8224

Diag. Cht. Nos. 8802-2, 8859, & 9302.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PF-2155 Office No. H-8224

LOCALITY

State Alaska

General locality N. Side Alaska Peninsula

Locality Port Moller

1955

CHIEF OF PARTY

K. G. Crosby

LIBRARY & ARCHIVES

DATE March 8, 1956

B-1870-1 (1)

8224

Form 537
(Ed. June 1946)

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-8224

Field No. PF-2155

State ALASKA

General locality North Side Alaska Peninsula

Locality Port Moller

Scale 1:20,000 Date of survey May - August 1955

Instructions dated 20 December 1954

Vessel SHIP PATHFINDER

Chief of party K. G. Crosby

Surveyed by R. A. Weber, J. O. Boyer, M. E. Natto, G. W. Thompson

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

Fathograms scaled by Fathometer operators

Fathograms checked by J. P. Randall, K. E. Taggart, W. Dodd

Protracted by J. O. Boyer

Soundings penciled by J. O. Boyer

Soundings in ~~fathoms~~ feet ~~at MLW~~ MLLW and are true depths

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 693019

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET H-8224 (Field No. PF 2155)

NORTH SIDE ALASKA PENINSULA

Scale: 1:20,000

1 9 5 5

USC&GS SHIP PATHFINDER K. G. CROSBY, COMMANDING

A. PROJECT:

This survey is a part of Project No. 1375. Original instructions were dated 20 December 1954.

B. SURVEY LIMITS AND DATES:

This sheet covers the entrance to Port Moller. It includes the area between latitudes 55° 56' to 56° 04' and longitudes 160° 30' to 160° 53'.

Hydrography was started 26 May and completed 3 August 1955.

This survey joins contemporary survey H-8223 (1955) on the north and H-8225 (1955) on the south.

C. VESSELS AND EQUIPMENT:

A few crosslines were run by the Ship PATHFINDER on runs between the usual anchorage and the working grounds. The Ship used portable 808-type depth recorder No. 130S. The sounding lines were relatively straight, so the Ship's turning radius is of no consequence.

Launch No. 1 ran about 2 miles of hydrography on one day using 808-type depth recorder No. 74S.

Launch No. 2 was used for 7 days on this sheet; No. 61, 808-type depth recorder was used.

Launch No. 3 was used for 13 days on this sheet and used 808-type depth recorder No. 52.

Launch No. 4 was used for 21 days on this sheet. This launch used 808-type depth recorders Nos. 46, 68, and 74.

All fathometers were calibrated for 800 fathoms per second. and echo corrections applied to give true depths

The launches operated from the Ship which usually anchored in the vicinity near the center of the sheet. This was fortunate as the weather was often bad. Very choppy seas could develop in a very few minutes.

The turning radii for the launches are about 20 meters. This varied a great deal due to currents and speed.

D. TIDE AND CURRENT STATIONS:

Tide corrections were determined from tides recorded on the standard gage at Entrance Point. See "Tide Note" attached to this report.

A 100-hour current station was observed at latitude 56° 01.7' and longitude 160° 41.2' with a Roberts radio current meter.

Two 100-hour stations were observed from the Ship with a current pole at latitude 56° 00.3' and longitude 160° 38.7' and at latitude 55° 59.7' and longitude 160° 39.6'.

The new current meter recorder was used at latitude 55° 58.7' and longitude 160° 35.5'. This was supposed to have been a 29-day station. Equipment failure and weather too rough for servicing the buoy regularly caused poor records from this station. Probably less than 100 hours of records will be usable from this station.

E. SMOOTH SHEET:

The smooth sheet projection was made by hand by the Seattle Processing Office. They transferred the shoreline from blueline tracings made from advance manuscripts. The shoran arcs were also drawn by the Processing Office. Review, RPI

It was found that the smooth sheet paper took some colored inks better than others. Because of this the best colors were used for the launches most frequently used. Launch No. 1 used blue ink and launch No. 3 used green ink in their respective sounding volumes. These colors were reversed for position numbers on the smooth sheet.

F. CONTROL STATIONS:

Triangulation stations AS1147 (USLM)1950 and HAGUE 1950 were used for all control on this sheet. These stations were located by J. H. Brittain in 1950. Shoran towers were built directly over the stations.

G. SHORELINE AND TOPOGRAPHY:

The shoreline and topography applied to the smooth sheet were taken from advance photogrammetric manuscripts Nos. 9571, 9573, and 11092. (1950) No discrepancies were noted except that listed below.

The short line, position 35 to 37m, in the N.E. corner of the sheet plots about 20 meters inshore. The soundings are all zero or less showing this line was run about on the low water line. It is possible that the shoreline has receded here since the photogrammetry was done; however, the rest of the shoreline agrees so well that it is doubtful that just this small section would change. It is more probable that the hydrographic location is in error. This line was run using the Ship as one shoran station. A small error (10 meters) in the Ship's position could cause the discrepancy. It is possible that the ship swung on the anchor this small amount without being detected. Review, HP

The beach in the area of the above line has a moderate slope. It is recommended that the shoreline as shown on manuscript No. 9571 be held and the sounding line moved westerly about 30 meters. Review, HP

H. SOUNDINGS:

All soundings were recorded on portable 808-type depth recorders. Bottom specimens were obtained with a tallow "armed" lead. Many leadline-fathometer comparisons were obtained while getting bottom specimens. In general the corrected fathometer readings agreed very well with the leadline readings.

Because of the close spacing of lines in some areas, many soundings that were scanned and entered in the sounding volumes were not put on the smooth sheet. Soundings were selected to give the least depth and clearest picture of these areas. The smooth plotter wrote "NP" after recorded soundings not put on the smooth sheet in a few volumes. It soon became apparent in the congested areas that many soundings put on the sheet had to be erased to make room for more critical soundings on lines run at a later date. The task of "thumbing" back through the volumes to find these deleted soundings would have been very time consuming, so the practice of writing "NP" after the soundings not plotted was discontinued. "NP"

Fathometer corrections were determined by disconnecting the fathometer receiver unit and connecting another receiver secured to the end of a graduated cable. This unit was lowered to known depths and the fathometer readings recorded. Corrections were computed from these readings as follows:

(a)	Fathometer reading	25.5
(b)	Initial set	3.0
(c)	(a) - (b)	22.5
(d)	2(c)	45.0
(e)	True distance between units	42.9
(f)	Fathometer correction (e) - (d)	-2.1
(g)	Draft (unit in keel)	2.6
(h)	Initial	3.0
(i)	Initial correction (g) - (h)	-0.4
(j)	Total correction (f) + (i)	-2.5

This is the correction to be applied to the fathometer reading for a true depth of 42.9 + 2.6 with the initial set at 3 feet.

A special fathometer report will be submitted.

I. CONTROL OF HYDROGRAPHY:

All hydrography was controlled in position by shoran distances. Most positions were determined using SHO-MO (AS 1147 USIM, 1950) and SHO-HAG (HAGUE, 1950). The area where these two stations gave a weak intersection was controlled using one of these stations plus SHO-BOAT.

SHO-BOAT was the shoran mast aboard the PATHFINDER. Its position was determined every half hour with a shoran fix on MO and HAG. Fixes were taken more frequently during periods of slack water and whenever the ship was swinging.

Shoran corrections were not determined until late in the season. The corrections varied a great deal for different launches. When different launches worked in the same area the relationship between lines on the boat sheet was not the same as the corrected lines on the smooth sheet. Launch No. 2 had the largest correction, about 0.09 miles on HAG. This launch covered a large area in the southern part of the sheet with 200 meter spacing. These lines were later split using launch No. 4. After corrections had been applied, the spacing was not 100 meters but about 30 meters and 170 meters. Because of the displacement, the boat sheet soundings didn't agree in rough areas. Excessive lines were sometimes run in these areas because of the apparent discrepancy. Review, AP 7

A separate report will be submitted on shoran corrections.

It is believed the control on this sheet is adequate. The work of four launches and the ship overlapped with no large discrepancies.

J. ADEQUACY OF SURVEY:

This survey is complete and adequate and should supersede all prior surveys.

The junction with survey H-8223 to the north is excellent.

The junction with survey H-8225 to the south will be discussed in the report for that survey. } Review, #4

K. CROSSLINES:

About 12 per cent of the lines are crosslines. The crossings are satisfactory. Review, #2

L. COMPARISON WITH PRIOR SURVEYS:

There are no prior surveys available for comparison. Review, #5

M. COMPARISON WITH CHART:

Chart 8833 gives only a general picture of this area which for the most part is inaccurate. The few soundings on the chart were probably obtained from poorly controlled reconnaissance lines. It is recommended that none of these old soundings be retained. Review, #6

N. DANGERS AND SHOALS:

All dangers and shoals are evident on the smooth sheet.

O. COAST PILOT INFORMATION:

Coast Pilot Notes for this area were submitted 13 October 1955.

P. AIDS TO NAVIGATION:

A black and white can buoy at latitude 56° 02.8' and longitude 160° 40.2' is the only aid in this area. This buoy is planted each year about 1 May and removed 30 September.

Q. LANDMARKS FOR CHARTS:

Covered in Coast Pilot Notes submitted for this area.

R. GEOGRAPHIC NAMES:

Covered in Coast Pilot Notes submitted for this area.

S. SILTED AREAS:

No silted areas were found. ✓

T. BY PRODUCT INFORMATION:

Generally speaking the bottom is fine sand firmly packed. The bottom throughout the northern portion of the sheet is characterized by sand waves one to two feet high. The shoals are likely to have very steep slopes. When approaching a shoal, it was a characteristic of the bottom profile that a small depression occurred before the rapid rise.

Because the bottom is composed of fine sand, the channels and shoals are subject to minor changes after each storm. The same is true of Walrus Island.

U - W MISCELLANEOUS:

Not applicable. ✓

Z. TABULATION OF APPLICABLE DATA:

1. Coast Pilot Notes - forwarded 13 October 1955.
2. Fathometer Correction Report Library 1955/131
3. Tide Records, Port Moller
4. Photogrammetric Descriptive Reports (Project PF-40)
5. Photogrammetric Manuscripts Nos. 9571, 9573, and 11092.
6. Shoran Report, - Library 1955/132

Respectfully submitted,

John O. Boyer

John O. Boyer,
LCDR., USC&GS

APPROVED AND FORWARDED:

K. G. Crosby

K. G. Crosby
Captain, USC&GS

STATISTICS FOR HYDROGRAPHIC SURVEY H-8224

FIELD NO. PF-2155

SHIP PATHFINDER — PROJECT NO. 1375

VOL. NUMBER	DAY LETTER	DATE 1955	NUMBER OF POSITIONS	STAT. MI. SOUNDING
SHIP PATHFINDER				
12	A (red)	26 May	6	4.9
12	B	5 June	11	5.0
12	C	6 June	25	10.9
12	D	13 June	13	5.5
	Total Ship PATHFINDER		55	26.3
LCH. #1				
13	c (blue) Sdg Vol) (green - smooth Sheet)	9 June	6	2.2
LCH. #2				
14	a (purple)	9 June	36	10.4
13	b	12 June	68	16.9
14	c	14 June	82	19.3
14 & 15	d	15 June	216	49.2
15	e	16 June	176	41.4
15 & 16	f	17 June	78	15.0
16	g	18 June	178	44.1
	Total Launch No. 2		834	196.3
LCH. #3	(blue Smooth Sheet)			
17	a (green) Sdg Vols	14 June	44	14.7
17	b	23 June	137	44.8
17 & 18	c	27 June	100	30.1
18	d	8 July	156	46.6
18 & 19	e	9 July	154	50.5
19 & 20	f	11 July	125	36.8
20	g	12 July	166	42.6
21	h	14 July	130	34.3
21	j	15 July	34	8.9
21 & 22	k	16 July	158	40.7
22	l	20 July	74	21.5
22	m	21 July	67	14.8
22 & 23	n	22 July	91	26.2
	Total Launch No. 3		1436	412.5

VOL. NUMBER	DAY LETTER	DATE 1955	NUMBER OF POSITIONS	STAT. MI. SOUNDING
LCH. #4				
1	a (red)	15 June	161	49.6
1 & 2	b	16 June	159	61.1
2 & 3	c	17 June	158	52.1
3	d	18 June	96	29.3
3 & 4	e	23 June	214	54.3
4	f	27 June	157	34.7
5	g	8 July	197	46.7
5	h	9 July	127	23.6
6	j	11 July	155	28.7
6 & 7	k	12 July	233	44.0
7	l	14 July	155	23.3
7	m	15 July	93	21.7
7 & 8	n	16 July	206	48.0
8	p	20 July	112	22.6
8 & 9	q	21 July	212	46.9
9	r	22 July	234	36.4
10	s	23 July	185	32.4
10	t	25 July	166	29.8
11	u	26 July	144	19.5
11	v	27 July	21	2.9
11	w	3 Aug.	57	9.1
	Total Launch No. 4		3242	716.7
Total all vessels			5573	1354.0

Total area of sheet - 114.0 square statute miles.

TIDE NOTE

HYDROGRAPHIC SURVEY H-8224

A standard tide gage was in operation at Entrance Point, Port Moller (latitude 55° 59.2', longitude 160° 34.3') throughout the period of this survey. Hourly heights from this gage were furnished by the Washington Office.

The August marigram was lost in the mail. Only one day's sounding was done in August on this sheet. These tides were inferred by the Washington Office from the best available sources (see letter, reference 36-196-982 pat, dated 4 November 1955.)

Entrance Point tides referred to MLLW were used with no range or time difference.

GEOGRAPHIC NAME LIST

HYDROGRAPHIC SURVEY H-8224

BRISTOL BAY

CAPE ROZHNOF

DEER ISLAND

ENTRANCE POINT

FAWN POINT

HAGUE CHANNEL

POINT EDWARD

PORT MOLLER

ROSS POINT

WALRUS ISLAND

WOLF POINT

ECHO CORRECTIONS

HYDROGRAPHIC SURVEY H-8224

Ship PATHFINDER, Fathometer 130S, Initial set 12.0 feet.

Correction determined from vertical casts on survey H-8223.

Correction for all "A" and "B" scale depths = - 2.4 feet

Launch No. 1, Fathometer 74S, Initial set 3.0 feet.

Use corrections determined for fathometer No. 74S with Launch No. 4

Launch No. 2, Fathometer 61, Initial set 3.0 feet.

Only a few comparisons were made with this fathometer on this sheet. The resulting comparisons were not consistant and there is a question which bar check reel was used. Use corrections for fathometer No. 61 as determined by Launch No. 1, sheet H-8225 as listed below.

FATHOMETER READING	CORRECTION "A" SCALE	"B" SCALE	"C" SCALE	"D" SCALE
0.0 to 6.0 ft.	-0.8 ft.			
11.0	-0.6			
16.0	-0.4			
20.0	-0.2			
25.0	0.0			
30.0	+0.2			
36.0	+0.4	0.0		
40.0	+0.6	+0.2		
45.0	+0.8	+0.4		
50.0	+1.0	+0.6		
55.0	+1.2	+0.8		
60.0	+1.4	+1.0		
65.0		+1.2		
70.0		+1.4	-1.0	
76.0		+1.6	-0.8	
80.0		+1.8	-0.6	
85.0		+2.0	-0.4	
90.0		+2.2	-0.2	
95.0		+2.4	-0.0	
100.0			+0.2	
105.0			+0.4	-2.6
110.0			+0.6	-2.4
115.0			+0.8	-2.2
120.0			+1.0	-2.0
125.0			+1.2	-1.8

evidently not right - used arbitrary correction a day to get agreement with adj hydrography REE.

ECHO CORRECTIONS

HYDROGRAPHIC SURVEY H-8224

Launch No. 3, Fathometer No. 52, Initial 3.0 feet.

FATHOMETER READING	"A" & "B" SCALE	CORRECTION "C" SCALE	"D" SCALE
0.0 to 10.5 ft.	-1.8 ft.		
22.5	-1.6		
35.0	-1.4		
46.5	-1.2		
59.0	-1.0		
71.0	-0.8	-2.2	
83.0	-0.6	-2.0	
95.5	-0.4	-1.8	
107.5	-0.2	-1.6	-4.0
119.5		-1.4	-3.8
132.5		-1.2	-3.6
end			-3.4

Launch No. 4, Fathometer No. 68, Initial set 3.0 feet, a - d days.

FATHOMETER READING	"A" SCALE	CORRECTION "B" SCALE	"C" SCALE
0.0 to 5.0 ft.	-1.8 ft.		
125.0	-1.6 + (-1.7) ✓	-3.3 ✓	-4.3

Launch No. 4, Fathometer No. 74, Initial set 3.0 feet, e - h days.

FATHOMETER READING	CORRECTIONS "A" SCALE	"B" SCALE
0.0 to 8.0 ft.	-1.4	
11.5	-1.2	
16.5	-1.0	
21.0	-0.8	
42.0	-0.6	+0.8
end	-0.8	+0.6

+1.4

Launch #4 A Scale B Scale

+ (-1.5) =

-1.4 + (-1.2) = -2.6 d day 6/18/55

-1.5 + (-1.5) = -3.0 e day

ECHO CORRECTIONS

HYDROGRAPHIC SURVEY H-8224

Launch No. 4, Fathometer No. 46, Initial set 3.0 feet, h - w days.

FATHOMETER READING	CORRECTION "A" SCALE	"B" SCALE	"C" SCALE	"D" SCALE
0.0 to 12.0	-1.2			
21.0	-1.0			
30.0	-0.8			
41.0	-0.6	+0.8		
50.0	-0.4	+1.0		
61.0	-0.2	+1.2		
70.0		+1.4		
81.0		+1.6	-0.4	
90.0		+1.8	-0.2	
100.0			0.0	
110.0			+0.2	-3.5
120.0			+0.4	-3.3
129.0			+0.6	-3.1

1-day phase is OK

LEADLINE CORRECTIONS

HYDROGRAPHIC SURVEY H-8224

Launch No. 3

LEADLINE MARK	CORRECTION
0 to 17 ft.	0.0 ft.
80 ft	-0.2

APPROVAL SHEET

HYDROGRAPHIC SURVEY H-8224 (PF-2155)

PORT MOLLER, ALASKA

This survey was done under my supervision, the boat sheet being inspected daily during the period of hydrography.

I consider this survey adequate for the charting of this area. No additional work is recommended within the area covered.

K. G. CROSBY
CAPTAIN, USC&GS

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Coastal Surveys: 28 March 1956

Division of Charts: R. H. Carstens

Plane of reference approved in
23 volumes of sounding records for

HYDROGRAPHIC SHEET 8224

Locality Alaska Peninsula, North Side

Chief of Party: K. G. Crosby in 1955
Plane of reference is mean lower low water, reading
2.4 ft. on tide staff at Port Moller
17.7 ft. below B. M. 1 (1939)

Height of mean high water above plane of reference is 9.8 feet.

Condition of records satisfactory except as noted below:
Note: Tide reducers for the positions listed below have been revised in red and verified:

Vol.	Positions
20	82g - 89g

William Shapiro
Branch
Chief, Division of Tides and Currents

U. S. GOVERNMENT PRINTING OFFICE 877933

GEOGRAPHIC NAMES

Survey No. H-8224

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	
Alaska		}	title							1
Alaska Peninsula		}							BGN	2
Port Moller									"	3
Bristol Bay									"	4
Entrance Point			(tide station)							5
Hague Channel										6
Deer Island										7
Fawn Point										8
Ross Point										9
Cape Rozhnof										10
Point Edward										11
Walrus Island										12
Wolf Point										13
										14
				Names approved						15
				3-22-51			L. Heck			16
										17
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										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8224

Records accompanying survey:

Boat sheets 2; sounding vols. 23; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls ~~28~~ 32 Envelopes

special reports, etc. 1-Descriptive report, & 1-Smooth sheet.

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

	EIKINS	KENNON	THOMAS
Number of positions on sheet	—	5573	—
Number of positions checked			28
Number of positions revised			15
Number of soundings revised (refers to depth only)	554 Phase 53 &.	36 res.	485 revision Echo Gram 371 Phase 47 Scan & addition
Number of soundings erroneously spaced	12	-	—
Number of signals erroneously plotted or transferred			—
Topographic details	Time	-	—
Junctions	Time	-	16 hrs
Verification of soundings from graphic record	Time	1 hr	3 hrs.
		TOTAL 170 hrs	MAY 1957
		Total 57 hrs.	FEB 1957

Ernest E. Thomas
DAVID I. KENNON

Verification by R. EIKINS Total time ..... Date .....

Reviewed by J. A. Dinsmore Time 40 Date 9/25/57

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8224 FIELD NO. PF-2155

Alaska, N. Side Alaska Peninsula, Port Moller

Surveyed - May - August, 1955 Scale 1:20,000

PROJECT NO. 1375

Soundings: Control:

808 Depth Recorder Shoran

Chief of Party - K. G. Crosby
Surveyed by - P. A. Weber, J. O. Boyer, M. E. Natto & G. W. Thompson
Protracted by - J. O. Boyer
Soundings plotted by - J. O. Boyer
Verified and inked by-E. Thomas
Reviewed by - T. A. Dinsmore Date: 25 Sept. 1957
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys T-9571, T-9573 and T-11092 of 1950.

The origin of the control is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement considering the irregularities in the bottom. Numerous discrepancies of 1-3 ft. were resolved in accordance with corrections noted in paragraph 7c of this review.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

Except in the offshore depths, the bottom is liberally marked by sand bars, scattered shoals and depressions which

contribute to the general irregularities in the bottom. Expansive sand and mud flats cover much of the southwestern part of the survey.

4. Junctions with Contemporary Surveys

An adequate junction was effected between the present survey and H-8225 (1955) on the south. The junctions with H-8223 (1955) on the north and H -8227 (1955) on the southwest will be considered in the reviews of those surveys. On the west, no surveys are registered at this time.

5. Comparison with Prior Surveys

H-3189 (1910) 1:20,000

Most of the surveyed area had not been previously surveyed. The above prior survey covers a small portion of the present survey in the vicinity of lat. 55°57', long. 160°37'. The widely spaced sounding lines on the early survey do not afford a detailed comparison. Although a few features are in general agreement between the two surveys, the comparison generally reveals that radical bottom changes have taken place. Shoals and channels have shifted positions appreciably since 1910. The bottom in the Port Moller area is regarded as unstable.

The present survey supersedes this early reconnaissance survey.

6. Comparison with Chart 8833(Latest print date 4/30/56)

A. Hydrography

Charted hydrography originates with advance information of the present survey shown on blueprints 52858-59 (boat-sheet copies). Although no major discrepancies are found on the chart, the smooth-sheet soundings generally differ from 1 to 3 ft. with the charted (boat-sheet) soundings.

The present survey entirely supersedes the charted information.

B. Aids to Navigation

The buoy charted in lat. 56°03.3', long. 160°40.6', was located about 900 meters south southeastward on the present survey. In either position, this temporary buoy would adequately serve the purpose intended.

No other aids to navigation are charted in the area.

7. Condition of Survey

a. The sounding records are complete; the Descriptive report covers all matters of importance.

b. The smooth plotting was generally accurate. Considerable difficulty was experienced in the verification of the survey smooth sheet because of shoran position discrepancies. Positioning differences in the locations of the narrow shoal ridges developed by the various launches indicated an uncertainty of as much as 60 meters. As the shoal ridges had been adequately developed by each of several systems of sounding lines, one system was adopted as a base. Least depths on the conflicting sounding lines were shifted in position so as to agree with the soundings on the base system of lines. This method of adjusting position differences effected agreement in the necessary localities.

Shoran positions in conflict with the shoreline were adjusted to clear the shoreline in accordance with notes recorded in the sounding volumes.

The hydrographer notes in paragraph I., page 4 of the Descriptive Report that shoran calibration was not accomplished until late in the season's work and that the corrections for the various launches varied appreciably. It appears probable that the apparent discrepancies in the shoran positioning may be partially attributed to the lack of shoran calibration at the start of the season's work.

c. Crossing discrepancies of as much as 2 ft. in 30- to 50- ft. depths were resolved on some sections of lines by applying fathometer reducers based on a mean of the day's bar checks rather than reducers based on a mean of the season's bar checks as applied by the field party.

The B-scale soundings of launch 4 which were in conflict with adjacent hydrography were revised 3 ft. to correct for an error in the determination of the phase correction. Apparently the algebraic sign of the phase difference was misapplied in the field determination of the correction. Changes were made to about 900 soundings for phase corrections.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is a basic survey and no additional field work is required.

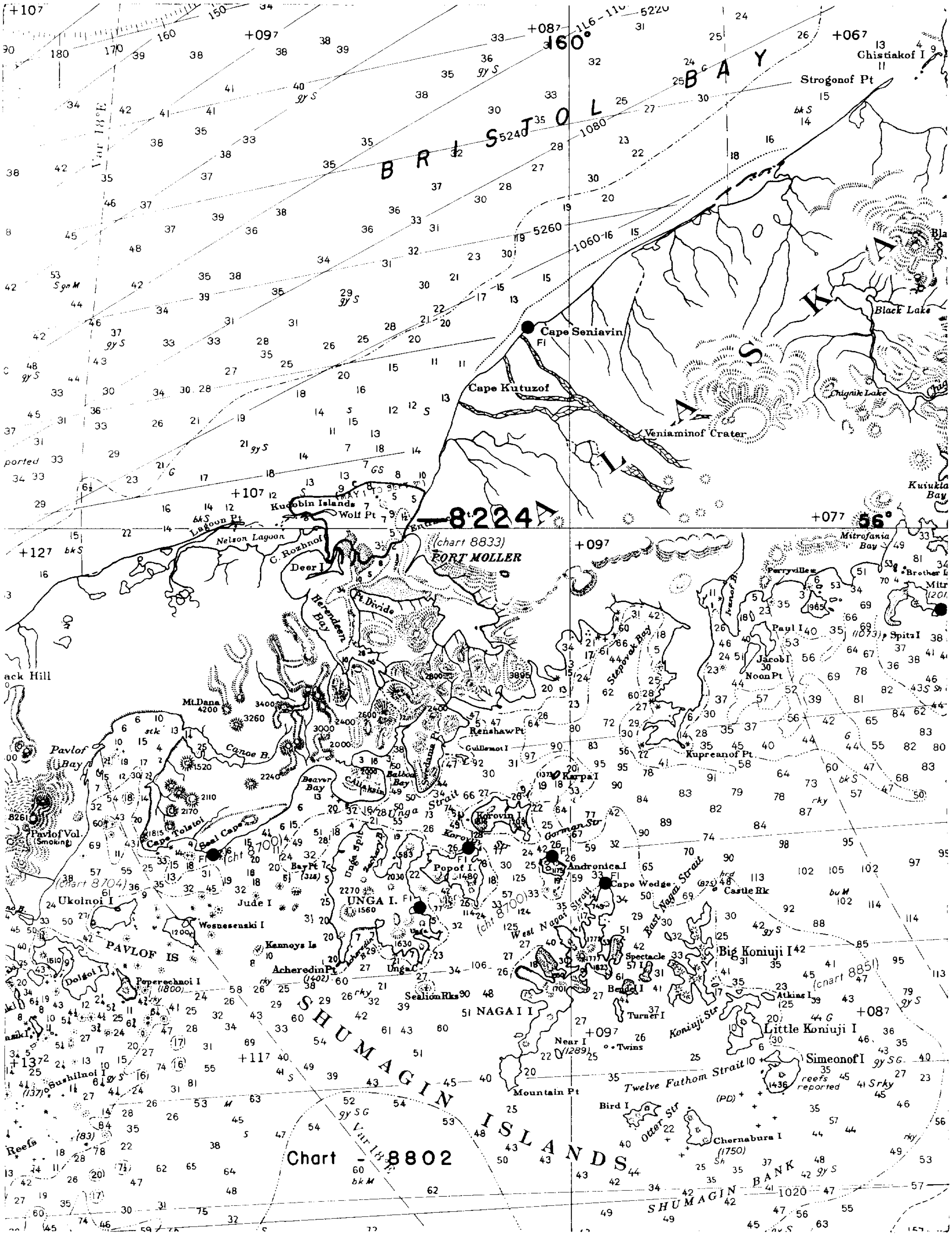
Examined and Approved:

Wallace A. Bruder
for Max G. Ricketts
Chief, Nautical Chart Branch

Charles A. Schanck
Chief, Division of Charts

Karl B. Jeffers 9/25/57
Karl B. Jeffers
Chief, Hydrography Branch

Samuel B. Grenell
Chief, Division of Coastal Surveys



BRISTOL BAY
ALASKA
160°
56°
Var 18°E
Chistiakof I
Strogonof Pt
Cape Seniavin
Black Lake
Chignik Lake
Cape Kutuzof
Veniaminof Crater
Kuiukta Bay
Kudobin Islands
Wolf Pt
Lagoon Pt
Nelson Lagoon
C. Rozhnof
Deer I
8224A
(chart 8833)
PORT MOLLER
Herendeen Bay
Pt Divide
Mitrofania Bay
Brother I
Perryville
Paul I
Spitz I
Jacob I
Noon Pt
Stepovak Bay
Kupreanof Pt
Mt. Dana 4200
Pavlof Bay
Canoe B.
Pavlof Vol. (Smoking)
Cape Tolstoi
Beaver Bay
Balboa Bay
Renshaw Pt
Guillemot I
Karpa I
Unga Strait
Korovin I
Gorman Str
Seal Cape
(cht 8700)
(chart 8704)
Popof I.
UNGA I.
Unga Spit
Bay Pt
Andronica I
Cape Wedge
West Nagai Strait
East Nagai Strait
Castle Rk
Ukolnoi I
Jude I
Wosnesenski I
PAVLOF IS
Dolgoi I
Peperechnoi I
Kennoys Is
Acheredin Pt
Unga C
Sealion Rks
NAGAI I
Spectacle I
Bendel I
Turner I
Big Koniuji I
Atkins I
(chart 8851)
Koniuji Str
Little Koniuji I
Simeonof I
reefs reported
Near I
Twins
Twelve Fathom Strait
Mountain Pt
Bird I
Otter Str
Chernabura I
Sushilnoi I
Reefs
SHUMAGIN ISLANDS
SHUMAGIN BANK
Chart - 8802

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8224

Reviewed 25 Sept. 1957

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
3-13-56	8833 Reconstr.	R. K. DeLaubenfels	Exam for cart. corrections to dwg. & recompilation. Before ~~After~~ Verification and Review
2-25-61	880x	J. M. Albert	~~Before~~ After Verification and Review
3-2-61	930x	JMA	via 880x ~~Before~~ After Verification and Review
5-29-63	8833	J. J. Streifler	Complete application ~~Before~~ After Verification and Review for recompilation.
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.