7837

Diag. Cht.No. 9380

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. EX-2550 Office No. H-7837

LOCALITY

State ALASKA

General locality SEWARD PENINSULA

Locality PORT CLARENCE

194/ 50

CHIEF OF PARTY

H.A. Karo

LIBRARY & ARCHIVES

DATE APRIL 30, 1951

B-1870 1 (1)

7837

Form 537
(Ed. Nov. 1941)

REG. NO.

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. 7837

Field No. EX 2550

State ALASKA

General locality ~~NORTON SOUND~~ Seward Peninsula

Locality PORT CLARENCE

Scale 1: 20 000 Date of survey 14 July 15 Sept. 1950

Instructions dated 19 May 1950

Vessel Ship Explorer & Launches 1& 2

Chief of party H Arnold Karo

Surveyed by S.B. Grennell, R.C. Bolstad, J.S. Morton, M.A. Hecht, E.L. Jones, R.H. Tryon, F.X. Popper, R.L. Kneedler.

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

Protracted by Clarence E. Pederson

Soundings penciled by Clarence E. Pederson

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

REMARKS:
Pathogramr read by Remme Cole Van Overbeke Boatman Frost Young
JEG DFR REW

Pathogramr checked by REW JEH JEG

U. S. GOVERNMENT PRINTING OFFICE 428975

Instrn for preliminary report in back of report

DESRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY # H 7837(1950)

Field No. EX 2550

Port Clarence

Scale 1: 20,000

1950

USC&GSS EXPLORER H. Arnold Karo Commanding

Surveyed by: S.B. Grenell, R.C. Bolstad, J.S. Morton, M.A. Hecht, E.L. Jones, R.H. Tryon, F.X. Popper, R.L.Kneedler.

A. PROJECT :

This survey was executed in accordance with Instructions for project CS 341 dated 19 May 1950.

B. SURVEY LIMITS AND DATES :

This survey includes the inshore and offshore hydrography of the northern half of Port Clarence. It extends from the north shore south to a latitude of 65 degrees 14 ', making a junction with sheet 2450. Sheet 2550 extends to the westward slightly outside of Port Clarence making a junction with sheets 2650, and 4850. It is bounded on the east by the shores of Port Clarence and the channel entering Grantley Harbor. Hydrography was carried inshore as far as the safety of the launches would permit.

H-7836 (1950) H-7837 (1950) H-7838 (1950) H-7846 (1950)

Hydrography was accomplished during the period from 14 July to 15 Sept. 1950. Work was carried on alternately in this area and Sledge Island area depending on weather conditions. Both areas were given a high priority of completion.

C. VESSEL AND EQUIPMENT:

For the most part Launches 1& 2 completed the major portion of the work on this sheet. The Ship however, did the channel entrance off of Point Spencer, making a junction with 2650 and 4850. Most of the survey was controlled by shoran, visual control being used only to augment shoran on the base line extension near the inshore ends of the lines near Point Spencer.

Soundings were obtained in feet with the 808 type fathometer. Corrections were applied for initial setting, draft, and velocity. (See fathometer report).

filed with H-7804

D. TIDE AND CURRENT STATIONS:

The reductions for records were taken from tidal data obtained from the tide station(portable) at Point Spencer. No time or range corrections were entered. The difference between zero on the tide staff and mean lower low water was furnished by the Washington Office.

One current station was observed within the limits of this survey, mid channel in theentrance to Port Clarence. It was almost directly north of the Point Spencer Navigation Beacon and was observed with a Roberts Radio Current Meter.

E. SMOOTH SHEET:

The smooth sheet will be plotted by the Seattle Processing Office.

F. CONTROL STATIONS:

This survey was controlled by third order triangulation, N.A. 1927 datum, executed by H Arnold Karo, Chief of Party in 1950. Hydrographic signals were located by triangulation, sextant cuts and photo field inspection. Shoran antennae were located by traverse from tiangulation stations.

Corrections to the shoran were determined by calibration and applied to the shoran distances observed. See Shoran summary attached.

H
G. SORELINE AND TOPOGRAPHY: Topo. signals from T-9650 and field computations from T-9648, 49, 50 & T-9651 (1950)

The shoreline detail for ~~this survey~~ the boat sheet was obtained by photo inspecting the available photographs. The shoreline and topographic detail will be furnished by the Portland Photogrametric Office, since current photos were not yet available.

H SOUNDINGS

All soundings were obtained in feet by the echo method. Sounding lines were spaced in accordance with the instructions received, shoal areas were closely developed. No unusual methods were used to obtain or reduce soundings.

I. CONTROL OF HYDROGRAPHY:

For all but a few sounding lines Shoran fixes were used exclusively for horizontal control. These few fixes were on the base line extension of the Shoran where an accurate Shoran fix was not obtainable. There were no unusual or sub standard methods used. For adjustment of Shoran control see Shoran calibration summary attached to this sheet.

J. ADEQUACY OF SURVEY:

The survey is considered complete ~~ed~~ and adequate in all respects. All portions of the survey comply with the Hydrographic Manual and the Project Instructions. Depth Curves can be drawn with the junctions of the other sheets. No holidays exist.

K. CROSSLINES

Crosslines were run amounting to 12% of the hydrography completed. No gross discrepancies were noted on the boat sheet. An addendum to this report will be submitted by the processing office after the smooth plotting has been accomplished.

L. COMPARISON WITH PRIOR SURVEYS :

The soundings in general do not compare with Sheet H 2519 (40 000). Throughout the area there seems to be 2-3 feet more water than is shown on H 2519. The general configuration seems to be the same. H 2517 and Chart # 9385 appear to agree more closely. This, at first glance appears strange due to the fact that the source of the chart is undoubtedly H 2517. Therefore it is assumed that the soundings on the chart have been corrected for a datum change at a later date. (sndgs on H-2519 have a correction factor of +4.0 ft.) Rev. par. 5

M. COMPARISON WITH CHART:

(See above paragraph). It is recommended that due to the date of the previous survey, the spacing of lines, the adequacy of control, the methods used and the changes in the shoreline of the previous survey that the information on Sheet H-7837 2550 completely supersede any contained on that portion of chart 9385 and 9380 (~~1902~~ 1902 and 1914 respectively) Review, par. 6

N. DANGERS AND SHOALS

Due in general to the flat mud bottom there are no shoals or dangers considered worthy of mention in this report.

O. COAST PILOT INFORMATION:

A special report of Coast Pilot Information covering this area has already been submitted.

P. AIDS TO NAVIGATION:

A report on fixed aids to navigation has been submitted. The navigation buoys in this area are

P. (continued from page three)
of a temporary nature and therefore not accurately located by this party. They are planted in the spring and taken up in the fall before the ice comes. They are maintained by the Lomen Commercial Company and are planted only approximately in the same location each year.

Q. LANDMARKS FOR CHARTS:

Report on landmarks for charts in the area of this survey has been submitted.

R. GEOGRAPHIC NAMES:

A special report on geographic names has already been submitted.

Respectfully submitted:

R. L. Kneedler

Robert Leroy Kneedler
Ensign USC & GS

APPROVED AND FORWARDED:

S.B. GRENELL, COMDR. USC&GS
Commanding Officer Ship Explorer

APPROVAL SHEET

The boat sheet and records for this survey have been inspected and approved.

S.B. Grenell, Comdr., USC&GS
Commanding Ship EXPLORER

H 7837 (1950)
Ex 2550

Port Clarence - North part.

Smooth sheet.

The projection was ruled by hand on a cut sheet, brand not known. The shoreline was transferred from map manuscripts T 9648, T 9649 and T 9650. The topographic signals were located by radial plot on T 9648 and T 9650.

Development at ϕ 65 15.4 λ 166 45.

The extra lines shown here were run to disprove a 31 foot sounding recorded on P 8 of Vol.3 Pos 7 to 8 a-day. The hydrographer affirms that this was caused by the disturbance of the fathometer when a pencil dropped on it. Nevertheless, an investigation was made on p-day Pos. 1 to 45. See P48 of Vol.10. The soundings of this investigation disclosed no shoal area and the 31 foot sounding is considered disproved. The soundings were omitted from the smooth sheet.

Discrepancies?

Note Pos. 136-b at ϕ 65 15 λ 166 42.7. This is in a line of 36 ft. soundings. The first parallel line to northward shows depths of 35 ft., the next line 36 ft., the next 37 ft. and the next 38 ft. The 35 foot lines seem too shoal.

Remaining diff. unimportant

General.

The plotting of positions near the line between the Shoran stations Hill and Drum was strengthened by the hydrographer's notations of the time when crossing ranges of objects on Pt. Spencer.

The plotting of positions was expedited by running the sounding lines along the shoran arcs. This also provided an even development with economy of lines run both of which aid in getting the soundings on the sheet.

Fathogram speed.

In addition to the rescaling done by the field party the fathograms were spot scanned for changes in fathogram speed in the Processing Office.

Edgar E. Smith
Cart.Engr.

Edgar E. Smith 4/19/51

H 7837
Ex 2550
Port Clarence

List of Signals.

Located by Field Computations 1950

Drum	Nut
Hill	Wax
Rum	Bar
Kid	Hod
Fog	Map
Dim	Spencer Control Tower
Scat	Calibration Pt.

Radial plot T ~~6~~ 26 50

Gal	Lem	Nod
Nit	Liz	Vam
Jug	Gar	Mim
Pie	Who	
Hot	Sir	
Bum	Rat	

Adj.Δ Vol.4 Page

Teller	74
Teller Mission FP	94
Teller NW Base	73
Teller SE Base	74
Teller Nav. Bcn.	94
Teller Az. Mark	75
Spencer Marine Nav.Lt.	85
Clarence Astro	80

PART III: SHORAN ZERO SETTINGS

Shore Set	Ship	Launch #1	Launch #2	Launch #3
HART (lf)	99.804	99.818	99.798	99.789
TINY (hf)	99.811	99.804	99.808	99.804
SEMI	99.830			
GAME	99.821			
ROCK (hf)	99.825	99.814	99.812	99.796
DORE (lf)	99.804	99.770	99.773	99.771
DRUM (hf)	99.815	99.791	* (See below)	99.787
HILL (lf)	99.827	99.815	* (See below)	99.801

* The shoran zero settings for Launch #2 at Port Clarence were determined at two distances. The variation in zero settings between the two calibrations was proportioned to distance. This variation was attributed to the attenuation of shoran signals at line-of-sight distances.

Calibration No. 10		Calibration No. 12	
DRUM distance	13.820 miles	DRUM distance	6.700 miles
DRUM zero set	99.762	DRUM zero set	99.790
HILL distance	19.356 miles	HILL distance	6.909 miles
HILL zero set	99.780	HILL zero set	99.819

From the above data the zero sets for Launch #2 are:

DRUM		HILL	
Distance	Zero Set	Distance	Zero Set
0 - 7.5 miles	99.790	0 - 8.5 miles	99.819
7.5-10.0 miles	99.780	8.5-11.5 miles	99.810
10.0-12.5 miles	99.770	11.5-14.5 miles	99.800
12.5-out miles	99.762	14.5-17.5 miles	99.790
		17.5-out miles	99.780

VELOCITY CORRECTIONS
1950

NMC & NMC-2 FATHOMETERS

Corr'n. fms	Depth fms.
(all corrections plus)	
0	0 to 220
1	221 to 380
2	381 to 500
3	501 to 595
4	596 to 673
5	674 to 741
6	742 to 800
10	857 ~~801~~ to 1104
15	1105 to 1315
20	1316 to 1484
25	1485 to 1635
30	1636 to 1776
35	1777 to 1907
40	1908 to 2022
45	2023 to 2135
50	2136 to 2237
55	2238 to 2342
60	2343 to 2445
65	2446 to 2536
70	2537 to 2620

NMC & NMC-2 FATHOMETERS

Corr'n. fms	Depth fms.
(all corrections plus)	
75	2621 to 2705
80	2706 to 2790
85	2791 to 2878
90	2879 to 2960
95	2961 to 3025
100	3026 to 3100
105	3101 to 3175
110	3176 to 3247
115	3248 to 3315
120	3316 to 3384
125	3385 to 3452
130	3453 to 3515
135	3516 to 3578
140	3579 to 3641
145	3642 to 3702
150	3703 to 3762
155	3763 to 3820
160	3821 to 3880
165	3881 to 3937
170	3938 to 4000

NMC 2000 & 4000 fm. scales

Depth	Corr'n fm.
0 to 500	0
501 to 856	5 fms

As above for decoder

STATISTICS FOR HYDROGRAPHIC SURVEY H-7837

Field No. EX 2550

Date	Day	Volume	Number of Pos.	Statute Miles
Ship				
1950				
7/30	A	1	119	52.4
8/3	B	1	63	26.2
8/4	C	1	60	25.5
8/5	D	2	10	3.1
8/14	E	2	1	0
8/16	F	2	10	6.5
8/23	G	2	61	26.7
	Total for ship		324	142.4
Launch No. 1				
7/27	a	3	129	28.3
7/29	b	3&4	192	46.3
7/30	c	4	205	51.2
7/31	d	5	133	31.5
8/2	e	5&6	142	44.8
8/3	f	6	17	6.4
8/4	g	6	69	22.8
8/5	h	6&7	191	51.1
8/9	j	7	14	5.0
8/14	k	7&8	154	46.0
8/15	l	8	137	43.9
8/16	m	9	150	46.7
8/24	n	10	138	39.1
8/25	p	10	59	15.0
8/26	q	11	87	20.6
	Total for launch 1		1817	498.7

VELOCITY CORRECTIONS
1950

Vicinity Amchitka I.
Surveys Nos. 2150, 2250, 4150, H-7731, H-7737

Corr'n fms	Depth fms
0.0	0 to 6.0
-0.2	to 14.0
-0.4	to 22.0
-0.6	to 30.0
-0.8	to 38.5
-1.0	to 46.5
-1.2	to 54.5
-1.4	to 63.0
-1.6	to 71.0
-1.8	to 79.0
-2.0	to 87.0
-2.2	to 95.0
-2.4	to 103.5
-2.5	to 114
-3.0	to 134
-3.5	to 154
-4.0	to 175

Vicinity Sledge I. & Port Clarence
Surveys Nos. 2350, 2650, 2750 & 4350.

(Ship) Corr'n ft.	Depth ft.
0.0	0 to 29.0
-0.5	to 60.0
-1.0	to 88.0
-2.0	to 151.0
-3.0	to 160.0

(launch) Corr'n ft.	Depth ft.
(0.2 reducer)	
0.0	0.0 to 08.5
-0.2	to 12.0
(0.5 reducer)	
0.0	0.0 - 19.0
-0.5	- 51.0
-0.1	- 80.0
-2.0	- 141.0
-3.0	- 160.0

Surveys Nos. 2450 & 2550

Corr'n ft.	Depth ft.
0.0	0.0 to 19.0
-0.2	to 33.5
-0.4	to 50.5
-0.6	to 60.0
-0.8	0.0 to 9.0
-1.0	to 23.5
	to 38.0
	to 56.0
	to 60.0
	to 88.0

STATISTICS H-7837 continued

Date	Day	Volume	Number of Pos.	Statute Miles
Launch No. 2				
7/27	a	12	30	10.9
7/29	b	12	142	45.6
7/30	c	13	117	41.6
7/31	d	13&14	126	47.4
8/2	e	14	119	42.1
8/3	f	15	145	36.1
8/4	g	15&16	132	47.3
8/5	h	16	171	44.2
8/9	j	17	14	6.3
8/14	k	17	136	44.2
8/15	l	18	162	46.5
8/18	m	19	157	34.3
8/19	n	20	142	41.8
8/21	p	20&21	104	35.5
8/22	q	21	22	8.2
8/24	r	22	124	37.0
8/25	s	22	28	9.8
8/26	t	22&23	135	50.4
8/28	u	23	39	9.6
Total for launch 2			2045	638.8
Launch No. 3				
8/31	a	9	81	13.7
9/13	b	9	14	1.6
Total for launch 3			95	15.3
GRAND TOTAL			4281	1295.2

Area equals 87 square statute miles.

7837

Tidal Note

Soundings for this survey were reduced from data obtained from the portable automatic tide gage located at Point Spencer, latitude 65°15.4'N., longitude 166°50.8'W.

The plane of reference is MLLW. From 7 July to 25 July MLLW on the staff was 4.1 feet. From 27 July, on which day a new staff was installed, until the gage was dismantled on 14 September MLLW was 2.4 feet on the staff.

All soundings and tidal observations are based on 165th meridian time (west). No corrections for time or range of tide are necessary.

H 7837
Ex 2550

Alaska
Seward Peninsula
Port Clarence

List of geographic names
penciled on smooth sheet.

Port Clarence

Seward Peninsula

Grantley Harbor

Teller

Point Spencer

Point Jackson

Cape Riley

R64c

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~ 21 May 1951

Division of Charts: R. H. Carstens

Plane of reference approved in 23 volumes of sounding records for

HYDROGRAPHIC SHEET 7837

Locality Port Clarence, Alaska

Chief of Party: H. A. Karo in 1950
Plane of reference is mean lower low water, reading
2.4 ft. on tide staff at Port Clarence (Point Spencer)
9.5 ft. below B. M. 1 (1950)

Height of mean high water above plane of reference is 1.2 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Chief, ~~Division~~ Section of Tides ~~and Currents.~~

U. S. GOVERNMENT PRINTING OFFICE 756675

GEOGRAPHIC NAMES

Survey No. H-7837

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H		
Alaska										1
Seward Peninsula			title						USGB K	2
Point Spencer			(location of tide gage)							3
Port Clarence										4
Cape Riley										5
Teller									USGB K	6
Grantley Harbor										7
Point Jackson										8
										9
										10
										11
										12
					Names underlined in red are approved. 6-7-51. L. Heck					13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7837

Records accompanying survey:

Boat sheets 3; sounding vols. 23; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 20 env.;

special reports, etc. 1 Smooth Sheet; 1 Descriptive Report

.....

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

		Preliminary Verification	Final Verification
Number of positions on sheet		4281	
Number of positions checked		22	479
Number of positions revised		3	16
Number of soundings revised (refers to depth only)		38	136
Number of soundings erroneously spaced		—	50
Number of signals erroneously plotted or transferred		—	—
Topographic details	Time	—	3
Junctions	Time	15	16
Verification of soundings from graphic record	Time	40	24

Verification by ..... see below ..... Total time 373 hr. Date .....

Reviewed by ..... A.J. Hoffman ..... Time 38 hr. Date 7-21-52.

Review addendum by ..... R.E. Elkins ..... 8 hr. 1-19-54

Preliminary verification by ..... J.T. Gallahan ..... 14 hrs. 8-25-51

" " ..... E.E. Thomas 48 10-3-51

Complete verification by ..... C.L. Tysor (in Norfolk) 260 12-2-53

" " ..... R.E. Elkins 51 1-18-54

total 373 hrs.

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7837 FIELD NO. EX-2550

Alaska, Seward Peninsula, Port Clarence

Project No. CS-341

Surveyed in July - September 1950 Scale 1:20,000

Soundings:

808 Fathometer

Control:

Shoran
Sextant fixes on shore signals

Chief of Party - H. A. Karo
Surveyed by - S.B. Grenell, R.C. Bolstad, J.S. Morton, H.A. Hecht, E.L. Jones, R.H. Tryon, F.X. Popper and R.L. Kneedler
Protracted by - C. E. Pederson
Soundings plotted by - C. E. Pederson
Preliminary Verification by - E. E. Thomas
Verified and inked by - C.L. Tysor
Reviewed by - A. J. Hoffman, 21 July 1952
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with the reviewed manuscripts of air-photographic surveys T-9648, T-9649, T-9650 and T-9651 of 1950.

The source of the signals is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The 24 and 36-ft. curves have been added to emphasize bottom relief.

The bottom for the most part is smooth. A narrow, deep water channel into Grantley Harbor and a shoal extending eastward to lat. 65° 14.8', long. 165° 48.4' are the only unusual bottom features apparent in the area.

4. Junctions with Contemporary Surveys

The present survey junctions adequately with H-7836 (1950) on the south and with H-7840 (1950) on the west. The junction with H-7838 (1950) on the northwest and southwest will be considered in the review of that survey. see addendum to review

5. Comparison with Prior Surveys

H-2517 (1900) 1:10,000 H-2519 (1900) 1:40,000

A comparison between these prior surveys and the present survey show present depths to be generally 1-3 ft. shoaler than prior depths. Some of these differences are probably due to varying results from leadline soundings in areas of soft bottom.

The present survey is adequate to supersede these prior surveys in the common area.

6. Comparison with Chart 9385 (Print date 10/1/51)

a. Hydrography

Charted hydrography originates principally with the prior surveys which need no further consideration. A number of soundings have been applied to the chart from the present survey prior to verification and review. The present survey entirely supersedes the charted hydrography. see addendum to review

b. Aids to Navigation

No floating aids to navigation are charted within the limits of the present survey. The buoys located on the present survey are privately maintained and are frequently shifted in position. There are no new dangers to navigation revealed in the area.

7. Condition of Survey

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

b. The smooth plotting was very well done.

c. Although an attenuation correction was applied to shoran distances of Launch No. 2 it appears that a similar correction should have been applied to the work of Launches No. 1 and 3. Positions along the northwest shore fall 20 to 40 meters inshore with respect to the shoreline. In lieu of an attenuation correction the sounding lines have been adjusted by means of estimated distances from the shoreline.

d. The preliminary verification of this survey was confined to critical soundings, discrepancies at crossings and junctions, and unnatural depth curves and bottom configuration. Also additional lines of soundings were verified and inked in order to detect inaccuracies in field data or plotting. see addendum to review

Completion of the verification and inking is deferred until some future date, at which time the inspection of the junctions and curves will be completed by the reviewer.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

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

H. R. Edmonston
Chief, Nautical Chart Branch

Examined and approved:

H. Arnold Karo
Chief, Division of Charts

L. S. Hubbard
Chief, Section of Hydrography

Earl O. Heaton
Chief, Division of Coastal Surveys

ADDENDUM TO REVIEW

H-7837 (1950)

Verified and inked by - C.L. Tysor in Norfolk Office
Review Addendum by - R.E. Elkins 1-20-54
Inspected by - R.H. Carstens

The verification of this survey, deferred at the time of review, has since been completed. Soundings and depth curves are now inked, and junctional soundings have been transferred from verified surveys.

Junctions with Contemporary Surveys

Adequate junctions were effected with H-7838 (1950) and H-7840 (1950) on the west, and with H-7836 (1950) on the south. There are no contemporary surveys on the east; however, charted soundings are in agreement with present survey sounding lines extending into Grantley Harbor.

Comparison with Chart 9385 (Print date 10-1-51)

The charted hydrography is from the prior surveys, H-2517 (1900) and H-2519 (1900), supplemented with several soundings from the present survey before verification.

The 6-ft. sounding charted in lat. 65°16.9', long. 166°21.6' from the present survey, originates with a fathogram showing grass traces, and has been rescanned to a depth of 8 feet.

Condition of Survey

Completion of the verification reveals that the smooth plotting was well done.

Approved

H. Arnold Karo
Chief, Division of Charts

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7837

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5/18/51	9302	Rieyari	Partially appld. thru Chr. 9380. Before ~~After~~ Verification and Review
5/17/51	9380	Richardson	Examined for critical information. Before ~~After~~ Verification and Review
5/21/51	9402	"	Through 9380 - Examined for Before ~~After~~ Verification and Review Critical Info.
8/8/51	9385	Chas R. Williamson	Before ~~After~~ Verification and Review Partially applied.
10/5/54	9302	GAE	~~Before~~ After Verification and Review
12/6/55	Reconstr. 9380	GAE	~~Before~~ After Verification and Review Rev. via chr. 9369 GMA
6/15/56	9369	GAE	~~Before~~ After Verification and Review
2-12-58	9402	RKD	~~Before~~ After Verification and Review thru Chr 9380 Reconstr.
2-13-58	9400	RKD	~~Before~~ After Verification and Review thru Chr 9402
			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.