

8130

Diag. Cht. No. 8102-3.

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. H0-1654 Office No. H-8130

LOCALITY

State S. E. Alaska

General locality Cordova Bay

Locality East Shore Cordova Bay, Mabel

Bay and Hassiah Inlet

19/ 54

CHIEF OF PARTY

John Bowie

LIBRARY & ARCHIVES

DATE July 29, 1957

8-1870-1 (1)

8130

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-8130

Field No. HO-1654

State S. E. Alaska

General locality Cordova Bay

Locality East Shore Cordova Bay, Mabel Bay & Hassiah Inlet

Scale 1:10,000 Date of survey 14 July - 31 August 1954

Instructions dated 17 March 1953 & 8 January 1954

Vessel Ship HODGSON

Chief of party John Bowie

Surveyed by J. Bowie, E. F. Hicks, Jr., J. Dermody

Soundings taken by fathometer, graphic recorder, hand lead, wire 808 Fathometer

Fathograms scaled by H. Hildahl & R. Owens

Fathograms checked by _____

Protracted by H. C. Parsons

Soundings penciled by H. C. Parsons

Soundings in fathoms ~~xxx~~ at ~~MLLW~~ MLLW *are based on a velocity of sound in water of 800 fms./sec.*

REMARKS: _____

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY NO. H-8130 (FIELD NO. HO-1654)

SCALE 1:10,000 SHIP HODGSON J. BOWIE, COMDG.

SURVEYED BY J. BOWIE, E. F. HICKS, JR., J. DERMODY

A. PROJECT

This survey was executed as part of Project CS-357 under instructions 22/MEK, S-2-HO dated 17 March 1953 and Supplemental instructions 22/MEK, S-2-HO dated 8 January 1954. ✓ ✓

B. SURVEY LIMITS AND DATES

This survey covers part of Cordova Bay along the west shore of Prince of Wales Island south of Lat. $55^{\circ} 02'$ to Long. $133^{\circ} 33' 15''$ extending from one half to one mile offshore including Mabel Bay and Hassiah Inlet. ✓ ✓

Field work on this survey began on 14 July 195~~3~~⁴ and was completed 31 August 195~~3~~⁴. ✓ ✓

This survey is joined on the southeast by contemporary survey H-8128, Field No. HO-1454, on the west by contemporary survey H-8134, Field No. HO-2154 and on the north by contemporary survey H-8132, Field No. HO-1854. (1954) ✓ ✓

C. VESSELS AND EQUIPMENT

This survey was executed with standard 30 foot hydrographic launch No. 98 and plane personnel boat, launch No. 134. Both launches had a turning radius of approximately 25 meters at standard speed. ✓ ✓

808 fathometers No. 62S and 150 SPX with reeds calibrated for a velocity of 800 fathoms per second were used for all hydrography. ✓ ✓

D. TIDE AND CURRENT STATIONS

A portable automatic tide gage was maintained at Kassa Inlet Entrance, Lat. $54^{\circ} 55' 36.0''$, Long. $132^{\circ} 31' 19.2''$ and was used without time or height correction for reduction of all soundings south of Lat. $54^{\circ} 58' 13''$. (outside limits of H-8130) ✓ ✓

A portable automatic tide gage was also maintained on east side of Mabel Island, Lat. $54^{\circ} 59' 58.8''$, Long. $132^{\circ} 35' 30.6''$ and was used without time or height correction of all soundings north of the previously mentioned latitude. ✓ ✓

The system of sounding lines was broken in the vicinity of that latitude to facilitate the reduction of soundings. ✓ ✓

No current observations were made within the limits of this survey. ✓ ✓

E. SMOOTH SHEET

All work on smooth sheet will be done by Seattle Processing Office

and will be covered by their report which will be an addenda to this report. ✓ ✓

F. CONTROL STATIONS

This survey was controlled by triangulation stations LEDGE 2 1908, CLUMP 1907-25, NEW 2 1954, MAB 1918 and HAS 1918 supplemented by photo hydro signals from manuscripts T-11294, T-11297 and T-11299. Where signals were needed and there were no photo points nearby that could be identified signals were located by sextant fixes on stations previously located. ✓ ✓

A signal was built on what was thought to be NEW 1908 using distance and azimuth from recovered witness marks but subsequent triangulation observations to establish NEW 2 1954 showed a minute difference and the signal named NEW and used on this survey should be plotted from Station NEW 2 1954 a distance of 6.3 meters on the line $14^{\circ} 31'$ to the east or right of station HAS 1918. (See sketch on boat sheet and in front of Vol. 1 of the sounding record). ✓ ✓

A list of all signals and origin is in Vol. No. 1 of the sounding record. ✓ ✓

G. SHORELINE AND TOPOGRAPHY

All shoreline is from ^{unreviewed} manuscripts Nos. T-11294⁽¹⁹⁵³⁾, T-11297⁽¹⁹⁵³⁾ and T-11299⁽¹⁹⁵⁴⁾ furnished by the Washington Office. ✓ ✓

No shoreline discrepancies were noted. Several isolated shoals and rocks were found which do not appear on the manuscript. ✓ ✓

On account of the steep to, rocky coast it was impractical to delineate the low water line in all cases. ✓ ✓

H. SOUNDINGS

All soundings except a few hand lead soundings on isolated rocks and shoals were made with 808 fathometers No. 62S and 150 SPX. ✓ ✓

The fathometer initial was set so that with the bar at two fathoms the fathometer would read two fathoms eliminating any index correction. Since the reeds were calibrated for a velocity of 800 fathoms per second no velocity correction was applied. ✓ ✓

Bar checks were made three times daily at two fathoms only in accordance with letter 22/MEK, S-1-HO dated 15 June 1953 to Commanding Officer, Ship HODGSON. ✓ ✓

Phase comparisons were made and corrections applied. Details of the phase comparisons and corrections applied are given in tables following this report. ✓ ✓

Bottom samples were taken at various intervals throughout the area of this sheet. ✓ ✓

I. CONTROL OF HYDROGRAPHY

All hydrography was controlled by visual sextant angles on shore objects or signals. ✓ ✓

J. ADEQUACY OF SURVEY

This survey is complete and adequate for charting purposes, and should supersede all prior surveys. Junctions with adjoining sheets are satisfactory and no holidays exist. Depth curves can be adequately drawn at the junctions.

K. CROSSLINES

There are approximately 3 1/4 miles of crosslines or slightly under 9% of all lines run are crosslines. All crossings appear to be satisfactory.

L. COMPARISON WITH PRIOR SURVEYS

The area covered by this survey was previously surveyed in 1905, Survey H-2787 a 1/40,000 survey. This was not a detailed survey being of a reconnaissance nature only. All information contained on this survey was on the chart and information called for under this heading will be considered under paragraph M.

M. COMPARISON WITH CHART

{ All chart references herein relate to the old chart; present chart has been corrected from advance application of this survey --- see review. }

CHART LOCATION	CHART DEPTH	NEW LOCATION	NEW DEPTH	REMARKS
54-56.19 132-35.28	7 fms.	54-56.29 ✓ 132-35.52 ✓	5 fms. ✓	Shoal sdg on large shoal. (This shoal is much larger than indicated on chart.)
2 54-56.91 132-35.70	3 rocks awash	54-56.92 ✓ 132-35.75 ✓	Rock awash MHW.	Signal RAM. This is the highest part of a general shoal area bare at MLLW. (This is reef mentioned Item No. 1 of review dated 26 Jan. 1953)
3 54-57.93 132-36.84	Two sunken rocks.	54-57.94 ✓ 132-36.84 ✓	Two rocks awash	Signal FAR, approx. 120 meters north of this position, is bare at all tides.
4 54-58.46 132-36.96	Two sunken rocks.	54-58.36 ✓ 132-36.90 ✓	North edge of reef	Sunken rocks do not exist and should be deleted.
5 54-58.70 132-37.11	Numerous rocks awash, sunken rocks & islets.	(a) 54-58.69 ✓ 132-37.20 ✓	reef Rock awash (7) Pos. 81f	
		(b) 54-58.73 ✓ 132-37.21 ✓	Rock awash (6) Pos. 82f	
		(c) 54-58.74 ✓ 132-37.25 ✓	Rock awash (6) Pos. 83f	
		(d) 54-58.77 ✓ 132-37.34 ✓	1 st fm. sgd. Pos. 94f	

CHART LOCATION	CHART DEPTH	NEW LOCATION	NEW DEPTH	REMARKS
		✓ (e) 54-58.82 132-37.32	1 ¹ / ₂ fm. sgd.	Pos. 93f
		✓ (f) 54-58.79 132-37.11	Rock awash	(5) Manuscript T-11297
		✓ (g) 54-58.81 132-37.12	Rock awash	(3) Manuscript T-11297
		✓ (h) 54-58.82 132-37.07	Rock islet	(8) Signal KIT
		✓ (j) 54-58.92 132-37.05	1 ⁰ / ₂ fm. sgd.	Pos. 63-84 ⁸⁷⁻⁸⁸ g
		✓ (k) 54-59.00 132-37.11	Rock awash	(2) Pos. 85f
		✓ (l) 54-59.02 132-37.05	Rock awash	(5) Pos. 86f
		✓ (m) 54-59.05 132-37.06	Rock awash	(6) Pos. 87f
		✓ (n) 54-59.06 132-37.11	Rock awash	(1) Pos. 89f
		✓ (p) 54-59.07 132-37.12	Rock awash	(4) Pos. 88f
		✓ (q) 54-59.09 132-37.23	Rock awash (e) Zero sgd.	Pos. 167-168 g - shown at pos. of sunken rk on T-11297
		✓ (r) 54-59.12 132-37.27	1 ¹ / ₂ fm. sgd.	Pos. 91f
		✓ (s) 54-59.08 132-37.16	Rock awash	(5) Pos. 90f

✓ The rock islets at Lat. 54° 59'17", Long. 132° 37'20" do not exist. Signal KIT is the only offshore rock in this area uncovered at all stages of the tide.

6	54-59.33 132-37.24	8 fms.	54-59.29 ⁸ 132-37.20 ²	1 ⁵ / ₂ fm. sgd.	Pos. 64-65 ⁵
7	55-01.65 132-35.90	6 fms.	55-01.64 ⁷ 132-35.90 ⁸⁹	1 ⁵ / ₂ fm. sgd.	Pos. 53-54j
8	55-00.00 132-35.32	6 ¹ / ₂ fms.	54-59.98 ⁸⁹ 132-35.38 ⁴²	3 ¹ / ₂ fm. sgd.	Pos. 79-80a ^{14 f}

CHART LOCATION	CHART DEPTH	NEW LOCATION	NEW DEPTH	REMARKS
9 54-59.75 132-35.40	Kelp patch ✓	54-59.74 ✓ 132-35.35	1 1/2 fm. sdg. 1 1/2 Rk	Wire drag work. Kelp showed in this area late in season after wire drag. ✓
10 54-59.18 132-34.80	4 rock ✓ islets	54-59.15 ✓ 132-34.76	Rock un- covered 3 ft. MLLW 4	This is high point in area. There are no rocks un- covered at high tide. ✓
(These are rocks mentioned in review dated 26 Jan. 1953 originating from survey T-2953)				
11 54-59.60 132-36.70	4 rock ✓ islets	54-59.60 ✓ 132-36.68	Rock awash at MHW	Signal NUT. (There are no offshore rocks uncovered at high water in this area. ✓

This survey was compared with Chart 8147, 3rd Edition published August 1931, reprint date May 12, 1952.

N. DANGERS AND SHOALS

The following previously uncharted dangers and shoals were found during the course of this survey:

LOCATION	DEPTH	REMARKS &
12 54-57.232 132-35.54	2 1/2 fms. ✓✓	Pos. 138-139a c Shoal sdg. on ridge. ✓
13 54-57.48 ✓ 132-36.00 ✓	2 1/2 fms. ✓✓	Pos. 89-90d 91-92d 116-117c Least Sdg. on shoal. ✓
14 54-57.17 ✓ 132-36.11 ✓	Rock awash ✓ (2)	✓
15 55-00.27 ✓ 132-36.08 ✓	Rock awash MLLW ✓✓	Pos. 1h ✓

There are numerous other rocks close along the beach or at the heads of the bays, coves and inlets which are not tabulated but are shown either on the ~~boat sheet or manuscript.~~
Smooth

O. COAST PILOT INFORMATION

When traveling northward from Kassa Inlet small fishing boats frequently use the inshore passages east of ~~Stamp~~ Island and rocks in vicinity of signals BAR and KIT. Their use is not recommended for vessels having a draft of 10 feet or more.

Abalone

The survey vessel anchored east of Mabel Island with western tangent of HELEN ISLAND bearing 180° T in 29 fathoms. ✓

The launches and small fishing craft anchored at numerous places along the coast line. ✓

Mabel Bay is free of offshore dangers except near the head of the bay. ✓

No unusual or unexpected weather conditions were encountered during the course of the survey.

During the summer months many large masses of jelly fish were noticed throughout the area. These large masses frequently gave the appearance of shoal water and many times when directly over them it was necessary to drop a leadline over the side to prove the nonexistence of a shoal. The jelly fish would not give a return on the fathometer.

P. AIDS TO NAVIGATION

No aids to navigation exist within the limits of this survey.

Q. LANDMARKS FOR CHARTS

No landmarks for charts exist within the limits of this survey.

During the latter part of the survey there was a floating fish trap anchored near Lat. 54° 56'45", Long. 132° 34'70". It is shown on the boat sheet but since it is in place only a few weeks during the year and may be omitted any year it is recommended that it not be charted.

R. GEOGRAPHIC NAMES

See special report on geographic names submitted by this party. No new names in the area covered by this survey are recommended.

S. SILTED AREAS

No significant silted areas were noted.

U. MARKED STATIONS

The following stations other than triangulation stations were marked by standard disks:

KID
FRY

V. MISCELLANEOUS

A small section east of Mabel Island was wiredragged to find a safe anchorage for the ship prior to the survey. No attempt was made to drag at a depth greater than necessary for the safety of the Ship HODGSON. The effective depth of the drag was between 4 and 5 fathoms. An uncharted rock, covered 1 1/2 fm., was found during this survey. This rock is listed under Section M.

Respectfully submitted,
E. F. Hicks, Jr.
E. F. Hicks, Jr.,
CDR, USC&GS

Approved and forwarded:

J. Bowie
J. Bowie, CDR, USC&GS
Comdg., Ship HODGSON

TABLE 1

STATISTICS

for

HYDROGRAPHIC SURVEY H-8130, FIELD NO. HO-1654

VOL.	DAY	DATE	VESSEL	POS.	STAT. MI.	H. L. SDG.
1	a	14 July	Launch 98	112	27.9	
1	b	15 July	" "	37	5.9	
1	c	27 July	" "	182	25.5	
2	d	28 July	" "	205	39.5	
2	e	3 Aug.	" "	47	5.7	
2	f	5 Aug.	" "	94	20.4	7
3	f	5 Aug.	" "	104	16.1	2
3	g	6 Aug.	" "	234	38.9	
4	h	17 Aug.	" "	208	50.7	
4	j	18 Aug.	" "	119	21.9	3
5	j	18 Aug.	" "	73	16.3	
5	k	20 Aug.	" "	80	11.2	27
Totals Launch 98				1495	280.0	39
6	a	21 Aug.	Launch 134	149	23.9	
6	b	23 Aug.	" "	193	29.9	
6	c	24 Aug.	" "	40	5.3	
7	c	24 Aug.	" "	192	26.4	
7	d	25 Aug.	" "	217	20.0	1
7	e	27 Aug.	" "	64	6.9	15
8	e	27 Aug.	" "	15	2.2	
8	f	31 Aug.	" "	40	4.6	
Totals Launch 134 - - -				910	119.2	16
5	a	18 Aug.	Dinghy	28		28
5	a	18 Aug.	Tin skiff	14		14
WD	a	22 July	98 & 134	67		3
Totals for sheet				2514	399.2	100

Area = 9.8 sq. stat. mi.

1 day from H-8134(1954)
 m day " " " "

19
 27
 2560

TABLE 2

FATHOMETER CORRECTIONS - (PHASE)

808 FATHOMETER NO. 623

Feet		Fathoms		Fathoms	
A	B	A	B	A	B
44.9	44.5	39.5	39.1	37.3	37.0
45.0	44.5	39.0	39.0	38.2	37.8
45.0	44.3	38.0	38.3	39.0	38.5
44.6	44.0	37.3	37.7	39.9	39.2
44.3	44.0	36.6	36.8	39.9	39.7
44.2	44.0	35.8	36.0	39.5	39.3
44.3	44.0	35.0	35.1	37.0	39.1
44.4	44.0	Mean 37.3	37.4	36.9	37.0
44.2	44.0			37.0	37.0
44.0	43.6			Mean 38.3	38.3
Mean 44.5	44.1				

Fathoms		Fathoms	
B	C	C	D
78.9	77.2	111.0	109.5
79.0	77.2	111.0	109.5
79.0	77.2	110.0	108.5
79.1	77.3	109.0	107.0
79.2	77.4	107.5	106.0
79.1	77.2	107.0	105.0
79.0	77.1	107.0	105.0
78.9	77.0	107.0	105.0
78.9	77.0	107.0	106.0
78.6	76.9	107.0	105.0
Mean 79.0	77.2	Mean 108.4	106.6

A-B +0.4
 -0.1
 Mean 0.0
 +0.1

B-C +1.8

C-D +1.8

Correction A Scale 0.0
 B Scale +0.1
 C Scale +1.9
 D Scale +3.7

TABLE 3

808 FATHOMETER 150 SPX

7 June 1954 - j day Sheet 1354

PHASE COMPARISON

A	B	B	C
42.3	41.3	71.4	71.8
41.6	43.2	73.6	71.4
40.4	42.0	73.5	71.0
40.0	41.3	73.0	73.5
39.9	41.2	72.8	73.3
40.0	41.0	73.0	73.5
40.0	41.0	72.0	72.5
40.1	41.2	71.9	72.1
40.0	41.3	71.7	72.3
40.4	41.6	25.9	50.4
4.7	18.1	72.9	73.4
40.5	41.8 Mean		Mean

A-B = -1.3

B-C = -0.5

A	= 0.0
B corr'd	= -1.3
C corr'd	= -1.8
D corr'd	= -1.1

17 Sept. - Sheet 1854

C	D
122.0	122.0
122.0	121.0
121.6	121.0
121.8	121.0
121.3	121.0
121.5	121.0
122.0	121.2
122.0	121.2
122.0	121.5
121.5	120.0
18.2	10.9
121.8	121.1

C-D 0.7

TIDE NOTE

FOR

HYDROGRAPHIC SURVEY H-8130, FIELD NO. HO-1654

KASSA INLET ENTRANCE

Lat. $54^{\circ} 55' 36.0''$

Long. $132^{\circ} 31' 19.2''$

MLLW = 3.9 on staff

MABEL BAY (Signal TEE)

Lat. $54^{\circ} 59' 58.8''$

Long. $132^{\circ} 35' 30.6''$

MLLW = 4.9 on staff

(1954)
 Comparison of junctions with contemporary survey H-8128[^] has been made and found to be satisfactory. ~~The depth curves can be adequately drawn.~~ Junctions with H-8132^v and H-8134[^] will be compared when those sheets are completed. Depth curves at junction with H-8128 can be adequately drawn. ← see Review

M. COMPARISON WITH CHART

Revised 10-7-57
 Comparison with chart 8147, 4th Ed. dated 5-28-56 - several differences were noted as follows:

Lat. and Long.	Chart	Smooth Sheet
54°59'.28 ^v 132°37'.22 ^v	4 fms ✓	5 fms ✓
54°58'.88 ^v 132°34'.84 ^v	rk awash ✓	0.7 fms ✓
55°54'01".65 ^v 132°35'.90 ^v 89	4 fms ✓	5 fms ✓
54°59'.75 ^v 132°35'.35 ^v	1.3 fms. 3 ft.	1.2 3
54°57'.42 ^v 132°36'.15 35.67	H.W. Rk islet	No rock at all reef
(Boat sheet shows reef, topo sheet has area dashed in, no mention in records. except "kelp" notes.)		
54°57'.29 ^v 132°35'.35 ^v	Sunken rk ✓	No rock - foul area
54°57'.23 ^v 132°35'.15 ^v	Rk awash MLLW (±)	Rk awash MLLW (2)
54°56'.71 ^v 132°34'.85 ^v	Rk awash MLLW (±)	" " " (2)
54°56'.63 ^v 132°34'.85 ^v	1 HW Rk and 1 Rk awash ✓	2 HW Rks ✓
54°56'.58 ^v 132°35'.75 ^v	6 fms ✓	12 15 fms

See Review
IPG

N. DANGERS AND SHOALS


Items listed under this heading in the field report have been corrected, in ink, to the smooth sheet values.

Respectfully submitted,



WILLIAM M. MARTIN
 Superv. Cartographer

APPROVED AND FORWARDED:



CURTIS LE FEVER, Capt.
 Seattle District Officer

LIST OF GEOGRAPHIC NAMES

HO-1654 H-8130

~~CLUMP ISLAND~~ Abalone I

CORDOVA BAY

HASSIAH INLET

HELEN ISLAND

MABEL BAY

MABEL ISLAND

POINT WEBSTER

PRINCE OF WALES ISLAND

GEOGRAPHIC NAMES
 Survey No. H-8130

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Southeast Alaska</u>			(for title)								1
<u>Prince of Wales Island</u>											2
<u>Cordova Bay</u>											3
<u>Kassa I. Jet</u>			(tide station off limits of sheet)								4
<u>Abalone Island</u>			(new name for Clump Island, from the names report mentioned in Par. 4, page 6. New name on 5-28-56 edition of chart 8147)								5
<u>Point Webster</u>											6
<u>Mabel Bay</u>											7
<u>Mabel Island</u>											8
<u>Helen Island</u>											9
<u>Hassiah I. Jet</u>											10
											11
											12
											13
											14
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											25
											26
											27

Names approved 8-8-57.
 L. Heck

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens

9 August 1957

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8130

Locality Cordova Bay, Alaska

Chief of Party: J. Bowie in 1954

Plane of reference is mean lower low water, reading

3.9 ft. on tide staff at Kassa Inlet Entrance

13.8 ft. below B.M. (1954)

4.9 ft. on tide staff at Mabel Bay

16.7 ft. below B.M. 1 (1954)

Height of mean high water above plane of reference is:

Kassa Inlet Entrance	11.7 feet
Mabel Bay	11.9 feet

Condition of records satisfactory except as noted below:


Signature

Acting Chief, Tides Branch

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8130.....

Records accompanying survey:

Boat sheets ²....; sounding vols. ⁸....; wire drag vols. ¹....;
 bomb vols.; graphic recorder rolls ~~5~~-Envelopes
 special reports, etc. ~~1~~-Smooth sheet and ~~1~~-Descriptive report.

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

Number of positions on sheet		260
Number of positions checked		250
Number of positions revised		265
Number of soundings revised (refers to depth only)		181
Number of soundings erroneously spaced <i>Sndgs were respaced to agree with revised positions and development of shoals.</i>		1500
Number of signals erroneously plotted or transferred		13
Topographic details	Time	32
Junctions	Time	28
Verification of soundings from graphic record	Time	24

Verification by... *C. Kupiec* Total time 570 Date Feb 3, 1959

Reviewed by... *[Signature]* Time 38 Date 3/24/59

DIVISION OF CHARTS

Review Section - Nautical Chart Branch

Review of Hydrographic Survey

Registry No. H-8130

Alaska, East Shore of Cordova Bay,
Hassiah Inlet and Mabel Bay

Field No. HO-1654

Surveyed - July-August 1954

Scale: 1:10,000

Project No. CS-357

Soundings:

Control:

808 Depth Recorder (mainly)
Hand Lead

Sextant angles on
shore signals

Chief of Party - J. Bowie

Surveyed by - J. Bowie, E. F. Hicks, Jr., J. Dermody

Protracted by - H. C. Parsons (Seattle P.O.)

Soundings plotted by - H. C. Parsons

Verified and inked by - C. F. Kupiec

Reviewed by - L. V. Evans III 3/24/59

Inspected by - R. H. Carstens

1. Shoreline and Control

The sources of shoreline and control are fully listed
in the Descriptive Report.

2. Sounding Line Crossings

The depths are in adequate agreement at crossings.

3. Depth Curves and Bottom Configuration

The depths curves are adequately defined by the
hydrography.

The bottom in this inshore area is quite irregular;
steep slopes and sharply rising rocky shoals, reefs and
pinnacles contribute to its rugged character. Rock ledge
fringes much of the shoreline, particularly along the main
shore of Cordova Bay.

4. Junctions with Contemporary Surveys

Satisfactory junctions were effected with H-8128 (1954) to the southeast, H-8132 (1954) to the northeast and H-8134 (1954) to the south, west and north.

5. Comparison with Prior Surveys

H-2787 (1905), 1:40,000 Reconnaissance

This reconnaissance is the only prior survey on record of the present survey area. A comparison shows general harmony between the present depths and the relatively sparse soundings of the prior survey. The present modern coverage reveals the bottom configuration in much greater detail than that given by the scattered handlead lines of H-2787. All shoals found on the prior survey were confirmed and developed with equal or (generally) lesser depths of H-8130.

The present survey is adequate to supersede the prior survey within their common area.

6. Comparison with Preliminary Chart 8147 (print of 10/7/57)

A. Hydrography

The charted hydrography originated entirely with copies (Bp 52031-32) of the boat sheets of the present survey. Charted depths in many instances differ from final smooth-sheet soundings on the order of plus or minus 1 fm. with some larger differences in the deeper, offshore area of this survey. None of the differences noted are considered critical; some of them are listed in the Processing Office Notes, paragraph M. Additional listings in paragraphs M and N of the Descriptive Report should prove helpful when the survey is fully applied to the chart.

Specific attention is called to the following:

1. The 6-fm. sounding charted in lat. $54^{\circ}56.59'$ long. $132^{\circ}35.75'$ should be disregarded. Originating with the copy of the boat sheet (Bp 52032) the sounding was later considered to be a "stray" and was replaced by general bottom depths of 12 to 15 fms.
2. The rock wash charted in lat. $54^{\circ}59.93'$, long. $132^{\circ}34.67'$ should be disregarded. What appeared to be a rock wash symbol on the bromide copy of the boat sheet (Bp 52031) was in reality penciled marks crossing out a position on the boat. sheet.

3. The small islet charted in lat. $54^{\circ}57.4'$, long. $132^{\circ}35.7'$ and the reef in lat. $54^{\circ}56.85'$, long. $132^{\circ}35.0'$ are indicated only as "foul" areas in the records of this survey. It is recommended that they be revised to agree with the present smooth sheet.

The present survey supersedes the charted hydrography with the common area.

B. Aids to Navigation

There are no charted aids to navigation within the area of this survey.

7. Condition of Survey

A. The field records are complete except that not all signals falling outside the mean high water line were described.

B. The following deficiencies were found in the smooth plotting:

1. The smooth plotter's action in moving 2 topographic stations ABE and DIM was considered incorrect since it was based on insufficient evidence. Furthermore, with the signals restored to their photo positions and revision in the position of signal HID, it was found that adequate agreement of hydrography could be effected through some rescanning of fathograms and respacing of soundings.
2. The transfer of topographic details was below usual standards. Many rocks awash had to be revised and 7 topographic signals had to be moved on the order of $1/2$ mm. The shoreline was weak and had to be completely re-inked.
3. Four hydrographic signals were found to have been plotted in positions which did not utilize the best apparent combinations of angles. Revision of those positions resulted in better general agreement of hydrography as well as better harmony between hydrographic and topographic information on rocks.
4. The verification of topographic and hydrographic stations was not signified in the data stamp. This may explain the unusual circumstances noted in (1), (2) and (3).

C. As a result of the items noted in the preceding paragraph, the verifier had to spend much more time than would normally have been necessary. Some 265 positions and 1500 soundings had to be moved after the control was rectified.

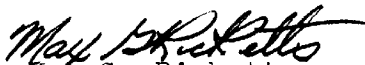
8. Compliance with Project Instructions

This survey adequately complies with the project instructions.

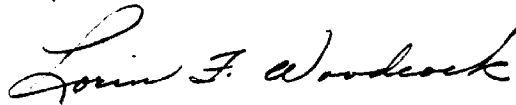
9. Additional Field Work Recommended

This is a good, basic survey; no additional field work is recommended.

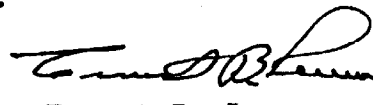
Examined and Approved:



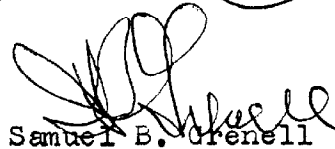
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