u>43</u>	<u>9.2</u>	<u>0</u>
		Total	179	35.2	0

Launch No. 5.

7-30-49	a	2	115	16.7	0
8-7-49	b	2	<u>68</u>	<u>11.3</u>	<u>0</u>
		Total	183	28.0	0

Total:	Sq. Sta. M.	_____	4.0
	Sta. Sound. M.	_____	63.2
	Pos.	_____	362
	HL Sdg.	_____	0



TIDE NOTE  
SHEET NO. H-7752  
(Field No. AB-2549-W)

Station Location: Point Lay Base Camp, at Latitude  $69^{\circ} 38.3'$ ;  
Longitude  $163^{\circ} 08.1'$ .

Plane of Reference: Mean Lower Low Water, which is 3.2 feet on  
the staff at the station.

All soundings were reduced to mean lower low water by using  
the portable automatic tide gage records at the base camp. The  
gage was maintained from 2 July to 16 September 1949.

VELOCITY CORRECTIONS, AR-2549-W H-7752

Fathometer # 73 S.

14 July to 27 July 1949

Depth	Corr.
5.0	1.0
12.0	0.8
19.0	0.6
26.0	0.4
32.5	0.2
39.0	0.0
45.5	- 0.2
52.0	- 0.4
58.0	- 0.6
65.0	- 0.8
76.5	- 1.0
93.5	- 1.5

Fathometer S 106.

Depth	Corr.
10.0	0.8
17.0	0.6
24.0	0.4
30.5	0.2
37.0	0.0
43.5	- 0.2
50.0	- 0.4
56.5	- 0.6
63.0	- 0.8
74.5	- 1.0
91.5	- 1.5

Fathometer # S 106

28 July to 14 September 1949

Depth	Corr.
10.0	0.8
22.0	0.6
33.5	0.4
43.5	0.2
53.5	0.0
61.0	- 0.2
85.0	- 0.5
109.0	- 1.0

Fathometer # S 104.

Depth	Corr.
4.0	0.6
16.0	0.4
28.0	0.2
38.0	0.0
48.5	- 0.2
58.5	- 0.4
71.0	- 0.5
95.0	- 1.0

*Handwritten signature or initials*

H-7752

Field Survey AR-4249-W

APPROVAL SHEET

The smeech sheet and field records of this survey are approved as transmitted to the Washington Office. The field work and processing of the survey was inspected daily and supervised personally by the Officer-In-Charge, Sub Party.


The survey is considered complete and adequate for the area covered, except for the mid-channel line mentioned in paragraph "J", which should be run if possible. Done in 1950

*Karl B. Jeffers*  
Karl B. Jeffers  
Comdr, USC&G Survey  
In-Charge, Sub-Party

Approved and forwarded.

*R. A. Earle*

R. A. Earle  
Comdr. USC&G Survey  
Chief, Arctic Field Party



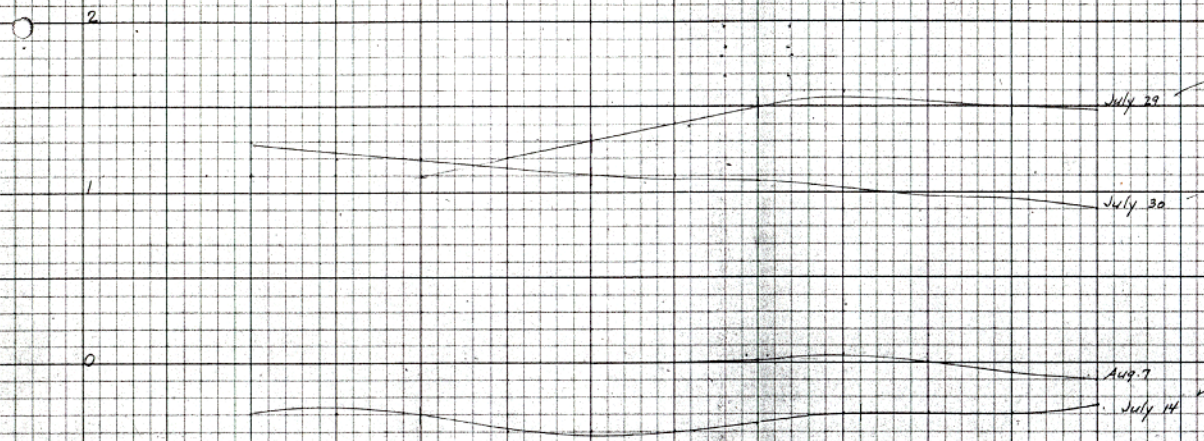
LIST OF SIGNALS FOR AR-2549W

<u>Name used in survey</u>	<u>Source</u>
AGATE	AGATE 1949
BEL	Point Lat School House Belfry, 1949
BEN	Theodolite cuts, 1949
BETH	BETH, 1949
BRANT	BRANT, 1949
Cob	Theodolite cuts, 1949
DADO	DADO, 1949
Egg	Theodolites cuts, 1949
ELMER	ELMER, 1949
EVA	Theodolite cuts, 1949
FLOSS	FLOSS, 1949
Gal	Theodolite cuts, 1949
IRK	Theodolite cuts, 1949
Keg	Theodolite cuts, 1949
LAN	LANCER, 1949
MAST	Camp Radio Mast Flagpole, 1949
Map	Theodolite cuts, 1949
Ned	Sexton cuts, 1949
OAR	Theodolite cuts, 1949
Quo	Theodolite cuts, 1949
Tag	Sexton fix, 1949
Ugh	Sexton fix, 1949
Uke	Theodolite cuts, 1949
WAD	Theodolite cuts, 1949
We	Sexton fix, 1949
Yap	Theodolite cuts, 1949



7 8 9 10 11 12 13 14 15 16 17 18

SHEET NO. 2549  
From Pt. Lay Base Camp  
Tide Gage.



July 14 "a" L 1 ✓  
 0200 to 1000 +0.2 ft ✓  
 1001 to 1512 +0.1 ✓  
 1513 to 1800 +0.2 ✓

July 30 "a" L 5 ✓  
 0800 to 1200 1.2 ft ✓  
 1201 to 1800 1.0 "

July 29 "b" L 1 ✓  
 1200 to 1400 1.4 ft ✓  
 1401 to 1700 1.6 "

Aug 7 "b" L 5 ✓  
 0.0 ft. all day ✓

Addendum to:

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SURVEY NO. H-7752 (Field No. AR-2549W)  
Point Lay -- Kasegaluk Lagoon  
ARCTIC COAST OF ALASKA  
AUGUST 1950  
SCALE 1:20,000

CHIEF OF PARTY - - - - - R. A. EARLE  
IN CHARGE OF FIELD WORK - - - - - H. G. CONERLY

A: PROJECT

The additional work covered by this addendum being part of Project CS-320, basic surveys along the Arctic Coast of Alaska, was done under authority contained in supplemental instructions dated 8 March 1950.

B: SURVEY LIMITS AND DATES

The additional work covered by this report consists of a mid-channel line, which runs from the anchorage near the main camp to the lagoon entrance. This work, which was recommended in paragraph "J" of the original descriptive report, was done on 28 August 1950.

E: SMOOTH SHEET

Remarks under this heading, which were contained in the original descriptive report, are still applicable. The original smooth sheet was returned to Seattle, Washington, where the 1950 hydrography was plotted by Arctic Party personnel.

F: CONTROL STATIONS

One additional hydrographic signal was erected, which was located by sextant cuts taken from existing triangulation stations.

J: ADEQUACY OF SURVEY

The survey is now believed to be adequate.

Y: NOTE

Paragraphs omitted from this addendum are the same as the original report.

Z: TABULATION OF APPLICABLE DATA

(a) Attached hereto:

1. Tabulation of statistics, 1950
2. Tide Note, 1950
3. Abstract of Velocity Corrections, 1950
4. List of Additional Signals

Z: TABULATION OF APPLICABLE DATA (con't.)

(b) Submitted under separate cover:

1. Descriptive Report to Accompany Hydrographic Survey No. H-7752 (Field No. AR-2549W)., 1949
2. Geographic Names, 1950
3. Coast Pilot Notes, 1949 & 1950
4. Velocity Corrections, 1950
5. Landmarks for Charts, 1949 & 1950
6. Special Tide Report, 1950



David M. Whipp  
Lieutenant, USC&G Survey



ADDITIONAL STATISTICS

FOR

HYDROGRAPHIC SURVEY NO. H-7752 (Field No. AR-2549W)

<u>Date</u>	<u>Day Letter</u>	<u>Vol.</u>	<u>No. Pos.</u>	<u>St. Mi. Sdgs.</u>	<u>H. L. Sdgs</u>
8-28-50	C	3	44	4.0	0
1949 TOTALS			<u>362</u>	<u>63.2</u>	<u>0</u>
	GRAND TOTAL		<u>406</u>	<u>67.2</u>	<u>0</u>

FINAL: Sq. Sta. Mi. \_\_\_\_\_ 4.0  
 Sta. M. Sdg. L. \_\_\_\_\_ 67.2  
 No. of Pos. \_\_\_\_\_ 406  
 H. L. Sdgs. \_\_\_\_\_ 0

TIDE NOTE  
SHEET NO. H-7752  
(Field No. AR-2549W\*)

STATION LOCATION: Powruk Tide Gage, Point Lay Base Camp,  
at Latitude  $69^{\circ}38.3'$ ; Longitude  $163^{\circ}08.1'$ .

PLANE OF REFERENCE: Mean Lower Low Water, which is 2.3 feet on  
the staff at the station.

All soundings were reduced to mean lower low water by  
using the portable automatic tide gage records at the base camp.  
The gage was maintained from 15 July to 30 August 1950.

VELOCITY CORRECTIONS

AR-2549W - H-7752 -

FATHOMETER #73 S.

August 28, 1950

<u>To Depth</u>	<u>Corr.</u>
6	+0.1
15	-0.1

LIST OF ADDITIONAL SIGNALS FOR HYDROGRAPHIC SHEET NO.  
H-7752, FIELD NO. AR-2549-W. -----

Name Used In Survey

Source

CAL

Sextant Cuts 1960


This signal, which was located by sextant cuts taken at various stations, was plotted on the boat sheet. Cuts, which are listed on Page 12 and Page 15 of Volume 3 should be plotted on the smooth sheet to locate this point.

APPROVAL SHEET

H-7752

It was not possible for the Chief of Party to make frequent inspections of all widely separated units engaged in hydrographic surveys, such inspections being assigned to the officer in charge of field work in each base camp.

The sheet and records have been examined and approved. The survey is considered adequate for this area.



R. A. Earle  
Commander, USC&G Survey  
Chief of Party

RH

### TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

31 March 1950

Division of Charts: R. H. Carstens

Plane of reference approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET 7752

Locality Kasegaluk Lagoon, Arctic Coast, Alaska

Chief of Party: R. A. Earle in 1949

Plane of reference is mean lower low water, reading

3.2 ft. on tide staff at Point Lay Camp

3.2 ft. below B. M. 1 (1949)

Height of mean high water above plane of reference is 0.60 foot.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
*Section*

Chief, ~~Division of Tides and Currents.~~

R4c

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

21 February 1951

Division of Charts: R. H. Carstens

Plane of reference approved in 1  
volumes of sounding records for

HYDROGRAPHIC SHEET 7752

Locality Arctic Coast, Alaska

Chief of Party: R. A. Earle in 1950  
Plane of reference is mean lower low water, reading  
2.3 ft. on tide staff at Point Lay (Powruk)  
3.3 ft. below B. M. 1 (1949)

Height of mean high water above plane of reference is 0.60 foot.

Condition of records satisfactory except as noted below:

*E. C. McKay*  
*Section*

Chief, ~~Division of Tides and Currents.~~

GEOGRAPHIC NAMES

Survey No. H-7752

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Alaska</u>											1
<u>Arctic Coast</u>											2
<u>Chukchi Sea</u>									US&B		3 ✓
											4
<u>Kasegaluk lagoon</u>											5 ✓
<u>Kukpowruk Pass</u>											6 ✓
<u>Point Lay Village</u>											7 ✓
<u>Kukpowruk River</u>									US&B		8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names underlined in red are approved. 3-29-50  
L. Heck



Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7752...

Records accompanying survey:

Boat sheets <sup>1</sup>2; sounding vols. <sup>2</sup>3; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls <sup>3</sup>envel.  
 special reports, etc. ....  
 .....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.....	406
Number of positions checked	.....	57
Number of positions revised	.....	11
Number of soundings revised (refers to depth only)	.....	40
Number of soundings erroneously spaced	.....	20
Number of signals erroneously plotted or transferred	.....	✓
Topographic details	Time	20
Junctions	Time	16
Verification of soundings from graphic record	Time	5

Verification by *Cyrus R. Helmer* ..... Total time 106 ..... Date *Sept. 28, 1951*

Reviewed by *J. F. Jordan* ..... Time 7 hrs ..... Date *Oct. 17, 1951*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7752

FIELD NO. AR-2549-W

Alaska, Arctic Coast-Kasegaluk Lagoon, Kukpowruk Pass

Project No. CS-320

Surveyed in August 1949 and 1950

Scale 1:20,000

Soundings:

Control:

808 Fathometer

Visual fixes on shore signals

Chief of Party - R. A. Earle  
Surveyed by - F. X. Popper and D. M. Whipp  
Protracted by - D. M. Whipp  
Soundings plotted by - D. M. Whipp  
Verified and inked by - C. R. Helmer  
Reviewed by - G. F. Jordan, 17 October 1951  
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline was transferred from ozalid prints of unreviewed air photographic surveys T-9368, T-9369 and T-9371 which are being completed in the field office.

The geodetic control stations established for the survey were supplemented with a few hydrographic stations located by the hydrographic party.

2. Depth Curves and Bottom Configuration

The usual depth curves could be completely drawn except for the low-water line which could not be determined by the regular system of sounding lines.

The bottom is irregular for one-half mile distance from the pass. Beyond, in depths greater than 10 feet, the bottom is smooth.

3. Crosslines

The depths at sounding line crossings are in adequate agreement.

4. Adjoining Surveys

The junction with H-7754 (1949) on the north and west is complete and adequate. The junction on the south with unverified survey H-7755 (1949) will be considered in the review of that survey.

5. Comparison with Prior Surveys

There are no prior surveys of the area made by this Bureau.

6. Comparison with Arctic Chart No. 15 (Print of 51-4/16)

A. Hydrography

The charted hydrography on this special chart originates with the present survey before verification. Revisions made during verification which effect the charted hydrography are minor, seldom amounting to more than 1-ft. changes in depths.

B. Aids to Navigation

There are no aids to navigation charted in the area of the present survey.

7. Condition of the Survey


- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The survey was accurately and neatly smooth-plotted.
- c. No bottom characteristics were recorded for this survey.


8. Compliance with Project Instructions


The survey complies adequately with the project instructions except in the matter of bottom characteristics.


9. Additional Field Work

This is a basic survey and no additional field work is recommended. Although the hydrography in Kasegaluk Lagoon appears incomplete, additional sounding was not attempted as depths in general were too shoal for a whaleboat and because of the unimportance of the area.

  
H. R. Edmonston  
Chief, Nautical Chart Branch

  
L. S. Hubbard  
Chief, Section of Hydrography

Examined and approved:  
  
H. Arnold Karo  
Chief, Division of Charts

  
W. M. Scaife  
Chief, Division of Coastal Surveys



Applied to Arctic Coast Chart #15 ~~SECRET~~ before verification 3/7/50 WE  
Applied to Chart 9402 prior to verification 3/13/1950 c. Wittmann thru Cht #15

DECLASSIFIED BY NOAA  
PURSUANT TO DOC SYSTEMATIC REVIEW  
GUIDELINES AS DESCRIBED IN SECTION  
3.3(a), EXECUTIVE ORDER 12356.