

7995

Diag. Cht. No 8862 & 9000-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. EX-10252 Office No. H-7995

LOCALITY

State ALASKA

General locality ALEUTIAN ISLANDS

Locality SEGUAM ISLAND

19~~4~~ 52

CHIEF OF PARTY

George L. Anderson

LIBRARY & ARCHIVES

DATE MAR 23 1953

7995

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

Verify (Carstens instructions)
1. add shoreline from
chart 8862 & 8863
2. Take curves 40, 50,
100, 200, 300, 400, 500
600, 700, 800, 900, 1000
1100, 1200, and 1500

REG. NO.

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-7995

Field No. EX-10252

State Alaska

General locality Aleutian Islands

Locality ~~Seguam Island~~ Northerly Approaches to Seguam Pass

Scale 1:100,000 ✓ Date of survey 17 July to 1 August 1952 ✓

Instructions dated 21 March & 10 April 1952

Vessel EXPLORER

Chief of party George L. Anderson & T. B. Reed ✓

Surveyed by F. R. Gossett, E. F. Hicks, Jr., C. A. Schoene, D. M. Whipp (Ships officers) ✓

Soundings taken by fathometer, graphic recorder, ~~hand lead~~ wire 808, NMC & NMC-2 Fathometers

Protracted by C. A. Schoene

Soundings penciled by H. A. Garcia, J. E. Guth, J. J. Dermody

Soundings in fathoms ~~FEET~~ at ~~MLLW~~ MLLW

(based on a velocity of sound of 800 fms/sec)

REMARKS: _____

782

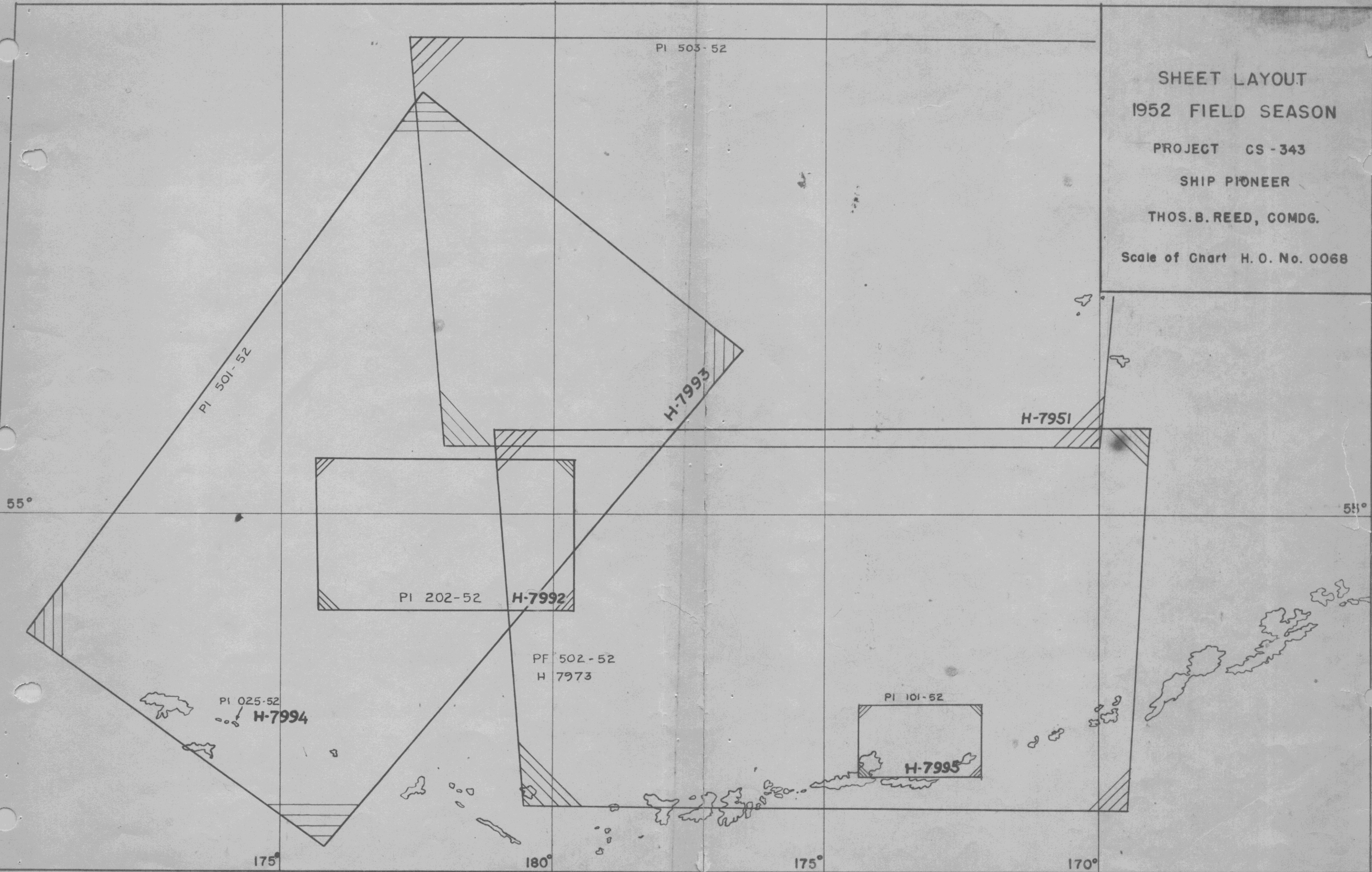
SHEET LAYOUT
1952 FIELD SEASON

PROJECT CS-343

SHIP PIONEER

THOS. B. REED, COMDG.

Scale of Chart H. O. No. 0068



DESCRIPTIVE REPORT

To Accompany
HYDROGRAPHIC SURVEY H-7995
Field No. EX-10252
APPROACHES TO SEGUAM PASS
ALEUTIAN ISLANDS - ALASKA
1952

Scale 1:100,000

USC & GSS EXPLORER, G. L. Anderson, Commanding

A. PROJECT:

Work was done under Instructions for Project CS-218, dated 19 March 1952, and Supplemental instructions for Project CS-343 dated 21 March 1952, and 10 April 1952.

B. SURVEY LIMITS AND DATES:

The area surveyed covers the northern approaches to Seguam Pass, on the north side of Seguam and Amlia Islands (Area "D"). This survey was executed by two ships, with the PIONEER^{plus} doing the western half and the EXPLORER (green) the eastern half. The area surveyed by the EXPLORER lies between Latitude 52°20' and Latitude 52°50', and extends northeast from the 30 mile arc of Station LUG and east from the 45 mile arc of Station CONE, to Longitude 172°-20' West. Field work was begun on 17 July and completed on 1 August, 1952.

The area surveyed joins Survey H-6700, scale 1:80,000, 1942 and Survey No. H-6723, scale 1:40,000, 1941. & H-6851 (1943) 1:20,000 *Review, par. 4.*

C. VESSEL AND EQUIPMENT:

All hydrography was accomplished with the Ship EXPLORER. The turning radius of the EXPLORER at standard speed is 275 meters full left about and 360 meters full right about (from previous descriptive reports).

808 fathometers, serials numbers 60 and 113-S were generally used in depths of 0-150 fathoms. NMC-2 fathometer No. 60 was generally used in depths of 150-600 fathoms, and NMC fathometer No. 54 in depths over 600 fathoms.

D. TIDE AND CURRENT STATIONS:

A portable tide gage at Finch Cove, Seguam Island was used for the reduction of all sounding with no time or range corrections. This gage was in operation during the entire period of the survey.

A current station in Finch Cove, Latitude 52°23.25', Longitude 172°-22.9' West was occupied with the ship EXPLORER using a current pole for 69 hours from 18 to 20 July.

E. SMOOTH SHEET

The smooth sheet is being constructed on board the Ship PIONEER. Such smooth plotting as time permits will be done by EXPLORER personnel as soon as the smooth sheet is received.

F. CONTROL STATIONS:

The triangulation in this area was executed by the Ship PIONEER in 1940, R. D. Horne commanding and 1941, W. D. Patterson commanding. ✓

G. SHORELINE AND TOPOGRAPHY:

This is an offshore survey and no shoreline or topography is involved. *Review, par. 1* ✓

H. SOUNDINGS:

All sounding was done with recording fathometers except for a few machine soundings on shoals. See separate fathometer report for computation of fathometer corrections. No corrections except initial, index, phase, draft, settlement and squat were applied in accordance with instructions for this project. ✓

Report with H-7977

I. CONTROL OF HYDROGRAPHY:

This survey was controlled entirely by two shoran stations. The EXPLORER established station CONE on Segum Island, and the PIONEER established station LUG on Amlia Island. In order to get adequate control in Segum Pass, the EXPLORER stopped sounding and acted as station ship for the PIONEER. The position of the EXPLORER was determined by shoran distances from the two stations, and simultaneously the PIONEER was located by shoran distances from the EXPLORER and one of the shore stations. ✓

Most of the hydrography was done by running shoran arcs on station LUG.

For a tabulation of shoran corrections, see "Special Report on Shoran - Segum Island 1952". *With H-7977*

J. ADEQUACY OF SURVEY:

This survey is considered to be complete and adequate for charting purposes. There are no prior surveys in this area. ✓

A satisfactory junction has been made with adjoining Surveys H-6700 and H-6723. The depth curves can be adequately drawn at the junctions. *Review, par. 4.* ✓

K. CROSSLINES:

About six per cent of crosslines were run on this survey. The depths at the crossings are in good general agreement and no major discrepancies were noted. ✓

L. COMPARISON WITH PRIOR SURVEYS:

There are no prior surveys in the area covered by this sheet. ✓

M. COMPARISON WITH CHART:

The largest scale chart of this area is No. 8862 (USC&GS), print date 51-10/15. The chart shows only a few scattered soundings. ✓ Some of these soundings are in good agreement with the survey and others are obviously misplaced. ✓

Review, par. 6.

The position of reported breakers (Latitude 52°-35'.0, Longitude 172°-38'.0) was disproved by this survey and should be deleted from the chart. ✓ A shoal with a least depth of 103 fms. (~~Boat Sheet~~) was found 2.5 miles northwest of this position. (98 " Smooth ") ✓

Following is a discussion of the items mentioned in the preliminary review of Chart 8862 by G. F. Jordan:

(1) The soundings taken by the U.S.S. Tillamook are disproved by this survey and should be disregarded. ✓

(2) This 37 fm. sounding was outside the area covered by this vessel and was investigated by the PIONEER. ✓

(3) and (4) These soundings were investigated under survey EX-8152. ✓ (H-6700 Ad. wk. 1952)

(5) The area mentioned in this paragraph is outside of the limits of this survey. ✓

(6) This position of reported breakers is covered in the previous paragraph. ✓

It is recommended that all of the soundings shown on the present chart in the area surveyed be deleted and that this survey be used exclusively for the revision of the chart. (Recommendation followed, - see Review, par. 6) ✓

N. DANGERS AND SHOALS:

No shoals were found on this survey that are a danger to navigation. ✓

A shoal with a least depth of 109 fathoms, pos. 171 F, was found in Latitude 52°-33'.2, Longitude 173°-17'.8. ~~Disregard~~, - shoaler depths southwestward

A shoal with a least depth of 109 fathoms, pos. 36-37 H, was found in Latitude 52°-34'.36 Longitude 173°-14'.37 ✓

A shoal with a least depth of ⁹⁸~~97~~ fathoms, pos. 59 H, was found in Latitude 52°-36'.8, Longitude 172°-41'.2. ✓

O. COAST PILOT INFORMATION:

Coast Pilot information for this area is included in a separate report, "Coast Pilot Notes 1952". ✓

P. AIDS TO NAVIGATION:

There are no aids to navigation in the area covered by this survey. ✓

Z. TABULATION OF APPLICABLE DATA:

- (1) Tide Records Finch Cove forwarded Washington Office 20 August 1952.
- (2) Special Report on Shoran, Project CS-343, forwarded 31 October 1952. ✓
- (3) Coast Pilot Notes, Aleutian Islands, forwarded 17 November 1952.

Respectfully submitted

Charles A. Schoene
Charles A. Schoene
LCDR, USCGS

TIDE NOTE

A portable tide gage at Finch Cove, Seguam Island was used for the reduction of all soundings without time or range corrections. Position of station:

Latitude $52^{\circ}-23'.15$ N., Longitude $172^{\circ}-24'.20$ W.

Mean lower low water on the staff is 2.1 feet. The gage was operated on 165th meridian time.

STATISTICS
 HYDROGRAPHIC SURVEY H-7995 (PART)
 FIELD NO. EX-10252

Date	Day Letter	Vol. No.	Statute Miles	No. of Positions	Extra Miles, Naut.	Total Miles Naut.
25 July	A	1	95.5	81	6.8	89.8
26 July	B	1	174.7	146	—	151.9
27 July	C	2	166.5	152	29.0	173.8
28 July	D	2 & 3	350.7	287	—	305.0
29 July	E	3 & 4	212.3	171	21.2	205.7
30 July	F	4 & 5	350.5	287	2.0	306.8
31 July	G	5	1.2	2	—	1.0
1 August	H	5	54.9	56	12.5	60.2
Totals:		5	1406.3	1182	71.5	1294.2

Total area surveyed - 1156 square statute miles

Approval Sheet
Hydrographic Survey H-7995 (EX-10152)

The boat sheet, sounding records, fathograms and descriptive report
have been examined by me and are approved.

George L. Anderson
George L. Anderson
Captain, USC&GS
Comdg. Ship EXPLORER

**FATHOMETER CORRECTIONS
ABSTRACT OF INDEX AND PHASE COMPARISONS**

SHIP Fathometer No. 113 8 808
 A Scale Plug 0.2 Fm.
 B Scale Plus 1.0 Fm.
 C Scale Plus 0.4 Fm.
 D Scale Minus 1.0 Fm.

LAUNCH No. 1
 A Scale Plus 0.4 Fm.
 B Scale Plus 0.8 Fm.
 C Scale Plus 0.8 Fm.
 D Scale Plus 0.5 Fm.

SHIP Fathometer No. 60 808
 A Scale 0.0 Fm.
 B Scale Plus 0.4 Fm.
 C Scale Plus 1.2 Fm.
 D Scale Plus 1.0 Fm.

LAUNCH No. 2 & 3
 A Scale Plus 0.2 Fm.
 B Scale Plus 1.2 Fm.
 C Scale Plus 1.2 Fm.
 D Scale Plus 1.0 Fm.

Ship BMC-2 0.0 Fm.
 Ship WMC 0.0 Fm.

DRAFT AND SQUAT CORRECTIONS

Use this table for speeds greater than half speed
 Subtract 2.0 Fm. from correction when using 808 Fathometer
 Do not use with BMC.

2.6 Fm. 19 May to 0600 21 May
 2.4 Fm. 0601 21 May to 29 May

2.5 Fm. 19 May to 29 May

2.6 Fm. 3 June to 1200 4 June
 2.4 Fm. 1200 4 June to 1500 14 June
 2.2 Fm. 1501 14 June to 27 June

2.5 Fm. 3 June to 1000 13 June
 2.0 Fm. 1001 13 June to 17 June

2.6 Fm. 17 June to 1200, 20 June
 2.4 Fm. 1201 20 June to 1400 30 June
 2.2 Fm. 1401 30 June to 2 July

2.5 Fm. 17 June to 0800 25 June
 2.0 Fm. 0801 29 June to 2 July

2.6 Fm. 7 July to 1400 13 July
 2.4 Fm. 1401 13 July to 15 July

2.5 Fm. 7 July to 15 July

2.6 Fm. 16 July to 0000 24 July
 2.4 Fm. 0001 24 July to 0800 31 July
 2.2 Fm. 0801 31 July to 1 August

2.5 Fm. 16 July to 1200 30 July
 2.0 Fm. 1201 30 July to 1 August

2.6 Fm. 4 August to 2000 6 August
 2.4 Fm. 2001 6 August to 0200 14 August
 2.2 Fm. 0201 14 August to 19 August

2.5 Fm. 4 August to 0200 13 August
 2.0 Fm. 0201 13 August to 19 August

2.6 Fm. 20 August to 2100 21 August
 2.4 Fm. 2100 21 August to 0000 29 August
 2.2 Fm. 0001 29 August to 3 Sept.

2.5 Fm. 20 August to 0000 28 August
 2.0 Fm. 0001 28 August to 3 Sept.

2.6 Fm. 7 Sept. to 2000 8 Sept.
 2.4 Fm. 2001 8 Sept. to 14 Sept.

2.5 Fm. 7 Sept. to 0200 13 Sept.
 2.0 Fm. 0201 13 Sept. to 14 Sept.

Use 0.2 units to 100 Fm.
 Use 0.5 units over 100 Fm.

Summary of Zero Sets

To be entered in sounding volumes of Hydrographic Sheets. Registry
No. H-7995. Field No. EX-10252.

	LUG	CONE
25 July to 1030 29 July ✓	99.799 ✓	99.840 ✓
1030 29 July to 0812 1 Aug. ✓	99.799 ✓	99.811 ✓

Copy - Chd.

DRAFT CORRECTIONS

Use this table for half speed or less

Subtract 2.0 Fm. from correction when using 808 Fathometer

Do not use with MMC Fathometer

All corrections in this table additive

2.4 Fm. 19 May to 1400 24 May
2.2 Fm. 1401 24 May to 29 May

2.5 Fm. 19 May to 0800 23 May
2.0 Fm. 0801 23 May to 29 May

2.4 Fm. 3 June to 1800 7 June
2.2 Fm. 1801 7 June to 17 June

2.5 Fm. 3 June to 1000 6 June
2.0 Fm. 1001 6 June to 17 June

2.4 Fm. 17 June to 1200 23 June
2.2 Fm. 23 June to 2 July

2.5 Fm. 17 June to 0800 22 June
2.0 Fm. 0801 22 June to 2 July

2.4 Fm. 7 July to 15 July

2.5 Fm. 7 July to 15 July

2.4 Fm. 16 July to 1800 26 July
2.2 Fm. 1801 26 July to 2200 31 July
2.0 Fm. 2201 31 July to 2 August

2.5 Fm. 16 July to 2300 25 July
2.0 Fm. 2301 25 July to 2 August

2.4 Fm. 4 August to 0000 9 August
2.2 Fm. 0001 9 August to 1000 16 August
2.0 Fm. 1001 16 August to 19 August

2.5 Fm. 4 August to 2200 7 August
2.0 Fm. 2201 7 August to 19 August

2.4 Fm. 20 August to 0200 24 August
2.2 Fm. 0201 24 August to 0300 31 August
2.0 Fm. 0301 31 August to 3 Sept.

2.5 Fm. 20 August to 0000 23 August
2.0 Fm. 0001 23 August to 3 Sept.

2.4 Fm. 7 Sept. to 0300 10 Sept.
2.2 Fm. 0301 10 Sept. to 14 Sept.

2.5 Fm. 7 Sept to 1200 9 Sept.
2.0 Fm. 1201 9 Sept. to 14 Sept.

Use 0.2 units to 100 fms.
Use 0.5 units over 100 fms.


Addenda to Descriptive Report
Sheet PI-10152 H-7795 EX-10252

K. Crosslines

Discrepancies in crossings are noted on the smooth sheet as follows:

Position Nos.		Lat. & Long.	Depths, fms.	
4-5	B day	52-26.8 N	80	} Discrepancies resolved in verification
59-60	A day	172-21.2 W	78	
60-61	D day (EX)	52-50 N	1060	
21-22	A day (PI)	173-11 W	1100	
130-131	D day (EX)	52-47 N	950	
20-21	A day (PI)	173-16 W	910	

EXPLORER records were re-examined and no changes were made to improve crossings with PIONEER lines.


S. B. Grenell
Commander, C&GS
Comdg. Ship EXPLORER

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. PI-101-52 Office No. H-7995

LOCALITY

State ALASKA

General locality SOUTH BERING SEA

Locality NORTHERLY APPROACHES TO

SEGUAM PASS

194 52

CHIEF OF PARTY

THOS. B. REED

LIBRARY & ARCHIVES

DATE MAR 23 1953

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-7995

Field No. PI-101-52

State Alaska

General locality South Bering Sea

Locality Northerly Approaches to Segum Pass

Scale 1:100,000 Date of survey 25 July 1952 to 1 Aug. 1952

Instructions dated 6 March 1951, 28 May 1951, 21 June 1951, 21 March 1952

Vessel Ship PIONEER

Chief of party Thos. B. Reed

Surveyed by Ship's Officers

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

Fathograms scaled by Fathometer Readers and Ship's Officers

Fathograms checked by Ship's Officers

Protracted by K.A. Mac Donald

Soundings penciled by K.A. Mac Donald

Soundings in fathoms ~~XXXX~~ at ~~XXXX~~ MLLW

REMARKS:

786

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY

H-7995

PI-101-52

NORTHERLY APPROACHES TO SEGUAM PASS

Project CS-343
Ship PIONEER
Scale: 1:100,000

Season of 1952
Thos. B. Reed, Chief of Party
Surveyed by: Ship's Officers

A. PROJECT

The work was done in accordance with instructions for project CS-343 dated 6 March 1951, 28 May 1951, 21 June 1951, and 21 March 1952.

B. SURVEY LIMITS AND DATES

The sheet was surveyed jointly by the Ships PIONEER and EXPLORER. This report covers the western portion which was surveyed by the Ship PIONEER.

The survey covers the northerly approaches to Segum Pass, bounded on the north by Lat. 52° 52'N., Amlia Island on the South, Segum Island on the East, and Atka Island on the West.

The survey joins contemporary survey, sheet number H-7973 on the North, and the following previous surveys; Sheet no. H-6851;(1952) Sheet no. H-6723.(1941) & H-6700 (1941-52)

Field work was begun on 25 July 1952 and ended on 1 August 1952.

C. VESSEL AND EQUIPMENT

The hydrography on this portion of the sheet was performed exclusively by the Ship PIONEER, which has a turning radius of approximately 400 meters. Soundings were taken with the following fathometers.

FATHOMETER	SERIAL NO.	RANGE IN WHICH USED
NMC	1-766	Over 800 fm
NMC-2	117	Under 800 fm
808	S-108	Under 800 fm

The 808 fathometer was used simultaneously with the NMC-2.

D. TIDE STATIONS

Tide Stations were installed at Nazan Bay and Finch Cove. Nazan Bay corrections were applied to the soundings west of the 45 mile arc on Shoran station CONE, and Finch Cove corrections applied to those east of the 45 mile arc on CONE.

E. SMOOTH SHEET

The projection was made by hand on the Ship PIONEER. The Shoran arcs were located by computation of points on the arcs. ✓

F. CONTROL STATIONS

All triangulation stations used for control in this survey were located by the Coast and Geodetic Survey and are on the N.A. 1927 datum.

Shoran LUG was located by triangulation from two previously established stations and one temporary station. Shoran CONE was located on triangulation station CONE which was established previously. Computations for the location of these stations are contained in a separate report, "Location of EPI and Shoran Stations, Season of 1952." ✓

G. SHORELINE AND TOPOGRAPHY

No shoreline or topography was included in this survey. *Review, part 1.* ✓

H. SOUNDINGS

Soundings were taken with the previously mentioned equipment. All fathograms were scanned and verified. ✓

In accordance with the Director's letter, dated 21 June 1951, 21/mek, S-1-PI, no velocity corrections were applied. ✓

I. CONTROL OF HYDROGRAPHY

The hydrography was controlled by Shoran stations LUG and CONE, except for the work between positions 33-G day and 27-H day, which was controlled by Shoran LUG and the Ship EXPLORER acting as a drifting Shoran station. The position of the Ship EXPLORER was determined by Shoran distances from stations LUG and CONE. This method was necessary due to the weak control offered by Stations LUG and CONE in this area. ✓

J. ADEQUACY OF SURVEY

The survey is believed to be complete and adequate to supersede prior surveys for charting. ✓

K. CROSSLINES

Crosslines constitute 15% of the survey. All discrepancies at crossings are within reasonable limits considering the rough bottom. ✓

L. COMPARISON WITH PRIOR SURVEYS

There are no prior surveys in this area except for the small area just west of Segum Island on H-6723. This area was examined to verify a sounding of 37 fathoms in Lat. $52^{\circ} 18.5'$, Longitude 172° ✓

40.4'W. A series of lines with 0.2 statute mile spacing was run in this area and a least depth of 39 fathoms was found. 37 fms. confirmed ✓

M. COMPARISON WITH CHART See Review, par. 6.

This area is covered by chart no. 8862. The charted soundings are from poorly controlled track lines and agree fairly well in the shoaler depths. Agreement is poor in deep water. ✓

N. DANGERS AND SHOALS

There are no dangers to surface navigation within the limits of this survey. ✓

O. COAST PILOT INFORMATION

No Coast Pilot information was recorded during this survey. ✓

P. BOTTOM SAMPLES

Twelve bottom samples were taken at various positions in the Shoaler depths. Eleven being taken in depths under 100 fathoms, and one at 390 fathoms. ✓

Q. DATA INCLUDED IN THIS REPORT

1. Abstract of Statistics.
2. Approval Sheet.
3. Tide Graphs.
4. Summary of Shoran corrections. (The computations of Shoran corrections are submitted with but not as part of this report.) ✓

R. MISCELLANEOUS

The smooth sheet and original Descriptive Report are being forwarded to the Ship EXPLORER for completion of their portion of the survey. The remainder of the records including a copy of the Descriptive Report will be forwarded to the Washington Office. ✓

Respectfully submitted:

K. A. MacDonald
K. A. MacDonald
Ensign, USC&GS

Approved and Forwarded:

Thos B Reed
Thos. B. Reed
Capt. USC&GS
Commanding Ship PIONEER

ABSTRACT OF STATISTICS FOR HYDROGRAPHIC SURVEY

H-7995 (1952)

Project CS-343

Ship PIONEER

<u>Day</u>	<u>Vol. No.</u>	<u>Date</u>	<u>No. of Pos.</u>	<u>No. Stat. Mi.</u>
A	1	25 July	46	116.2
B	1,2	26 July	151	403.8
C	2,3	27 July	147	339.8
D	3,4	28 July	203	362.2
E	4,5	29 July	160	385.2
F	5,6	30 July	166	345.0
G	6,7	31 July	142	296.7
H	7	1 August	<u>44</u>	<u>100.5</u>
		TOTAL	1059	2349.4

Square Stat. Mi. — 2067

SUMMARY OF SHORAN CORRECTIONS

H-7995

PI-101-52

Station	Period	Correction
<u>Shoran LUG</u>	25 July to 1 Aug.	-0.01
<u>Shoran CONE</u>	25 July to 1 Aug.	-0.02
<u>Shoran EX.</u>	31 July to 1 Aug.	-0.00

APPROVAL SHEET TO ACCOMPANY

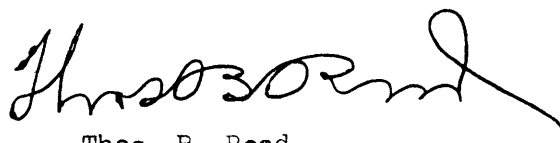
Survey H-7995

Project CS-343

The field work was supervised closely and the boat sheet inspected daily.

The records and smooth sheet have been inspected and are approved.

The survey is considered adequate.

A handwritten signature in cursive script, appearing to read 'Thos B Reed', with a long, sweeping underline that extends to the right.

Thos. B. Reed
CAPT., USC&CS
Comdg. Ship PIONEER

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

3 April, 1953

Division of Charts: R. H. Carstens

Plane of reference approved in 12
volumes of sounding records for

HYDROGRAPHIC SHEET 7995

Locality Aleutian Islands, Alaska

Chief of Party: T. B. Reed) in 1952
G. L. Anderson)
Plane of reference is mean lower low water, reading
1.9 ft. on tide staff at Nazan Bay
6.5 ft. below B. M. 1 (1934)
2.1 ft. on tide staff at Finch Cove, Seguam Island
9.1 ft. below B. M. 1 (1941)

Height of mean high water above plane of reference is as follows:

Nazan Bay = 3.3 feet
Finch Cove = 3.2 feet

Condition of records satisfactory except as noted below:

E. C. McKay
Tides Branch

Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No. H-7995

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			
<u>Alaska</u>										1	
<u>Alutian Islands</u>										2	
<u>Sequam Island</u>									BLM	3	
<u>Sequam Pass</u>										4	
<u>Amlia Island</u>										5	
<u>Cape Idalug</u>										6	
Atka Island										7	
				Names underlined in red are approved							8
									4-5-53 LITCK	9	
										10	
										11	
<u>Finch Cove</u>				(location tide & current station)							12
										13	
										14	
										15	
										16	
										17	
										18	
										19	
										20	
										21	
										22	
										23	
										24	
										25	
										26	
										27	

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7995...

Records accompanying survey:

1-PIONEER & 1-EXPLORER 7-PIONEER & 5-EXPLORER
 Boat sheets ..2...; sounding vols. ..12...; wire drag vols.; PIONEER
 bomb vols.; graphic recorder rolls 4 Eny, for EXPLORER & 2 for
 special reports, etc. 1 Smooth Sheet; 2 Descriptive Reports; 1 for PIONEER & 1
 1 for EXPLORER; 1 Cahier-Shoran Special Report for PIONEER; 1 envelope-Shoran
 Plotting Abstracts;

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

Number of positions on sheet	Pioneer 1057 Explorer 1182	2241
Number of positions checked		28
Number of positions revised		0
Number of soundings revised (refers to depth only)		182*
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	0
Junctions	Time	20
Verification of soundings from graphic record	Time	2hr

Verification by *C.R. Helmer* Total time *248 hrs* Date *11/5/53 - 7/29/54*
T.A. Dinsmore (Shoreline & Depth Curves) 30 hrs. *7/24/55 - 5/6/55*
5-23-55

Reviewed by *T.A. Dinsmore* Time *28* Date *5-27-55*

* 90% were junction and crossline re-scanning //

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7995

EX-10252

FIELD NO. PI-10152

Alaska, Aleutian Islands, Northerly Approaches to Seguam Pass

Project Nos. CS-218
CS-343

Surveyed - July - Aug. 1952

Scale 1:100,000

Soundings:

Control:

808 Fathometer
NMC "
NMC-2 "

Shoran

Chief of Party - T. B. Reed and G. L. Anderson
Surveyed by - Ships Officers (PIONEER and EXPLORER)
Protracted by - C. A. Schoene and K. A. MacDonald
Soundings plotted by - H. A. Garcia, J. E. Guth, J. J. Dermody and
K. A. MacDonald
Verified and inked by - C. R. Helmer and T. A. Dinsmore
Reviewed by - T. A. Dinsmore 27 May 1955
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline delineated on the smooth sheet was transferred from Chart 8862 and is shown only to indicate the relative position of adjacent islands to this offshore survey.

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

2. Sounding Line Crossings

Depths at crossings are in excellent agreement.

3. Depth Curves and Submarine Relief

The usual depth curves are adequately delineated. Supplemental curves at 100-fm. intervals are shown to 1200-fm. depths. The 1500-fm. curve has also been added.

The survey covers a wide expanse of the insular shelf and slope north of Amlia Island and Seguam Pass. The most prominent submarine feature in the area is the offlying ridge extending eastward from Atka Island. The ridge, with crests of 93 fms.

in lat. $52^{\circ}31.8'$, long. $173^{\circ}26.5'$, and 98 fms. in lat. $52^{\circ}36.8'$, long. $172^{\circ}41.2'$, is indented at several localities by heads of prominent canyons which trend north toward the broad basin of the Bering Sea. Of particular interest, is the basin lying southward (inshore) of the ridge chain. The deeper part of this basin is delineated by the 500-fm. depth curve which opens in lat. $52^{\circ}36'$, long. $173^{\circ}03'$, to form the head of a steep canyon affording a northward outlet. It is also noted that the conspicuous canyon north of Seguam Island heads close to that island. The features described contribute to the general unevenness of the bottom.

4. Junctions with Contemporary Surveys

Adequate junctions are made with H-6700 (1941) on the east, H-6723 (1941) on the southeast and with H-6851 (1943) on the southwest. In effecting a junction with H-6700, a portion of an overlapping sounding line on that survey was rejected and deleted from the smooth sheet because of appreciable disagreement with depths on the present survey.

The junction with H-7973 (1952) on the north and west will be considered in the review of that survey.

The area south of the present survey is unsurveyed as is also the inshore area along the northeast coast of Atka Island.

5. Comparison with Prior Surveys

There are no prior surveys in the area by this Bureau.

6. Comparison with Chart 8862 (Buff Drawing of 1955)

A. Hydrography

Charted hydrography originates entirely with the present survey prior to verification and review. Only minor revisions to smooth-sheet soundings have been made during verification and review. No important discrepancies are noted. Chart 8862 is presently being revised.

B. Aids to Navigation

No aids to navigation are charted within the limits of the present survey. No dangers to navigation are revealed by the survey.

7. Condition of Survey

a. The sounding records and Descriptive Report are complete and comprehensive.

b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey and no additional field work is required.

Examined and Approved:

Wallace A. Bruder
Wallace A. Bruder
Acting Chief, Nautical Chart Branch

E. R. McCarthy
E. R. McCarthy
Acting Chief, Chart Division

J. C. Bull
J. C. Bull
Chief, Hydrography Branch

Earl O. Heaton
Earl O. Heaton
Chief, Division of Coastal Surveys

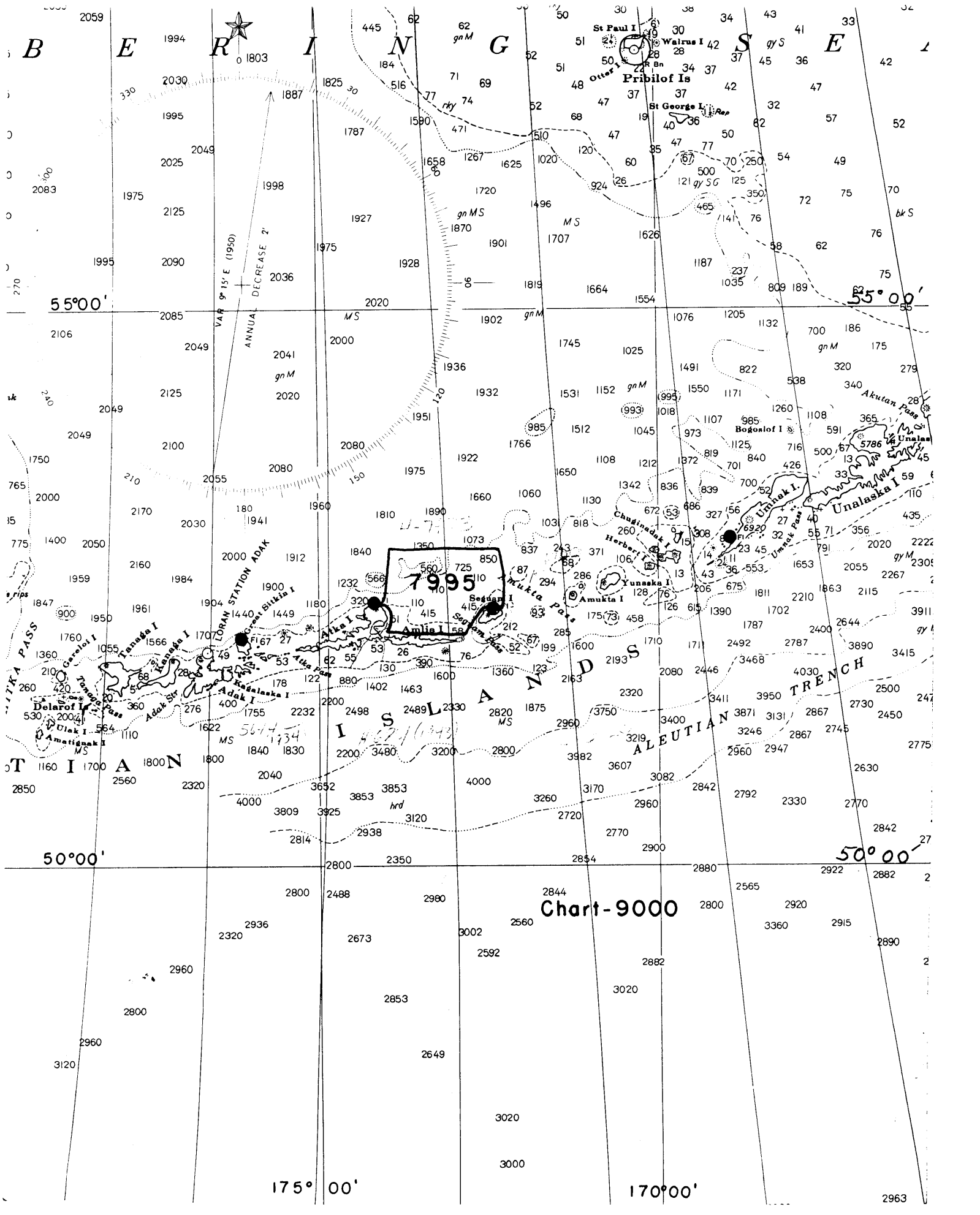


Chart-9000

55° 00'

55° 00'

50° 00'

50° 00'

175° 00'

170° 00'

2963

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7995

Reviewed 27 May 1955

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
1/17/55	8862	D. H. Benson	Before After Verification and Review <i>Full application 100 fathom curves</i>
2/10/55	9102	D. H. Benson	Before After Verification and Review <i>Full application</i>
4/4/55	9000	D. H. Benson	Before After Verification and Review <i>Fully application</i>
	8802	Everett	Before After Verification and Review <i>applied thru chart 9102.</i>
6-17-57	9102	J. M. Albert	Before After Verification and Review <i>Applied direct a complete adgo. changed 2 or 3 fms bottoms and he et</i>
5-19-59	8862	R. K. De Landau	Before After Verification and Review. <i>checked all adgo for depth.</i>
2-27-61	8802	J. M. A.	<i>curves already in bed on day from unverified survey generally conform to verified survey and were not revised at this time.</i> Before After Verification and Review <i>Compared with 9102 and 8862 and found in substantial agreement</i>
8-14-63	9010	D. A. Westbrook	Before After Verification and Review <i>Fully applied</i>
			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.