8227

Diag. Cht. Nos. 8802-3, 8859, & 9302.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PF-2455 *Office No.* H-8227

LOCALITY

State Alaska

General locality North Side Alaska Peninsula

Locality Herendeen Bay

19 55

CHIEF OF PARTY

K. G. Crosby

LIBRARY & ARCHIVES

DATE March 14, 1956.

B-1870-1 (1)

8227

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-8227

Field No. PF-2455

State Alaska

General locality North ~~N.~~ Side Alaska Peninsula

Locality Herendeen Bay

Scale 1:20,000 Date of survey June thru August 1955

Instructions dated 20 December 1954

Vessel Ship PATHFINDER

Chief of party K. G. Crosby

Surveyed by G. W. Thompson

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

Fathograms scaled by Saunders

Fathograms checked by Dodd

Protracted by G. W. Thompson, C. D. Upham Ship [illegible]

Soundings penciled by A. L. Wardwell, C. D. Upham

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

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY H-8227 (Field No. PF-2455)

HERENDEEN BAY

Scale: 1:20,000

1955

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 survey covers Herendeen Bay north of latitude 55°49'. Hydrography was done on 17 June and from 27 July to 31 August 1955.

H-8224(1955) on the north

The survey joins contemporary survey H-8225 (1955) to the northeast and H-8228 (1955) to the south. Review, ¶ 4

C. VESSELS AND EQUIPMENT:

PATHFINDER launch 2 was used on 17 June. The rest of the survey was done by launch 4. Their turning radii were about 20 meters.

Portable 808 type graphic recorders with keel-mounted acoustic units were used. The fathometers were calibrated for 800 fathoms per second.* Launch 2 used fathometer No. 61 and launch 4 used fathometer No. 46. * bar check corrections applied for all depths

The launches operated from the ship. The first few days of work were done when the ship was anchored about 3 miles off Entrance Point. The rest of the survey was done while the PATHFINDER was anchored in northern Herendeen Bay.

D. TIDES AND CURRENTS:

Tide corrections were obtained from observations made by a standard gage at Entrance Point, Port Moller and a portable gage at Fidalgo Island Cannery in southern Herendeen Bay. See TIDE NOTE attached to this report. Review, ¶ 7

Two 100-hour current stations were observed with Roberts radio current meters at latitude 55°50!5, longitude 160°47!3 and latitude 55°54!4, longitude 160°46!4.

A 100-hour current station was observed from the ship with a current pole at latitude 55°52!4 and longitude 160°50!7.

E. SMOOTH SHEET:

The projection was made by hand by the Seattle Processing Office. The Processing Office constructed the shoran arcs and transferred the shoreline from blueline tracings made from advance manuscripts Nos. 11092 (1942-52) and 11094 (1942-54) (PH-40). Review, #1

F. CONTROL STATIONS:

MARBLE, 1950; HAGUE, 1950; AS 1147 (USLM), 1950; EAGLE ROCK, 1950; OSGOOD, 1950; and DEER, 1950 were used to control this survey. The triangulation was done by J. H. Brittain.

G. SHORELINE AND TOPOGRAPHY:

The shoreline and topography applied to the smooth sheet were taken from advance photogrammetric manuscripts Nos. 11092 (1942-52) and 11094 (1942-54) (PH-40). No discrepancies were noted except that listed below. & T-11091 (1942-52) Review, #1

Positions 32, 44, and 46 M at the western tip of Deer Island plot as much as 50 meters inshore of the high water line. The extreme western tip of the island is a sand spit subject to minor changes; however it is questionable that it has changed this much since the photographs were taken. The writer does not know whether the error is in the shoreline or the hydrographic control. If the verifier can ascertain that the shoreline compilation was rigidly controlled, it is recommended that the shoran distances be corrected so that the hydrography will fit the shoreline. Review, #7

H. SOUNDINGS:

All soundings were recorded on portable 808-type depth recorders. Bottom specimens were obtained with a tallow "armed" lead.

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 Ft.
(b)	initial set	3.0 "

(c)	a - b	22.5	Ft.
(d)	2c	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 (e) + 2.6 (g) with the initial set at 3 feet.

A special fathometer report will be submitted. (1955/131)

I. CONTROL OF HYDROGRAPHY:

A sextant fix using three triangulation stations was taken to help locate Halftide Rock. All other hydrography was controlled with shoran distances.

Most hydrography was controlled by distances from SHO-HAG (HAGUE, 1950) and SHO-MAR (MARBLE, 1950). The area where these two stations gave a weak intersection was controlled by SHO-HAG and SHO-BOAT.

SHO-BOAT was the shoran mast aboard the PATHFINDER. Its position was determined every half hour with a sextant fix on OSGOOD, 1950; DEER, 1950; and HAGUE, 1950. Fixes were taken more frequently during periods of slack water and whenever the ship was swinging.

A part of the northeastern portion of the survey was controlled by distances from SHO-HAG and SHO-MO (AS 1147 USIM, 1950). In most cases the calibrating of shoran equipment was done by the launches in the same general area as the survey. The only shoran corrections then applied were those determined from the calibration test and the zero checks. The calibration tests run for SHO-MO were made relatively close to the station. It was found while plotting the smooth sheet that an additional correction should be applied to relatively long distance readings from this station.

Previous tests have shown that there is a variable shoran error that is dependent upon the distance between the mobile and fixed units and also the heights of their antennas. This correction was determined for SHO-CYN, on St. Lawrence Island, in 1954. The elevation of SHO-CYN and SHO-MO was about the same, and the same type launches were used. Because of the similarity, the distance corrections determined for SHO-CYN in 1954 were applied to shoran readings from SHO-MO. A detailed

description of this variable may be found in the Shoran Correction Descriptive Report, 1954, Ship PATHFINDER, along with the curves showing the actual value of the error as applied to this survey.

A separate report will be submitted on shoran corrections. (1955/132)

It is believed the control of this sheet is adequate. No large discrepancies were noted except that listed above in Section G. Review, #7

J. ADEQUACY OF SURVEY:

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

The junction with survey H-8228 to the south is satisfactory. Review, #4

The junction with survey H-8225 to the northeast will be discussed in the Descriptive Report for that survey. Review, #'s 4 & 7

K. CROSSLINES:

About 8 percent of the sounding lines are crosslines. The crossings are now satisfactory. Review, #4

L. COMPARISON WITH PRIOR SURVEYS:

There are no prior surveys available for comparison.

M. COMPARISON WITH CHART:

Chart 8833 gives only a general picture of this area which for the most part is inaccurate. The soundings on the chart were probably obtained from poorly controlled reconnaissance lines. The detached *3 fathom sounding at latitude 55°52'.7, longitude 160°49'.8 was not found. It is recommended that none of these old soundings be retained. Review, #6

* 16-ft. depths on present survey

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:

There are no aids in this area.

Q. LANDMARKS FOR CHARTS:

Covered in Coast Pilot Notes submitted for this area.

R. GEOGRAPHIC NAMES:

Names appearing on the smooth sheet were obtained from chart 8833 and photogrammetric manuscripts 11092 and 11094 (PH-40). No new names are recommended.

S. SILTED AREAS:

No silted areas were found.

T. BY PRODUCT INFORMATION:

There are a few submerged boulders and foul areas along the eastern shore of Herendeen Bay. Except for this area, the bottom is either sand or mud with no danger of striking hidden rocks.

Currents are quite strong in Hague Channel and Johnston Channel. Vessels entering this area should do so at slack water.

U - Y MISCELLANEOUS:

Not applicable.

Z. TABULATION OF APPLICABLE DATA:

1. Coast Pilot Notes forwarded 13 October 1955.
2. Fathometer Correction Report. (1955/131)
3. Tide Records, Entrance Point and Fidalgo Island Cannery.
4. Photogrammetric Descriptive Reports (Project PF-40).
5. Photogrammetric Manuscripts Nos. 11092 and 11094(PF-40).
6. Shoran Correction Descriptive Report, Ship PATHFINDER, 1954. (1955/132)
7. Season Report (1955/81)

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-8227

FIELD NO. PF-2455

SHIP PATHFINDER PROJECT NO. 1375

VOL. NUMBER	DAY LETTER	DATE 1955	NUMBER OF POSITIONS	STAT. MI. SOUNDING
LAUNCH NO. 2				
1	a (purple)	17 June	138	23.0
LAUNCH NO. 4				
2	a (red)	27 July	180	24.8
2	b	29 "	165	23.4
2,3	c	30 "	156	21.6
3	d	3 Aug	11	- -
3	e	4 "	168	28.6
3,4	f	10 "	190	44.6
4	g	11 "	35	8.4
4	h	12 "	126	30.6
5	j	13 "	113	25.8
5	k	15 "	132	26.7
5,6	l	16 "	51	10.5
6	m	25 "	117	21.2
6	n	28 "	- -	- -
6	p	29 "	138	18.6
6,7	q	31 "	59	5.3
		Total launch No. 4	1641	290.1
		Total for survey	1779	313.1

Total area of survey= 55.4 sq. stat. mi.

TIDE NOTE

HYDROGRAPHIC SURVEY H-8227

A standard tide gage was in operation at Entrance Point,* Port Moller (latitude 55°59!2, longitude 160°34!3), and a portable gage was at Fidalgo Island Cannery, southern Herendeen Bay (latitude 55°42!9, longitude 160°41!6).

A comparison of the records from the two gages showed Fidalgo Island with reference to Entrance Point tides were:

high water= +0.6 feet and +38 minutes
low water= -0.6 feet and + 58 minutes

It was estimated that tides in the vicinity of this survey were the average of the tides for the above two locations. (an average was used in reducing)

The August marigram for Entrance Point was lost in the mail. The Washington Office inferred the August hourly heights from the best available sources (see letter reference 36-196-982 pat dated 4 November 1955). Because of this, the corrected observed tides at Fidalgo Island were used for this survey when available. ~~Corrected~~ Inferred Entrance Point tides were used for the several days Fidalgo Island gage was not working (see TIDE NOTE, survey H-8228 DESCRIPTIVE REPORT).

Launch 4 d day 3 aug
" e " 4 " *
" j " 13 "
" p " 29 " *
" q " 31 " *

aug 10 to aug 28

* = adjusted to eliminate 2 & 3 ft crossing discrepancies -

aug 2 9:00 is last aug record on Entrance Point

GEOGRAPHIC NAME LIST

HYDROGRAPHIC SURVEY H-8227

Alaska Peninsula
Black Point
Coal Bluff
Coal Creek
Coal Valley
Deer Island
Doe Point
Eagle Rock
Fawn Point
Halftide Rk
Hague Channel
Herendeen Bay
Johnston Channel
Lynden Creek
Mud Bay
Point Divide
Ross Point
Village Spit

ECHO CORRECTIONS

HYDROGRAPHIC SURVEY H-8227

Launch No. 2, Fathometer 61, initial set 3.0 ft.

Use corrections as determined for fathometer No. 61 by launch No. 1, survey 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
1150			0.8	2.2
120.0			+1.0	2.0
125.0			+1.2	-1.8

Launch No. 4, Fathometer No. 46, initial set 3.0 ft.

FATHOMETER READING	CORRECTION "A" SCALE	"B" SCALE	"C" SCALE	"D" SCALE
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		

(continued next page)

LAUNCH NO. 4 (continued)

FATHOMETER READING	CORRECTION "A" SCALE	"B" SCALE	"C" SCALE	"D" SCALE
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
139.0				2.9
149.0				2.7
160.0				-2.5

APPROVAL SHEET

HYDROGRAPHIC SURVEY H-8227 (PF-2455)

HERENDEEN BAY, 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

30/36

RECEIVED MAIL ROOM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
SHIP PATHFINDER
700 FEDERAL OFFICE BUILDING
SEATTLE 4, WASHINGTON

SEP 13 11 45 AM 1955

PATH-JOB-wy
File 711.1
Serial 113
1 Sep. 1955

AIR MAIL COAST & GEODETIC SURVEY

To: Director, U. S. Coast & Geodetic Survey
Washington 25, D. C.

Subj: Tides, hourly heights

1. It is requested that the following heights determined from the Port Moller Tide gage be furnished this party as they become available.

a. From 0800 to 2000 (150th Meridian time) on 3 and 4 August.

b. From 0800 to 1700 on 10, 11, 12, 15, 16 17, 24, 25, and 26 August.

c. From 0800 to 1200 on 13 and 29 August.

d. From 1600 to 1800 on 31 August.

2. Tide marigrams, hourly heights, and level data for portable tide gage at Fidalgo Island Cannery in Herendeen Bay are being sent under separate cover. It is requested that mean lower low water be determined for this gage and the results sent to this party as soon as available.

K. G. CROSBY
Captain, USC&GS
C. O. Ship PATHFINDER

Aug 2 - 9:00 is last record from Entrance Point

36-196-992
pat

4 November 1955

To: The Commanding Officer
USC&GSS PATHFINDER
705 Federal Office Building
Seattle 4, Washington

Subject: Tidal data, Port Moller and
Herendeen Bay, Alaska

Reference is made to your letter of September 1, 1955 requesting hourly heights for Port Moller, Alaska and the plane of mean lower low water on the staff at Herendeen Bay, Alaska.

The delay in answering this request is due to the fact that we were waiting for the August tide roll for Port Moller, which apparently has been lost in the mail.

Based upon the best available sources the hourly heights for Port Moller have been inferred for the dates requested. These are referred to the plane of MLLW.

The plane of mean lower low water on the staff at Herendeen Bay has been computed as 1.8 feet.

ELLIOTT B. ROBERTS

Acting Director

Enclosure

GEOGRAPHIC NAMES

Survey No. H-8227

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										1
Alaska Peninsula										2
Herendeen Bay										3
Coal Bluff										4
Johnston Channel										5
Eagle Rock										6
Halftide Rock										7
Point Divide										8
Hague Channel										9
Deer Island										10
Doe Point										11
Mud Bay										12
Black Point										13
Village Spit										14
										15
				Names approved						16
				3-27-56. L. Heck						17
				(Other names on						18
				sheet are approved if						19
				desired to use them).						20
										21
Entrance Point		(tide station off sheet)								22
										23
										24
										25
										26
										27

M 224

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8227

Records accompanying survey:

Boat sheets 1; sounding vols. 7; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 8-Envelopes

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

1 Cahier of Sheran Calibration Data and

1 Metal Mounted Sheran Calibration Sheet Filed With Graphic Control Surveys

(to be discarded on completion of project)

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

Number of positions on sheet		1779
Number of positions checked		20
Number of positions revised		150 *
Number of soundings revised (refers to depth only)		10
Number of soundings erroneously spaced		—
Number of signals erroneously plotted or transferred		2
Topographic details	Time	5
Junctions	Time	40
Verification of soundings from graphic record	Time	10

Verification by Roy E Elkins Total time 170 hrs estimated Date 11-14-57

Reviewed by J. A. Dinsmore Time 16 Date 1-22-58

* Revised during general adjustment to eliminate discrepancies with plotted location of planned edges and in junctional area with H-5225

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8227 FIELD NO. PF-2455

Alaska, N. Side Alaska Peninsula, Herendeen Bay

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

Project No. CS-1375

Soundings: Control:

808 Depth Recorder Shoran

Chief of Party - K. G. Crosby
Surveyed by - G. W. Thompson
Protracted by - G. W. Thompson & C. D. Upham
Soundings plotted by-A. L. Wardwell & C. D. Upham
Verified and inked by - R. E. Elkins
Reviewed by - T. A. Dinsmore Date: 22 Jan. 1958
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with reviewed air-photographic surveys T-11091 (1942-52), T-11092 (1942-52) and T-11094 (1942-54).

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

2. Sounding Line Crossings

Depths at crossings are in good agreement after corrections noted in paragraph 7 were applied.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

The 311-ft deep in lat. 55°53.15', long. 160°48.9', is probably the most unusual feature in the area. Johnston Channel in the eastern part of Herendeen Bay is quite constricted by flanking

shoal flats. In lat. 55°51.4', long. 160°47.7', depths drop sharply from 6 to 60 ft. in as short a distance as 80 meters. Channel depths range from 41 to 96 ft.

4. Junctions with Contemporary Surveys

A butt junction was effected with H-8225 (1955) on the northeast. Conflicting overlap soundings on H-8225 were removed from the marginal area for reasons explained in paragraph 7.

The junction with H-8224 (1955) on the north is adequate except that the channel skirting the eastern side of Deer Island remains unsurveyed. This inshore shallow channel appears relatively unimportant inasmuch as the area northward is comprised mostly of shoal flats.

The junction with H-8228 (1955) on the south will be considered in the review of that survey.

5. Comparison with Prior Surveys

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

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 blueprint 52857 (copy of boat sheet). 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

No aids to navigation are charted in this 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 adequate. However, in specific localities, development by Launches 2 and 4 conflicted with each other and also with the shoreline and channels located by air photographs. In the affected

localities, adjustments of .060 to .080 miles in the shoran positioning of certain sounding lines resolved the discrepancies.

The channel development by Launch 3 on H-8225 would agree with the photo-positioned channels and junctional development on H-8227 if the development on H-8225 were shifted southeastward .080 miles; however, inasmuch as the inking of H-8225 had been completed, a butt junction was effected by removal of conflicting overlap soundings from the margin of H-8225.

It should be noted that the shoran reducers and positioning adjustments are merely expedients, and are not supported by conclusive evidence that the reducers or adjustments are numerically correct. All positioning adjustments were made during verification of the survey in the Washington Office.

c. The use of a tide station far removed from the project area, necessitated by the loss of the Entrance Point marigram for August, caused sounding conflicts of 2 and 3 feet in flat shallow areas. Three days of development by Launch 4 (e, p. q. days) dependent on inferred tides were adjusted during verification. The adjustments are based on improvised tide curves developed by plotting depth differences between soundings of the subject days and soundings reduced with local tides.

In this instance the tide note is inadequate in that it does not state specifically when local tides were used nor does it state when inferred tides (surmised in this case to be subject to 2 ft. error) were used. The tide gage entry, stamp 38, lists local stations when in fact the tides on certain days are from stations far removed from the project area.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

The survey is considered to be basic and no additional field work is recommended.

Examined and approved:

Max G. Ricketts
Chief, Nautical Chart Branch

Charles A. Schanck
Chief, Division of Charts

Karl B. Jeffers
Chief, Hydrography Branch

Samuel B. Grenell
Chief, Division of Coastal Surveys

P-41c

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coast and Geodetic Survey~~: 28 March 1956

Division of Charts: R. H. Carstens

Plane of reference approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET 8227

Locality Herendeen Bay, Alaska

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)

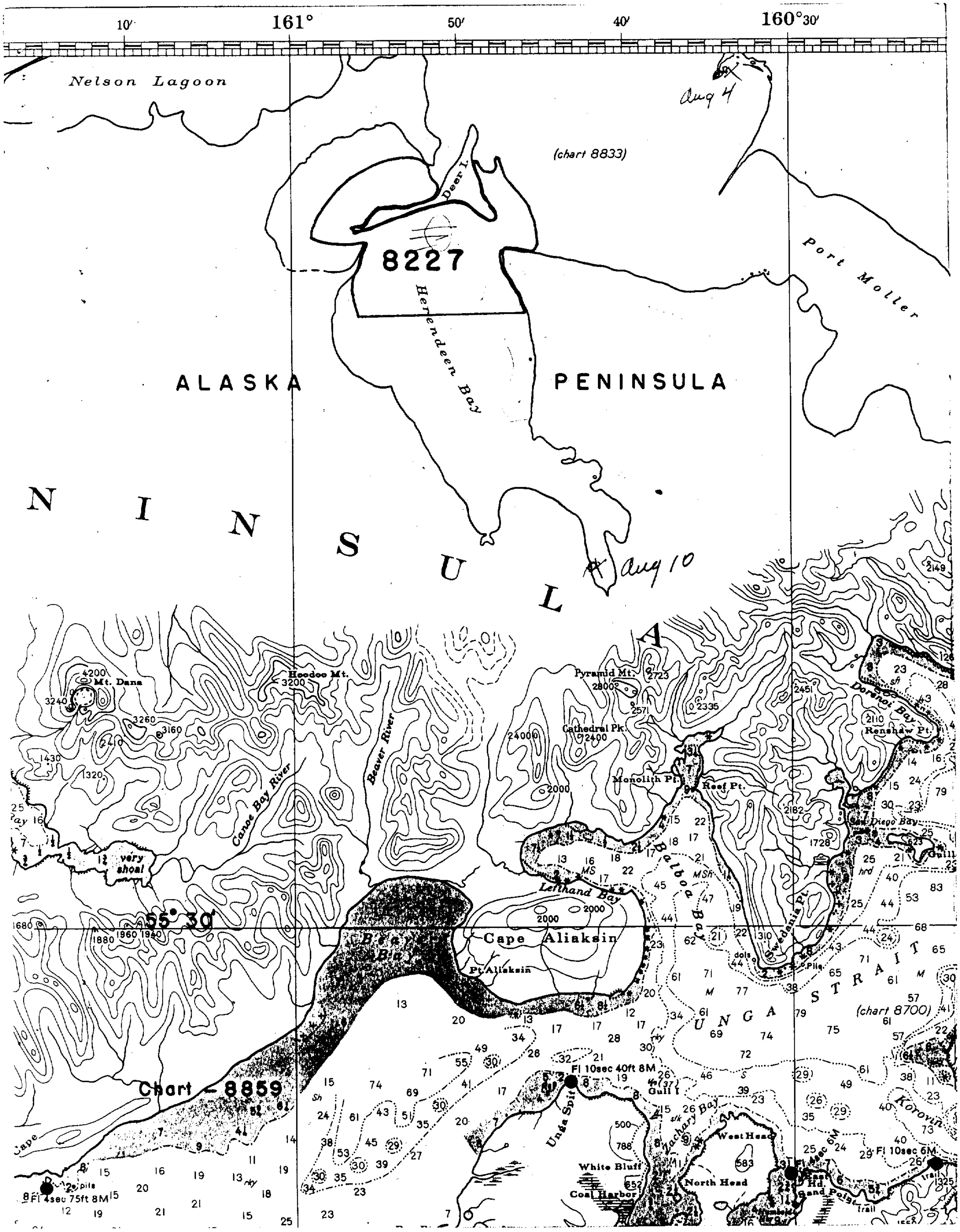
Height of mean high water above plane of reference is 9.8 feet.

Condition of records satisfactory except as noted below:

William Thofner

Chief, ~~Division of~~ Tides Branch ~~and Current~~.

U. S. GOVERNMENT PRINTING OFFICE 877033


10′
161°
50′
40′
160°30′
Nelson Lagoon
Aug 4
(chart 8833)
Deer I.
8227
Herendeen Bay
Port Moller
ALASKA
PENINSULA
N I N S U L A
Aug 10
Mt. Dana
Hoodoo Mt.
Pyramid Mt.
Cathedral Pk.
Canoe Bay River
Beaver River
Monolith Pt.
Reef Pt.
Dorenoi Bay
Renshaw Pt.
San Diego Bay
very shoal
Lefthand Bay
Balboa Bay
55°30′
Cape Aliaksin
Pt. Aliaksin
Beaver Bay
Swedania Pt.
UNGA STRAIT
(chart 8700)
Chart 8859
Fl 10sec 40ft 8M
Gull I
Unga Spit
Zachary Bay
West Head
Korovin
White Bluff
North Head
Coal Harbor
Fl 4sec 75ft 8M
Fl 10sec 6M

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8227

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2-25-61	8802	J.M. Albert	~~Before~~ After Verification and Review
3-2-61	9302	JMA	via 8802 ~~Before~~ After Verification and Review
5-29-63	8833	J.J. Streifler	Complete application ~~Before~~ After Verification and Review for reconstr.
			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
			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.