

8128

Diag. Cnt. No. 8102-3.

Form 504 ^

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HQ-1454 Office No. H-8128

LOCALITY

State S. E. Alaska

General locality Cordova Bay

Locality Ship Is. Passage & Kassa Inlet

194/ 54

CHIEF OF PARTY

J. Bowie

LIBRARY & ARCHIVES

DATE July 19, 1957

B-1870-1 (1)

8128

1126

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-8128

Field No. HO-1454

State S. E. Alaska

General locality Cordova Bay

Locality Ship ^{Island} Passage and Kassa Inlet

Scale 1/10,000 Date of survey 18 June 1954 - 3 Aug. 1954

Instructions dated 17 March 1953 and 8 Jan. 1954

Vessel HODGSON

Chief of party J. Bowie

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

Soundings taken by fathometer, ~~graphical recorder, hand lead, wire~~ Fath. 62S and 150 SPX

Fathograms scaled by H. Hildahl and R. Owens

Fathograms checked by J. Dermody

Protracted by C. A. J. Pauw

Soundings penciled by C. A. J. Pauw

Soundings in fathoms ^{and tenths} ~~feet~~ at ~~MLLW~~ and are based on a velocity of sound of 800 fms./sec.

REMARKS: _____

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY NO. H-8128, (FIELD NO. HO-1454)

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

SURVEYED BY E. F. HICKS, JR. AND 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 Jan. 1954.

B. SURVEY LIMITS AND DATES

This survey covers Kassa Inlet and approaches, Ship Island Passage, and inshore area west to approximately Long. 132° 33'W.

Field work on this survey began on 18 June 1954 and was completed 3 August 1954.

This survey is joined on the west by Survey H-8134⁽¹⁹⁵⁴⁾, Field No. HO-2154; ~~on the north by survey H-8130~~^{and}, Field No. HO-1654, and on the south by H-8067, Field No. HO-1353. ⁽¹⁹⁵⁴⁾ (1953)

C. VESSELS AND EQUIPMENT

This survey was executed with standard 30 foot hydro 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 Nos. 62S and 150 SPX with reeds calibrated for a velocity of 800 fms./sec. were used for all hydrography.

D. TIDE AND CURRENT STATIONS

A portable automatic tide gage was maintained at Kassa Entrance, Lat. 54° 55.60' N, Long. 132° 31.32' W during the time sounding was in progress and was used without time or height correction for reduction of all soundings, south of a line between signal QUO and signal PIG, and all soundings in the west arm of Kassa Inlet.

A portable automatic tide gage was maintained in North Kassa Inlet, Lat. 54° 58.78' N, Long 132° 28.30'W during the time sounding was in progress and was used without time or height correction for the reduction of all soundings north of a line between signal QUO and signal PIG.

The system of soundings was broken at this line as mentioned to facilitate the reduction of soundings.

No current stations were occupied within the limits of this survey.

E. SMOOTH SHEET

All work on the smooth sheet will be done by the Seattle Processing Office and will be covered by their report which will be an addenda to this report. *Addendum attached*

F. CONTROL STATIONS

The following triangulation stations were used as hydro signals:

- LEDGE 2, 1908 (called LED)
- SHIP 2, 1908-25 (called SHIP)

In 1953 a number of whitewash signals were established in the vicinity of the Ship Island group. (Graphic Control Sheet*HO-F). Most of these signals were recovered and used. However, in the early stages of hydrographic work on this sheet (HO-1454), jumps in sextant fixes were noticed which indicated that some of the 1953 locations were in error. Checks were made on all 1953 signals and those found in error were relocated.
** To be destroyed as all useful data has been transferred to the present survey*

The following signals from 1953 Graphic Control were relocated by photogrammetric means: (See Manuscript T-11299)

- Box ~~1953~~, Axe, Dud, Erg, Fox, Gum, Lip

The following signals from 1953 Graphic Control were relocated by sextant fixes:

- Bus, Cry, Hop, Joe, Nit, Six, Sub

All other signals were located from 1954 Photo Mss furnished by Washington Office, supplemented by sextant locations of additional signals as needed. A list of all signals and origin is posted in the cover sheet of Volume 1.

G. SHORELINE AND TOPOGRAPHY

All shoreline is from MSS on Photo Project Ph-117 furnished by the Washington Office. *Review, P1*

No shoreline discrepancies were noted. Several isolated shoals and rocks were found which did not appear on the MSS.

The large reef north of signal PIG shown on the MSS does not exist. (Probably jelly fish). *$\phi 54^{\circ}57.6'$ $\lambda 132^{\circ}28.7'$*

On account of the steep to, rocky coast it was impractical to delineate the low water line except in a few places where it was delineated on the boat sheet by sextant fixes.

All important rocks were searched for and data compiled during minus tides prior to launch hydrography.

H. SOUNDINGS

All soundings except a few hand lead soundings on isolated rocks or

shoals were made with 808 Fathometers Nos. 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 fathometers were calibrated for a velocity of 800 fms/sec. no velocity correction was made.

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 corrections were made and corrections applied. Details of the phase comparisons and corrections are given in Table 2 following this report.

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

I. CONTROL OF HYDRO

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. Junctions with adjoining sheets are satisfactory and no holidays exist. Depth curves can be adequately drawn at the junctions.

K. CROSSLINES

There are approximately 36 miles of crosslines or slightly over 8% of all lines run are crosslines. All crossings appear to be satisfactory.

L. COMPARISON WITH PRIOR SURVEYS

The soundings from prior surveys ~~are~~ charted were transferred to the boat sheet; differences are noted under "M" below. The rock symbol in Lat. 54° 56.8', Long. 132° 30.3' from T-2953 was disproved by wire drag.

M. COMPARISON WITH CHART *Review, #6*

This survey was compared with Chart 8147 (49-8/8). The charted soundings, where shown, are more or less correct. All rock symbols shown were verified or disproved. This survey should supersede all charted data. The charted shoreline is out in many places, particularly in N. Kassa Inlet.

The following is a list of significant soundings and dangers which differ from the charted data:

LOCATION	PREVIOUSLY CHARTED DEPTH	DEPTH FOUND (fms.)	POSITION	REMARKS
54-54.02 132-30.2 ✓	Sunken rk. symbol	Group of rks. awash ✓	20a thru 28a (Particularly 21a)	Group of rocks in channel. ✓
54-53.6 ✓ 132-30.55 ✓	Rock Symbol	Signal PUT Reef (12)	(See control data)	
54-54.05 ✓ 132-31.9 ✓	Rock Symbol with 5½ fms.	2 rocks with 1/2 fm. ✓	4 b thru 9b etc.	2 sunken rocks ✓
54-54.3 ✓ 132-32.0 ✓	5	3 ¹ ✓	129-130h	Significant sdg. ✓
54-53.9 ✓ 132-32.2 ✓	8	5 ¹ ✓	124-125c	Significant sdg. ✓
54-56.1 ✓ 132-30.3 ✓	Sunken rk. symbol	Does not exist ✓	Wire drag volume	Delete this rock symbol originated with survey T-2953. (1909) ✓
54-56.2 ✓ 132-30.05 ✓	9	4 ¹	140-150b etc.	Midchannel sdg. ✓
54-56.35 ✓ 132-28.92 ✓	3 sunken rk symbols	reef ✓	23-24a	Reef- offshore limits determined. ✓

All building symbols within the limits of this survey should be deleted.

N. DANGERS AND SHOALS

LOCATION	DEPTH (fms.)	POSITION	REMARKS
54-54.4 ✓ 132-32.6 ✓	5 ²	63-64c	Significant sdg. ✓
54-53.5 ✓ 132-30.4 ✓	1½ ✓	138g	Sunken rock ✓
54-53.92 ✓ 132-31.73 ✓	2 ³	3a	Significant sdg. ✓
54-53.7 ✓ 132-30.93 ✓	--	6a	End of reef ✓
54-54.8 ✓ 132-31.6 ✓	5 ✓	110-115f etc.	Significant sdg. ✓
54-56.1 ✓ 132-31.1 ✓	--	1 & 2f	2 rocks ✓ (2) (4)
54-57.6 ✓ 132-31.33 ✓	2 ⁵ Rk	1n	Significant HL sdg. ✓
54-57.6 ✓ 132-28.9 ✓	Reef symbol on preliminary Photo MS	Does not exist ✓	
54-58.06 ✓ 132-28.53 ✓	10 ²	1-15j etc.	Sunken rock ✓

The above list does not include the numerous inshore rocks, reefs and kelp patches found.

All of the above depths are from boat sheet positions using predicted tides and will be revised when smooth plot is made and actual reducers applied.

O. COAST PILOT INFORMATION

Shipwreck Point lies about 1.8 miles WNW of Bird Rocks. The point is low and timbered and rises to a knob 605 feet high. Barbara Rk.*, a low rocky islet lies about 300 yards off the point. An island, about 160 feet high, lies westward from the point, close to. Ship Islands, 50 to 120 feet in height, with outlying rocks and ledges lie about 1/2 mile offshore. Small craft, at high tide, use the narrow channel between Shipwreck Point and the island close to. A rocky shoal area restricts the narrowest part of the channel to a width of approximately 50 yards. Ship Island Passage*, the pass to the westward of the inner island, is preferable, passing to either side of the rock (signal PUT) in the middle of the entrance. The survey vessel in 1954 found good anchorage in Ship Island Passage 0.4 mile north of the inner island in 20 fms. A 5 fm. shoal exists approximately one mile north of the inner island on the west side of the channel.

Kassa Inlet has its entrance a short distance northward of the northernmost of the Ship Island group. It is about 0.5 mile wide at Kassa Point* and extends 2 miles ENE'ward to Clam Cove, thence 3 miles northward. Good anchorage for small craft can be found in Clam Cove in 5 to 10 fms. and at various places in the upper reaches and in the west arm of the inlet. The survey ship in 1954 found good anchorage 3/4 mile N of Clam Cove in 14 fms. A dangerous rock lies near midchannel between Clam Cove & Kassa Island*. It bares only on minus tides and is marked by light kelp. The best water is to the south and east of this rock. Another dangerous rock lies in midchannel about 1 1/2 miles north of Clam Cove. This rock is covered 2 fathom at MLLW and is free of kelp. In passing this rock, keep close to the eastern shore of the channel.

P. AIDS TO NAVIGATION

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

Q. LANDMARKS FOR CHARTS

The charted waterfall in the west arm of Kassa Inlet is now overgrown and should be deleted as no waterfall existed in 1954. No other landmarks are charted, and none are recommended.

R. GEOGRAPHIC NAMES

A special report will be submitted by this party covering this heading. All names marked "*" in this report are names recommended by this vessel in 1953 and/or 1954. They are as follows:

- (a) The rock Lat. 54° 53.56', Long. 132° 29.61' called Barbara Rock.
- (b) (1953) The channel between Ship Islands and the shore called Ship Islands Passage.
- (c) The point Lat. 54° 55.4', Long. 132° 31.5 called Kassa Pt.
- (d) The island Lat. 54° 56.6', Long. 132° 29.8 called Kassa Island.

The charted names within the limits of this survey were verified as being:

- (a) Shipwreck Pt.
- (b) Ship Islands
- (c) Kassa Inlet
- (d) Clam Cove

S. SILTED AREAS

No significant silted areas were noted. ✓

T. MARKED STATIONS

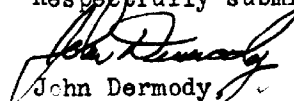
The following stations were marked by standard topographic disks: ✓

Box, Bug, Sow, Ox.

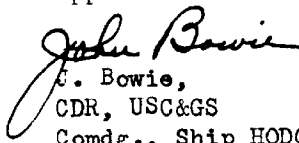
Z. TABULATION OF APPLICABLE DATA

Tidal Data
Air Photos

Respectfully submitted,


John Dermody
Ens., USC&GS

Approved and forwarded:


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

STATISTICS FOR HYDROGRAPHIC SURVEY H-8128, (HO-1454)

VOL.	DAY	DATE	VESSEL	POS.	STAT. MI.	H. L.
2	a	18 June	98	23	5.1	
2	b	19 June	"	3	0.8	
2	c	26 June	"	201	50.3	
2	d	27 June	"	93	18.2	
3	d	27 June	"	119	28.1	
3	e	28 June	"	83	12.3	
3	f	9 July	"	118	23.9	
4	g	10 July	"	206	27.3	3
4	h	12 July	"	165	23.0	
5	h	12 July	"	37	7.9	
5	j	13 July	"	92	8.9	22
Totals for Launch 98 - - - - -				1140	205.8	25
6	a	19 June	134	103	16.1	
6	b	26 June	"	148	14.7	
6	c	28 June	"	78	9.2	
7	c	28 June	"	66	7.1	
7	d	9 July	"	55	9.3	
7	e	10 July	"	221	54.3	
8	e	10 July	"	15	3.0	
8	f	11 July	"	76	14.6	
8	g	12 July	"	222	16.8	
8	h	13 July	"	57	4.8	
9	h	13 July	"	84	3.7	
9	j	14 July	"	170	19.9	
9	k	15 July	"	98	14.7	
10	m	27 July	"	228	20.6	
10	n	28 July	"	96	11.5	
10	p	2 Aug.	"	85	12.0	
11	p	2 Aug.	"	26	4.5	
11	q	3 Aug.	"	36	4.5	
Totals for Launch 134				1764	241.3	
1	a	18 June	dinghy			28
1	b	19 June	"			34
1	c	12 July	"			25
1	d	13 July	"			25
1	e	14 July	"			24
1	f	15 July	"			24
Totals for dinghy						160
9	aa	14 July	169 (whaleboat)			9
9	ab	15 July	" "			12
Total for Whaleboat 169						21
<u>Wire Drag</u>						
Wire	a	11 July	98	12	0.8	
Drag			134			
Vol.			169			
Totals for Sheet - - - - -				3097	447.1	206 (46 H.L.)

Area = 10.5 sq. stat. miles

plus 0.1 sq. stat. mile wire drag

TIDE NOTE FOR HYDRO SURVEY H-8128

FIELD NO. HO-1454

Tide Stations

Kassa Entrance

Lat. 54° 55.60' N
Long. 132° 31.32' W

MLLW on staff = 3.9 ft.

North Kassa Entrance

Lat. 54° 58.78' N
Long. 132° 28.30' W

MLLW on staff = 3.5 ft.

TABLE 2

FATHOMETER CORRECTIONS - (PHASE)

808 FATHOMETER NO. 62S

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	<u>35.0</u>	<u>35.1</u>	37.0	39.1
44.4	44.0	Mean 37.3	37.4	36.9	37.0
44.2	44.0			<u>37.0</u>	<u>37.0</u>
44.0	43.6			Mean 38.3	<u>38.3</u>
44.5	44.1	Mean			

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
<u>78.6</u>	<u>76.9</u>	<u>107.0</u>	<u>105.0</u>
79.0	77.2	Mean 108.4	106.6

A-B	+0.4
	-0.1
	<u>0.0</u>
Mean	+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	44.3	74.4	74.8	
41.6	43.2	73.6	74.4	
40.4	42.0	73.5	74.0	
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	<u>71.7</u>	<u>72.3</u>	
<u>40.4</u>	<u>41.6</u>	25.9	30.4	
4.7	18.1	72.9	73.4	Mean
40.5	41.8			

A-B = -1.3

B-C = -0.5

A	=	0.0
B corrn	=	-1.3
C corrn	=	-1.8
D corrn	=	-1.1

17 Sept. - Sheet 1854

C	D	
122.0	122.0	
122.0	121.0	
121.6	121.0	
121.8	121.0	
121.8	121.0	
121.5	121.0	
122.0	121.2	
122.0	121.2	
122.0	121.5	
<u>121.5</u>	<u>120.0</u>	
18.2	10.9	
121.8	121.1	C-D 0.7

PROCESSING OFFICE NOTES H-8128

SMOOTH SHEET

The smooth sheet was hand constructed and checked in the Seattle Hydrographic Processing Unit, using standard methods. ✓

SHORELINE AND TOPOGRAPHY

Shoreline and topography were transferred from film positives of T-11294, T-11295, T-11297, T-11298, T-11299 and T-11300. (1953-54)

ADEQUACY OF SURVEY

The survey appears to be complete and adequate for charting. Junctions with adjoining surveys have not been checked. No copy of H-8067 is in the processing office and H-8134 has not been plotted yet. Comparison with that sheet will be made when it is completed.

Review, #4

Respectfully submitted,

William M. Martin
WILLIAM M. MARTIN
Supervisory Cartographer, C&GS

APPROVED AND FORWARDED:

Curtis Le Fever
CURTIS LE FEVER, Capt., C&GS
Seattle District Officer

GEOGRAPHIC NAMES PENCILED ON H-8128

BARBARA ROCK
CLAM COVE
CORDOVA BAY

KASSA INLET

KASSA ISLAND

KASSA POINT

SHIP ISLANDS

SHIP ISLANDS PASSAGE

SHIPWRECK POINT

GEOGRAPHIC NAMES
 Survey No. H-8128

Name on Survey											
	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>Barbara Rock</u>											4
<u>Shipwreck Point</u>											5
<u>Ship Islands</u>											6
<u>Ship Island Passage</u>											7
<u>Kassa Point</u>											8
<u>Kassa Inlet</u>			(location of tide stations)								9
<u>Kassa Island</u>											10
<u>Clam Cove</u>											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27
											M 234

Names approved 8-9-57.

L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8128....

Records accompanying survey:

Boat sheets ..2..; sounding vols. .11.; wire drag vols. .1...;
 bomb vols.; graphic recorder rolls 7-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		.3085..
Number of positions checked		.259..
Number of positions revised		.2....
Number of soundings revised (refers to depth only)		.10....
Number of soundings erroneously spaced		.10....
Number of signals erroneously plotted or transferred		...0...
Topographic details	Time	.40....
Junctions	Time	.40....
Verification of soundings from graphic record	Time	.20....

Verification by... *F. P. SAULSBURY* Total time *.421...* Date *4-4-58*

Reviewed by... *J. A. Dismore* Time *.40....* Date *4/21/58*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8128

FIELD NO. HO-1454

S. E. Alaska, Cordova Bay, Ship Island Passage and Kassa Inlet

Surveyed June-Aug. 1954

Scale 1:10,000

Project No. CS-357

Soundings:

808 Depth Recorder
Hand lead

Control:

Sextant fixes on
shore signals

Chief of Party - J. Bowie

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

Protracted by - C. A. J. Pauw

Soundings plotted by - C. A. J. Pauw

Verified and inked by - F. P. Saulsbury

Reviewed by - T. A. Dinsmore

Inspected by - R. H. Carstens

Date: 21 April 1958

1. Shoreline and Signals

The shoreline originates with unreviewed air-photographic surveys T-11294, T-11295, T-11297, T-11298, T-11299 and T-11300 of 1953-54.

The source of control is given in the Descriptive Report.

2. Sounding Line Crossings

Considering the irregularities in the bottom, depths at crossings are in very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. In some localities, steep to shores precluded the development of the 0- to 5- fm. curves.

The bottom in the area of this inshore survey is rugged and irregular with generally steep slopes and marked by

numerous shoals and pinnacle rocks. Much of the shoreline is fringed by outcropping ledge.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-8067 (1953) on the south and H-8130 (1954) on the west. The junction with H-8134 (1954) on the southwest will be considered in the review of that survey.

5. Comparison with Prior Surveys

H-2787 (1905) 1:40,000
T-2953 (1909) 1:20,000

H-3043 (1909) 1:20,000

Much of the area covered by the present survey was previously unsurveyed. However, a few lines of soundings on these early reconnaissance surveys fall within the area of the present survey. There are no important differences between prior and present depths considering the irregularities in the bottom. Rocks and least depths from the prior surveys were generally confirmed, usually with lesser depths and slightly different positions, except for the following sunken rock symbol:

In lat. $54^{\circ}56.08'$, long. $132^{\circ}30.3'$, a sunken rock symbol previously charted from T-2953 was disproved by wire-drag investigation on the present survey.

The present survey is adequate to supersede the scant amount of hydrography on these early surveys.

6. Comparison with Chart 8147 (Latest print date 10/7/57)

A. Hydrography

Charted hydrography originates entirely with advance information of the present survey shown on copies of the boat sheets (Bps. 52028-29). Important discrepancies on the chart, resulting in two instances from illegible soundings on blueprints 52028-29 are listed as follows:

<u>Latitude</u>	<u>Longitude</u>	<u>Charted Depth (fms.)</u>	<u>Survey Depth (fms.)</u>
$54^{\circ}59.63'$	$132^{\circ}29.76'$	rock awash	0.8
56.08	29.86	6	16
55.82	32.78	10	21
53.22	32.5	18	28

Numerous revisions in positions and depths have been made in smooth plotting and verification as a result of office plotting, rescanning of portions of fathograms and application of final reducers.

The present survey entirely supersedes the charted information.

B. Aids to Navigation

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

7. Condition of Survey


- a. The sounding records are complete; the Descriptive Report covers all matters of importance.
- b. The smooth plotting was generally accurate. A number of rocks awash smooth plotted from sextant fixes and using the height from the topographic surveys were revised to show the height from the hydrographic survey and the position from the topographic survey.
- c. Wire-dragging of a portion of the channel in Kassa Inlet (shown in insert on smooth sheet) disproved the existence of a sunken rock previously charted in lat. $54^{\circ}56.08'$, long. $132^{\circ}30.3'$, from T-2953 of 1909.

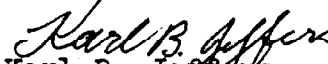
8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

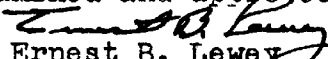
9. Additional Field Work


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


Max G. Ricketts
Chief, Nautical Chart Branch


Karl B. Jeffers
Chief, Hydrography Branch

Examined and approved:


Ernest B. Lewey
Chief, Division of Charts


Samuel B. Grenell
Chief, Division of Coastal Surveys

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens

2 August 1957

Plane of reference approved in
12 volumes of sounding records for

HYDROGRAPHIC SHEET 8128

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. 1 (1954)

3.2 ft. on tide staff at Tah Bay
12.6 ft. below B.M. 2 (1909)

3.5 ft. on tide staff at Kassa Inlet (North End)
12.2 ft. below B.M. 1 (1954)

Height of mean high water above plane of reference is:

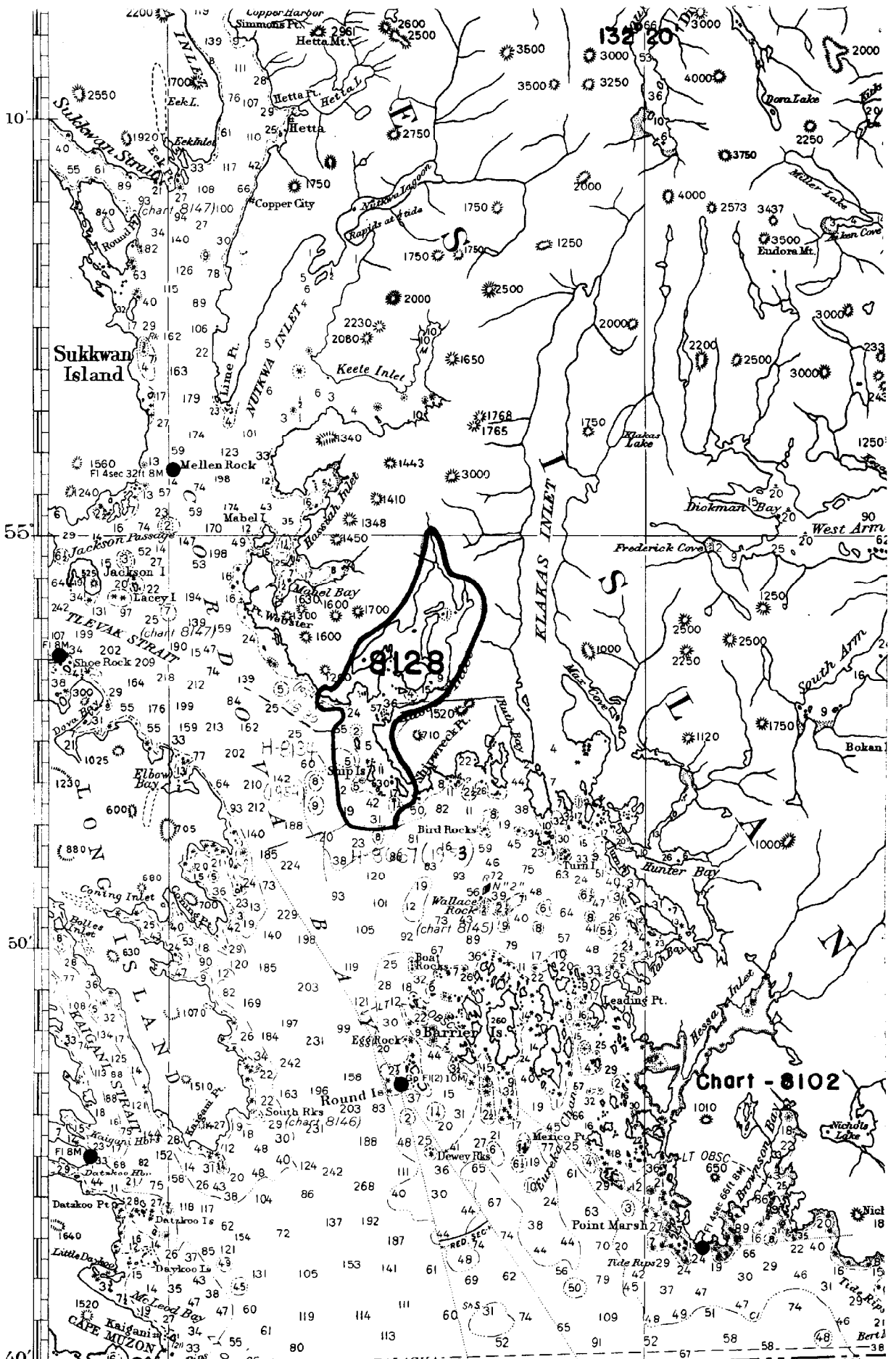
Kassa Inlet Entrance . .	11.7 ft.
Tah Bay	11.7 ft.
Kassa Inlet (North End)	11.8 ft.

Condition of records satisfactory except as noted below:



 Signature

Chief, Tides Branch



NAUTICAL CHARTS BRANCH

SURVEY NO. H-8128

Received 4-28-58

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10-18-57	8002	<i>Benson</i>	Before After Verification and Review <i>Critical edges only</i>
			<i>205 con</i>
10-15-58	8102	<i>R.E. Elkins</i>	<i>Partly applied</i> Before After Verification and Review
			<i>So Kassa Islet hydro completely revised. applied partly thru chart 8147.</i>
10-17-58	8152	<i>R.E. Elkins</i>	Before After Verification and Review
			<i>Partly applied - off thru chart 8102 dng 11.</i>
11-2-60	8152	<i>R.E. Elkins</i>	Before After Verification and Review <i>Completely applied</i>
			<i>without going thru the large scale chart 8147 (Prelim)</i>
1/14/61	8102	<i>E.E. Thomas</i>	Before After Verification and Review
			<i>Completely applied thru Dwg 12, Chart 8152</i>
4/24/61	8145	<i>Helmer</i>	Before After Verification and Review <i>Fully applied. Exam</i>
			<i>chart 8152, Dwg 12 and 2 edges disagree in overlap ch</i>
4/21/62	8147	<i>H. Radde</i>	Before After Verification and Review <i>Fully applied</i>
			<i>Exam. Chart 8145 overlap</i>
8-6-63	8147	<i>h. j. Keeler</i>	Before After Verification and Review <i>Appd. thru ch. 8152</i>
			<i>Print con only for T.O. print. RKO</i>
1/29/75	8147	<i>M.D. Kanis</i>	Before After Verification and Review, <i>inspection's</i>
			<i>Signature - Re-examined for critical corrections</i>
5/22/75	8145	<i>M.D. Kanis</i>	<i>Fully Applied</i> Before After Verification and Review <i>+ Signature</i>
			<i>Re-examined only in conjunction with</i>
			<i>Reviewed T-11299</i>

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.