

RESTRICTED

8001

Diag. Cht. Nos. 8802-3 & 9000-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. PF 10152 Office No. H-8001

LOCALITY

State ALASKA

General locality BERING SEA

Locality PRI BILOF ISLANDS, EASTERN PT

1952

CHIEF OF PARTY

CHARLES PIERCE

LIBRARY & ARCHIVES

DATE MAR 2 1953

CS-343

DECLASSIFIED

AUTHORITY *Ltr. Oceanav
Ser B37/N3D*

DATE *12-16-75* BY *DRG*

8-1870-1 (1)

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

2993-4

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

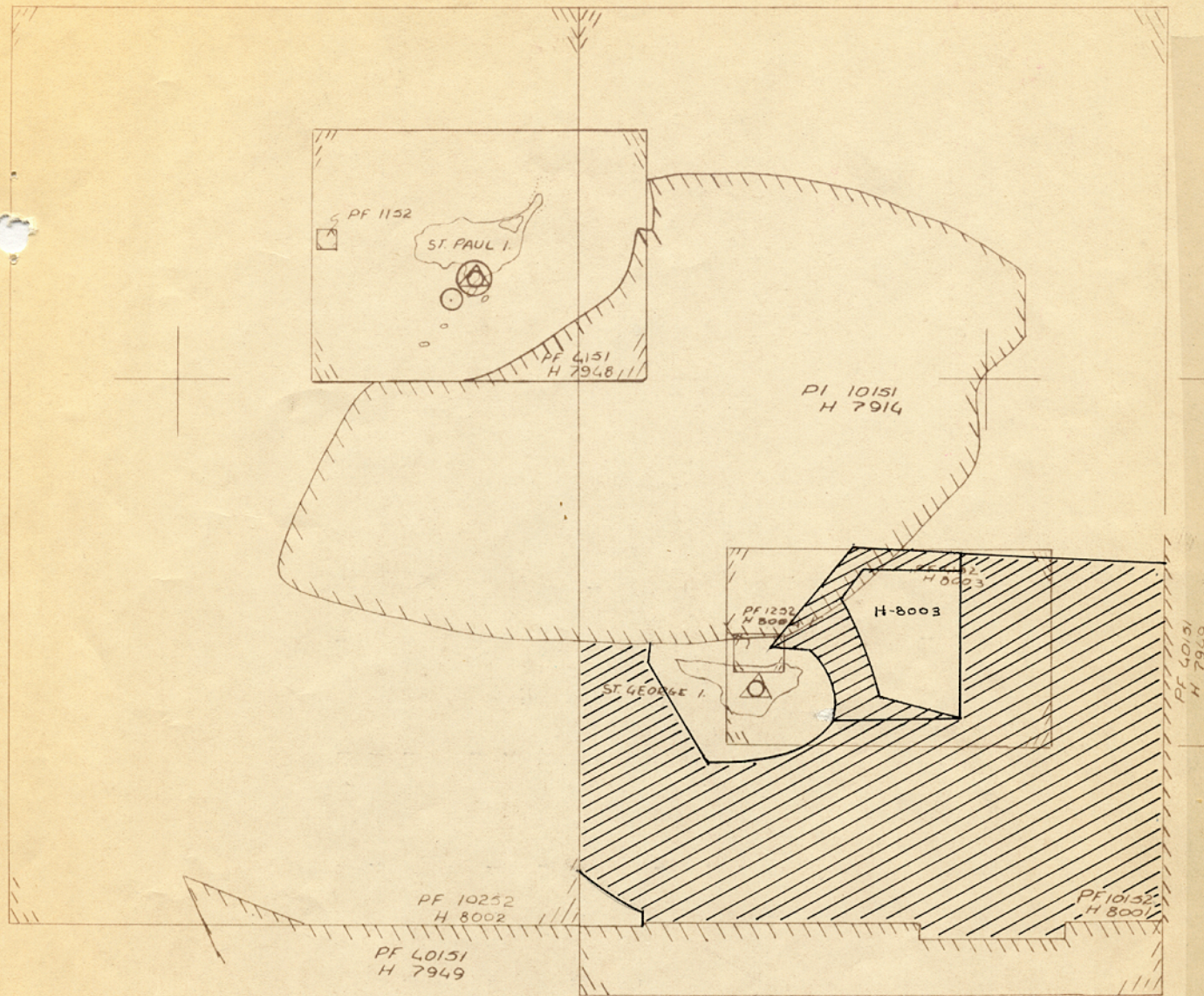
The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8001

Field No. PF 10152

State Alaska
General locality Bering Sea
Southeastward off
Locality Pribilof Islands, Eastern Part
Scale 1:100 000 Date of survey 20 July - 12 Sept 1952
Instructions dated 6 March 1951; 21 March 1952
Vessel U.S.C. & G.S. Ship PATHFINDER
Chief of party CHARLES PIERCE
Surveyed by H.J. HEALY, K.S. ULM, F.J. BRYANT
Soundings taken by fathometer, ~~graphic record, hand lead, and~~ Graphic Record
Fathograms scaled by GCA, DCH, EEE, VE, JJC
Fathograms checked by REW, EEE, MJT, VE
Protracted by R.E. WILLIAMS
Soundings penciled by R.E. WILLIAMS
Soundings in fathoms ~~xxx~~ at ~~MLLW~~ MLLW

REMARKS:






USC&GSS PATHFINDER
 1952 SHEET LAYOUT SKETCH
 PRIBILOF ISLANDS ALASKA

PROJECT CS-343

CHARLES PIERCE, COMDG.

SCALE: CHART 8802

LEGEND:  SHORAN STATION
 E.P.I. STATION
 TIDE GAGE

171°

170°

169°

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY H-8001 (Field No. PF 10152)

PRIBILOF ISLANDS, EASTERN PART, ALASKA

Scale: 1: 100 000

1952

USC&GSS PATHFINDER

CHARLES PIERCE, Comdg

H.J. HEALY

K.S. ULM

- HYDROGRAPHERS

F.J. BRYANT

A. PROJECT

1. Project CS-343, Bering Sea Alaska
2. Instructions 22/MEK dated 6 March 1951
Supplemental Instructions 22/MEK dated 21 March 1952

B. SURVEY LIMITS AND DATES

1. Paragraph 26 of Supplemental Instructions - Project CS-343, dated 21 March 1952 specifies complete offshore and coastal hydrographic coverage within the limits of Chart 8995 - Pribilof Islands, Survey H-8001 is designed for offshore coverage of that part of the project area East of Longitude 170° 00' W.
2. Hydrographic coverage in 1952 comprises the offshore part of the survey area South of Latitude 56° 45' N except for the area of Survey H-8003 (PF 4152).
3. Field work was done between the inclusive dates 20 July - 12 September 1952.
4. H-8001 joins H-7914 (PI 10151) and the following contemporary surveys:

<u>SURVEY</u>	<u>FIELD NO.</u>	<u>SCALE</u>	<u>STATUS</u>
H-7949	EX-PF40151	1: 500 000	Incomplete
H-8002	PF10252	1: 100 000	Incomplete
H-8003	PF4152	1: 40 000	Complete

5. Progress of the work was delayed by persistently rough weather and by the necessity of remaining in the vicinity of St. George Island to take advantage of calm weather for launch work on H-8003 (PF4152).

C. VESSEL AND EQUIPMENT

1. Vessel was USC&GSS PATHFINDER, standard speed while sounding varied from 115 to 102 RPM as noted in the sounding volumes. The turning radius of the vessel over this range of speed is estimated to be 300 meters.

2. The following echo-sounding equipment was used for depth measurements:

808 Fathometer No. 130-S to 160 Fathoms

NMB Fathometer No. 106 over 160 Fathoms

D. TIDE AND CURRENT STATIONS

1. A Portable Automatic Tide Gage was maintained at Village Cove, St. Paul Island during the entire period of field work.

2. Tidal data from this gage was used for reduction of soundings without application of corrections for time and range differences. (Reference: Director's letter 36-rcb, Subject "Tide Zones and Reducers, Pribilof Islands Area, Alaska", 18 September 1952).

3. Current stations occupied within the area covered by the smooth sheet are discussed in the Descriptive Reports accompanying Hydrographic Surveys H-8003 and H-8004.

E. SMOOTH SHEET

1. The smooth sheet was constructed at the Seattle Processing Office by conventional means. The scale and area covered are the same as for the Boat Sheet.

2. Distance arcs from stations EPI B, St. Paul Island, and SHO CAN, St. George Island, were constructed on the Smooth Sheet by swinging circles from the plotted positions of the stations through computed geographic positions of selected points on the distance arcs. In the case of EPI B, the projection was originally constructed so as to include this point and the sheet trimmed after the circles were drawn.

3. Distance arcs from station EPI SE, Sequam Island, were constructed on the Smooth Sheet by an expedient devised at the Seattle Processing Office. The chords of conveniently spaced arcs were constructed through computed geographic positions at the extremities of the arcs and intermediate points on the arcs were plotted by computed offsets from the chord. The arcs were then drawn through the plotted points by means of a spline. Points on intermediate arcs were located by sub-division of the radii.

4. All circles have been constructed to represent distances in statute miles.

F. CONTROL STATIONS

1. Electronic control stations only were used on this survey. The positions of each of these stations have been computed on the 1927 North American Datum.

2. The stations used and the source of control are as follows:

EPI B 1951, St. Paul Island. The position of this station originates with the Electronic Position Indicator trilateration accomplished in 1951. The computations were made and the position furnished by the Washington Office (Reference: Director's letter 22/MEK S-1-PF, Subject "Report on Adjustment of EPI Observations", 7 November 1951).

SHO CAN 1952, St. George Island. Located in 1952 by personnel of USC&GSS PATHFINDER using conventional methods of third order accuracy for a connection to existing triangulation of 1897 and 1944. Published values of existing triangulation are on the 1944 St.-Paul - St. George Datum and geographic positions were corrected to the 1927 North American Datum by applying factors, furnished by the Washington Office, resulting from a connection to the Bering Sea Electronic Position Indicator trilateration scheme at St. Paul Island by observed reciprocal azimuths and electronic distance measurements accomplished jointly by USC&GSS PIONEER and PATHFINDER in 1951. The correction factors furnished and used are - Latitude -6".67; Longitude -30".15; Azimuth: +27".4. The resulting position of SHOCAN 1952 is from the field computations.

EPI SE, Sequam Island. Located in 1952 by personnel of USC&GSS PIONEER with third order accuracy from existing triangulation on the 1927 North American Datum. The geographic position of this station was furnished by USC&GSS PIONEER and is from the field computations.

G. SHORELINE AND TOPOGRAPHY

Shoreline and topography^{ic} details have been omitted in accordance with Section 751 (c) of the Hydrographic Manual.

H. SOUNDINGS

1. Depths were measured with the echo-sounding equipment listed in "C". Complete and legible Fathograms exist for all periods of sounding.

2. Velocity corrections have not been applied. (Reference: Director's letter 21/MEK, S-1-PF, subject "Fathometer Corrections, Alaska", 21 June 1951).

3. On 29 July, between positions 58c and 60c, in the vicinity of Latitude 56° 38'N, Longitude 169° 56'W, the speed of revolution of the Stylus Arm of the 808 Fathometer No. 130-S then being used for sounding varied from the standard speed of 109.1 RPM corresponding to the calibration velocity of 800 fms/sec due to changes in the line voltage from the ship's supply. By timing the revolutions of the Stylus Arm the average speed was found to be 107 RPM, corresponding to a theoretical calibration velocity of 784.6 fms/sec. Assuming 800 fms/sec as a standard velocity of sound in sea water, the correction factor is given by:

$$\frac{800 \text{ fms/sec} - 784.6 \text{ fms/sec}}{784.6 \text{ fms/sec}} \quad \text{or} \quad + 0.0196$$

All recorded depths between positions 58c and 60c, both inclusive, have been corrected by +2.0%.

4. Instrumental correction for the Fathometers used have been based on simultaneous comparisons of 808 Fathometer No. 130-S and wire and hand-lead soundings and from phase comparisons between the various scales taken throughout the season. Instrumental corrections for NMB Fathometer No. 106 were obtained by simultaneous comparisons with 808 Fathometer No. 130-S. For details concerning the computation of these corrections reference should be made to the report "Fathometer Corrections 1952", submitted separately.

5. Fathometer initials were maintained at a standard setting of 2.0 fathoms. Initial corrections, that is the difference between 2.0 fathoms and the actual initial as shown on the Fathograms, were applied when the Fathograms were scanned and have not been entered in the sounding volumes.

6. A continuous record was kept of the mid-ship draft and plotted as a graph. Draft corrections have been obtained by reference to these graphs and the values of this correction entered in the sounding volumes represent the difference between the standard initial setting of 2.0 fathoms and the instantaneous draft.

7. Corrections for the effect of settlement and squat, from observations in Iliuliuk Bay, Alaska, on 26 June 1952, have been combined with the instrumental corrections discussed in paragraph 4 above. Mean values of +0.15 fathom for speeds of 102 RPM and over and +0.10 fathom for speeds between 75 and 101 RPM have been used.

I. CONTROL OF HYDROGRAPHY

1. All hydrography was controlled by electronic means using either Electronic Position Indicator distances or a combination of Electronic Position Indicator and Shoran distances.

2. The major part of the hydrography was controlled by the combination of EPI and Shoran distances, the ship usually being conned along the Shoran arcs. Shoran distances from station SHOCAN, St. George Island were combined with EPI distances from either EPIB, St. Paul Island, or EPISE, Sequam Island. For EPI fixes the stations EPIB and EPISE were used.

3. All plotting has been done in statute miles, observed EPI distances being converted to statute miles by a table computed from the factor 1 Microsecond \div 0.09-3109 statute mile.

4. Observed electronic distances were corrected by values derived from calibrations of the equipment used at various times during the progress of the hydrography. For detailed information concerning the computation of these corrections, reference should be made to the report "EPI and Shoran Corrections 1952", submitted separately.

J. ADEQUACY OF SURVEY

1. Excluding coastal and inshore areas of St. George Island, the survey is complete South of Latitude $56^{\circ} 45'N$ to a junction with the incomplete contemporary survey H7949 (EX-PF40151) (1: 500 000) except for a holiday North of Latitude $56^{\circ} 13'N$, between Longitudes $169^{\circ} 50'$ and $170^{\circ} 00'W$. The coastal and inshore areas of St. George Island should be surveyed at a larger scale, using electronic control based on that island.

2. North of Latitude $56^{\circ} 45'N$ and East of the limits of H-7914 (PI 10151) the survey area is covered by sounding lines from the incomplete contemporary survey H-7949 (EX-PF 40151)(1: 500 000) at an average spacing of 5 nautical miles. Although no shoals or notable submarine features are indicated in this area, some reduction of the existing line spacing is necessary for a complete basic survey.
3. Depth curves in the vicinity of Latitude $56^{\circ} 18'N$, Longitude $169^{\circ} 38'W.$, and Latitude $56^{\circ} 25'N.$, Longitude $169^{\circ} 40'W.$, are not adequately delineated. Additional sounding lines in these localities are desirable.
4. The area East of Longitude $169^{\circ} 29'W.$, between Latitudes $56^{\circ} 35'$ and $56^{\circ} 40'N.$ is more adequately covered on H-8003 (PF 4152) and depths from H-8003 should supersede those of H-8001.
5. The junction at the Southeast limit of H-7914 (PI-10151), between points in Latitude $56^{\circ} 40'N$, Longitude $169^{\circ} 30'W.$, and Latitude $56^{\circ} 47'N.$, Longitude $168^{\circ} 18'W.$, is not satisfactory because poor control in the area of the present survey. Hydrography in this area should be superseded at a future date by a larger scale survey controlled by electronic stations on St. George Island.
6. Except for the holiday cited in 1 above, junctions with the incomplete contemporary survey H-7949 (EX- PF-40151)(1: 500 000) are satisfactory. The junction with the incomplete contemporary survey H-8002 (PF 10252) along Longitude $170^{\circ} 00'W.$ is satisfactory to the extent of the completed hydrography. The majority of the sounding lines in this area were continuous between the two surveys.
7. Standard depth curves to and including the 200 fathom curve have been drawn and are adequately defined except as noted in 3 above.

K. CROSS LINES

1. A total of 188.3 statute miles of cross lines has been run, amounting to 6.6% of the regular system of lines in the area. While the cross lines as run do not afford a systematic coverage of the area, 7 lines of soundings from H-7949 (EX- PF 40151)(1: 500 000) cross that part of the area not covered by crosslines of the present survey and are a satisfactory substitute. Agreement at crossings with sounding lines from H-7949 is excellent.

2. Approximately 200 crossings are involved in the system of crosslines of this survey. For 95% of these crossings the discrepancy in common depths is less than 1% and for 4% of the crossings the discrepancy in depth is between 1 and 2%. The following crossings fail to agree by more than 2%:

a. Latitude $56^{\circ} 13'.5N$, Longitude $169^{\circ} 15'.5W$: A 156 fathom sounding between positions 14R and 15R falls on 171 fathoms between positions 51R and 52R. The 156 fathom sounding appears on the record of both the 808 and NMB fathometers and has been retained. Soundings from the NMB Fathometer appear to be approximately 10 fathoms too deep between positions 51R and 52R. Although there is a clear trace on the NMB Fathogram, simultaneous "red light" soundings from this Fathometer are 10 to 15 fathoms shoaler. The soundings from the NMB Fathogram have been plotted and are retained pending further consideration during verification and review.

b. Latitude $56^{\circ} 38'.8N$, Longitude $169^{\circ} 27'.7W$,: The discrepancy is 1.2 fathoms in depths of 40 to 42 fathoms with comparatively flat bottom. Agreement of soundings is generally poor in this area of weak control.

L. COMPARISON WITH PRIOR SURVEYS

1. There are no surveys in the area prior to 1951. Comparison with H-7914 (PI 10151) reveals that, except as noted in I 5, agreement is excellent at junctions and in common areas. Depth curves are not appreciably displaced at the junctions.

2. Agreement with the contemporary incomplete survey H-7949 (EX-PF 40151)(1: 500 000) is excellent.

M. COMPARISON WITH CHART

1. The present survey was compared with Chart 8995, 3rd Edition, print date 51-9/24. The majority of the soundings in the common area originate with the Boat Sheet of H-7949 (EX-PF 40151). Such charted information is not further considered under this heading.

2. Significant charted sounding differ by considerable amounts from the Smooth Sheet values. The charted 50 fathom curve is in general agreement between Longitudes $169^{\circ} 25'W$ and $170^{\circ} 00'W$. but is completely in error East of Longitude $169^{\circ} 15'W$. Lack of adequate control for the charted soundings and the difference in datum between Chart and Smooth Sheet make any detailed comparison pointless in this generally featureless area.

3. Depths from the present survey should supersede the charted information.

N. DANGERS AND SHOALS

1. There are no dangers to navigation or notable shoals within the area of this survey.
2. The following shoal soundings appearing on Chart 89-95 are considered in the Descriptive Report accompanying H-8003 (PF 4152):

<u>POSITION</u>	<u>CHARTED DEPTH</u>
56° 42'.0 N 169° 06'.6 W	5 Fms Rep.
56° 40'.7 N 169° 07'.0 W	8 Fms P.D.
56° 33'.0 N 169° 08'.0 W	3½ Fms P.D.

O. COAST PILOT INFORMATION

Information of this nature has been separately submitted for the general area of the project from time to time.

P. AID TO NAVIGATION

No Aids to Navigation are regularly maintained within the limits of this survey.

Z. TABULATION OF APPLICABLE DATA

1. Forwarded with Smooth Sheet:
Overlay of soundings from H-7914 and H-7949.
2. To be submitted separately:
 - a. EPI and Shoran corrections 1952
 - b. Fathometer corrections 1952
 - c. Bathythermograph Observations 1952
 - d. Observations of Serial Temperatures and Salinities 1952
 - e. Geodetic Data, St. George Island
 - f. Tidal Data, Portable Automatic Tide Gage, Village Cove, St. Paul Island, Alaska

Fair J. Bryant
FAIR J. BRYANT
Lieutenant Commander, USC&GS

Robert E. Williams
ROBERT E. WILLIAMS
Ensign, USC&GS

STATISTICS FOR HYDROGRAPHIC SURVEY H-8001

(Field No. PF-10152)

PATHFINDER

Project No. CS-343

VOL NO	DAY LTR	DATE	H.L. WIRE	POSIT	STAT MILES
I	A	20 July 1952	0	57	117.4
I	B	28 July 1952	0	72	160.2
I	C	29 July 1952	0	60	109.3
II	D	1 Aug 1952	0	115	119.5
II & III	E	7 Aug 1952	0	61	105.0
III	F	9 Aug 1952	0	9	19.0
III	G	16 Aug 1952	0	62	108.8
III	H	20 Aug 1952	0	20	40.7
III & IV	J	21 Aug 1952	0	56	115.3
IV	K	22 Aug 1952	0	18	37.0
IV & V	L	23 Aug 1952	0	89	193.2
V	M	26 Aug 1952	0	27	56.9
V	N	27 Aug 1952	0	77	175.1
VI	P	29 Aug 1952	0	67	147.3
VI & VII	Q	30 Aug 1952	0	103	241.4
VII	R	2 Sept 1952	0	72	166.5
VII & VIII	S	3 Sept 1952	0	138	301.5
VIII & IX	T	4 Sept 1952	0	127	282.1
IX	U	7 Sept 1952	0	4	7.1
X	V	11 Sept 1952	0	80	187.9
X	W	12 Sept 1952	<u>0</u>	<u>48</u>	<u>110.7</u>
TOTAL - 1952			0	1362	2834.7
AREA - 1952 - 1926.0 Square Statute Miles					

TIDE NOTE

HYDROGRAPHIC SURVEY H ⁸⁰⁰¹~~7001~~ (PF 10152)

1. Records from the Portable Automatic Tide Gage maintained at Village Cove, St. Paul Island, Alaska, Latitude $57^{\circ} 07'.5$ N, Longitude $170^{\circ} 16'.5$ W., during the period of the field work were used for the reduction of soundings for tide.
 2. 4.3 feet on the staff corresponded to MLLW in 1952.
 3. Hourly heights for the reduction of soundings were scaled from the Marigrams in the field.
 4. Tidal data from this gage was used for the entire area of the survey without application of corrections for time or height differences. (Reference: Director's letter 36-rcb, Subject "Tide Zones and Reducers, Pribilof Islands Area, Alaska", 18 September 1952).
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FATHOMETER CORRECTIONS
HYDROGRAPHIC SURVEY H-8001 (PF 10152)

808 FATHOMETER NO. 130-S

A Scale Corrections	Full Speed (102 RPM and over)
To Depth	Correction
30.9 Fms	+0.1 Fm
55 Fms	0.0 Fm
A Scale Correction	Reduced Speed (75 - 101 RPM)
To Depth	Correction
55 Fms	0.0 Fm.
B Scale Correction	All Speeds
To Depth	Correction
90 Fms	0.0 Fm
C Scale Correction	All Speeds
To Depth	Correction
125 Fms	+1.0 Fm
D Scale Correction	All Speeds
To Depth	Correction
160 Fms	+2.5 Fms

NMB FATHOMETER NO. 106

For All Speeds

To Depth	Correction
500 Fms	+1.5 Fms

ABSTRACT OF EPI CORRECTIONS
HYDROGRAPHIC SURVEY H-8001 (PF 10152)

DATE	DAY LETTER	PERIOD FROM TO	A CHAN. STATION	SET NO	CORRN	B CHAN. STATION	SET NO	CORRN
20 July	A	0830 1720	EPI B	7	-5.0			
28 July	B	0850 2000	EPI B	7	-5.0			
29 July	C	0950 1930	EPI B	7	-5.0			
1 Aug	D	0815 1845	EPI B	1	-6.1			
7 Aug	E	0640 1500	EPI B	7	-5.0			
9 Aug	F	1320 1437	EPI B	7	-5.0			
16 Aug	G	0800 1550	EPI B	7	-5.0			
20 Aug	H	1505 1755	EPI B	7	-5.0			
21 Aug	J	0525 2005	EPI B	1	-6.1			
22 Aug	K	0515 0750	EPI B	7	-5.0	EPI SE	3	-5.6
23 Aug	L	0536 1845	EPI B	7	-5.0	EPI SE	3	-5.6
26 Aug	M	2000 2400				EPI SE	3	-5.6
27 Aug	N	0010 1020				EPI SE	3	-5.6
		1028 1220	EPI B	7	-5.0	EPI SE	3	-5.6
29 Aug	P	1250 2355	EPI B	7	-5.0	EPI SE	3	-5.6
30 Aug	Q	0005 1220				EPI SE	3	-5.6
		1225 1735	EPI B	7	-5.0	EPI SE	3	-5.6
2 Sept	R	1210 2355	EPI B	7	-5.0	EPI SE	3	-5.6
3 Sept	S	0005 1925	EPI B	7	-5.0	EPI SE	3	-5.6
		1935 2355	EPI B	7	-5.0	EPI SE	6	-5.0
4 Sept	T	0005 0555	EPI B	7	-5.0	EPI SE	6	-5.0
		0600 2045	EPI B	1	-6.1	EPI SE	6	-5.0
7 Sept	U	1425 1457	EPI B	1	-6.1			
11 Sept	V	1055 1205				EPI SE	6	-5.0
		1215 1810	EPI B	1	-6.1	EPI SE	6	-5.0
		1815 2355	EPI B	7	-5.0	EPI SE	6	-5.0
12 Sept	W	0005 0755	EPI B	7	-5.0			

ABSTRACT OF SHORAN CORRECTIONS
HYDROGRAPHIC SURVEY H-8001 (PF 10152)

DATE	DAY LETTER	PERIOD		STATION	CHANNEL	CORRECTION
		FROM	TO			
20 July	A	0830	1720	SHOCAN	RATE	+0.003
28 July	B	0850	2000	"	DRIFT	-0.007
29 July	C	0950	1930	"	"	-0.007
1 Aug	D	0815	1845	"	"	-0.007
7 Aug	E	0640	1500	"	"	-0.007
9 Aug	F	1320	1437	"	"	-0.007
16 Aug	G	0800	1550	"	"	-0.007
16 Aug	G	1349	1403	"	RATE	+0.003
16 Aug	G	1404	1550	"	DRIFT	-0.007
20 Aug	H	1505	1755	"	"	-0.007
21 Aug	J	0525	2005	"	"	-0.007
22 Aug	K	0515	0750	"	"	-0.007
23 Aug	L	0536	1845	"	"	-0.007
26 Aug	M	2000	2400	"	"	-0.007
27 Aug	N	0000	1220	"	"	-0.007
29 Aug	P	1250	2400	"	"	-0.007
30 Aug	Q	0000	1735	"	"	-0.007
2 Sept	R	1210	2400	"	"	-0.007
3 Sept	S	0000	2400	"	"	-0.007
4 Sept	T	0000	2045	"	"	-0.007
11 Sept	V	1055	2400	"	"	-0.007
12 Sept	W	0000	0755	SHOCAN	DRIFT	-0.007

APPROVAL SHEET

The field work was done under my immediate supervision and the Boat Sheet was inspected daily as the work progressed. Coverage of the surveyed part of the area is complete except as noted in the Descriptive Report; additional work is recommended to complete the unsurveyed area.

The completed Smooth Sheet and accompanying records have been examined by me and are approved.

A handwritten signature in cursive script, reading "Charles Pierce".

CHARLES PIERCE
Chief of Party

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Survey~~

13 March 1953

Division of Charts: R. H. Carstens

Plane of reference approved in 10
volumes of sounding records for

HYDROGRAPHIC SHEET 8001

Locality Bering Sea, Alaska

Chief of Party: C. Pierce in 1952

Plane of reference is mean lower low water, reading
4.3 ft. on tide staff at Village Cove, St. Paul Island
9.5 ft. below B. M. 2 (1946)

Height of mean high water above plane of reference is 3.0 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section of Tides

Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No. H-8001

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>Alaska</u>										1
<u>Bering Sea</u>									B.M.	2
<u>Pribilof Islands</u>									i.	3
										4
										5
										6
										7
										8
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										23
										24
										25
										26
										27

Names underlined
in red are approved
3-13-53 L. Hack

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-8901...

Records accompanying survey:

Boat sheets; sounding vols. 10...; wire drag vols.;
bomb vols.; graphic recorder rolls 4 Exp.;
special reports, etc. 1 Smooth Sheet; 1 Descriptive Report; 1 Overlay Soundings :
from H-7914 & H-7949; 3 Folders-E.P.L. Plotting Abstracts;.....

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

Number of positions on sheet
Number of positions checked
Number of positions revised
Number of soundings revised (refers to depth only)
Number of soundings erroneously spaced
Number of signals erroneously plotted or transferred
Topographic details	Time
Junctions	Time
Verification of soundings from graphic record	Time

Verification by.....Total time Date

Reviewed by..... Time Date

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H- 8001

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

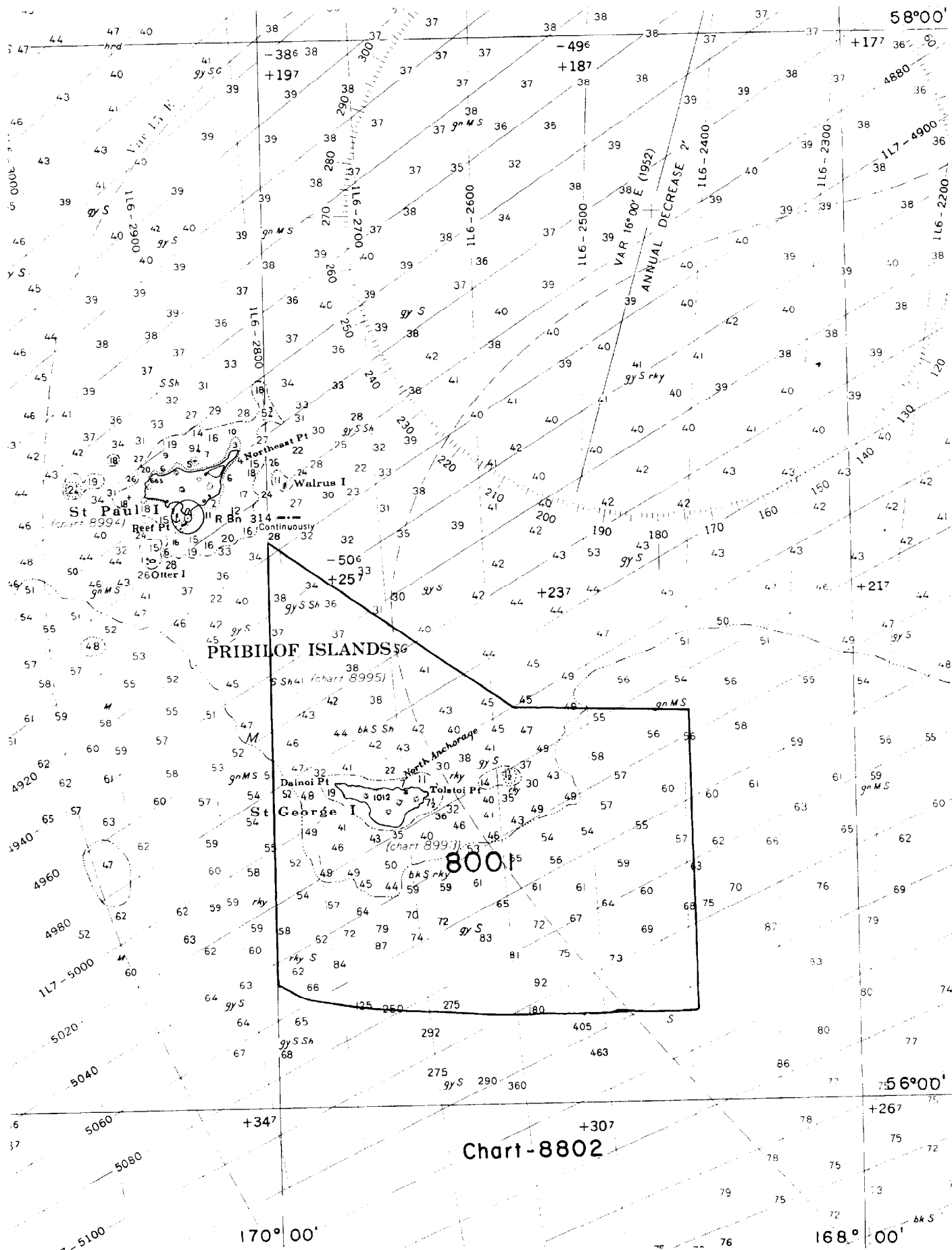
1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken.
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.
3. All reference to survey sheets mentioned in the descriptive report include the registry number and year.
4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering.
5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.
6. All positions verified instrumentally were check marked in the sounding records.
7. All critical soundings are clear and legible and are a little larger than the adjacent soundings.
8. The metal protractor has been checked within the last three months.
9. The protracting and plotting of all bad crossings were verified.
10. All detached positions locating critical soundings, rocks or buoys were verified.
11. The boat sheet was compared with the smooth sheet.

12. The spacing of soundings as recorded in the records was closely followed.
13. The bottom characteristics were shown on outstanding shoals.
14. The reduction and plotting of doubtful soundings were checked.
15. The transfer of contemporary topographic information was carefully examined.
16. All junctions were transferred and overlapping curves made identical.
17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil.
18. The depth curves have been inspected before inking.
19. All triangulation stations and transfer of topographic and hydrographic signals were checked.
20. Heights of rocks were checked against range of tide.
21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.
22. Unnecessary pencil notes have been removed.
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.
24. The low water line and delineation of shoal areas have been properly shown.
25. Degree and minutes values and symbols have been checked.
26. Questionable soundings have been checked on the fathograms.

27. Source of shoreline and signals (when not given in report).
28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual.
29. All aids located, with those on contemporary topographic sheets, have been shown on survey.
30. Depth curves were satisfactory except as follows:
31. Sounding line crossings were satisfactory except as follows:
32. Junctions with contemporary surveys were satisfactory except as follows:
33. Condition of sounding records was satisfactory except as follows:
34. The protracting was satisfactory except as follows:
35. The field plotting of soundings was satisfactory except as follows:
36. Notes to reviewer:

Verified by

Date



NAUTICAL CHARTS BRANCH

SURVEY NO. H-8001

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10 Mar 54	8993	Trisols	Before After Verification and Review <i>Partial appl.</i>
3/24/54	8995	Wittmann	Before After Verification and Review <i>Partial then 8993</i>
5/4/54	8994	H.W. Bargey	<i>Examined - no correction</i> Before After Verification and Review <i>Not applied</i>
Mar 55	8802	G.H.E	Before After Verification and Review <i>via 8995</i>
Mar. 6, 61	9302	J.M. Albert	<i>no correction needed</i> Before After Verification and Review <i>via 8802</i>
4/11/78	8993	C.S. Forbes	<i>Fully appl</i> Before After Verification and Review <i>Consider application as final. No additional corr.</i>
3-26-90	16066	R. Ross	Before After Verification and Review <i>Adequately Appld</i>
4-9-90	16381 (8993)	Ed Martin	Before After Verification and Review <i>Consider.</i> <i>Adequately applied, no further processing required</i>
4-10-90	16066	DUNCANNON	CONSIDER ADEQUATELY APPLIED Before After Verification and Review
5-10-90	16380	DUNCANNON	CONSIDER ADEQUATELY APPLIED CAT I
6-23-90	16382	L. ARKENY	Fully Applied CATEGORY I

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.