

8132

Diag. Cht. No. 8102-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HC-1854 Office No. H-3132

LOCALITY

State S. E. Alaska

General locality Cordova Bay

Locality Nutkwa and Keete Inlet

194/ 54

CHIEF OF PARTY

J. Bowie

LIBRARY & ARCHIVES

DATE November 5, 1957

8132

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-8132

Field No. HQ-1854

State S. E. Alaska

General locality Cordova Bay

Locality Nutkwa and Keete Inlet

Scale 1/10,000 Date of survey September 1954

Instructions dated 17 March 1953

Vessel Launch No. 98 and Launch No. 134

Chief of party J. Bowie

Surveyed by R. C. Munson - J. J. Dermody

Soundings taken by fathometer, ~~graphic sounder, beam trawl, etc.~~ 808 - 62S, 808 - 150 SPX

Fathograms scaled by R. D. O. & H. H.

Fathograms checked by R. C. M. & J. J. D.

Protracted by C. A. J. Pauw

Soundings penciled by C. A. J. Pauw

Soundings in fathoms ~~62S~~ at ~~MLLW~~ and are based on
velocity of sound of 800 fms./sec

REMARKS:

Handwritten initials

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY NO. H-8132 (FIELD NO. HO-1854)

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

SURVEYED BY R. C. MUNSON - J. 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 Nutkwa Inlet between parallels $55^{\circ} 01' 8''$ and $55^{\circ} 06' 10''$, all of Keete Inlet and the inshore work along the west shore of Lime Point to Latitude $55^{\circ} 04' 19''$.

Field work on this survey began on 24 August 1954 and was completed 28 September 1954.

This survey is joined by contemporary surveys as follows:

DIRECTION	SURVEY FIELD NO.	SURVEY OFFICE NO.
South ✓	HO-1654	H-8130 ✓
West ✓	HO-2154	1954 H-8134 ✓
North ✓	HO-1954 ✓	H-8133 ✓

C. VESSEL AND EQUIPMENT

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

808 fathometer 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

5 A portable automatic tide gage was maintained at Nutkwa Inlet, Lat. $54^{\circ} 02' 50.4''$ N, Long. $132^{\circ} 34' 37.0''$ W during entire period of this survey and was used without time or range correction for reduction of all soundings except those in the narrow, north-south arm of Keete Inlet.

A portable automatic tide gage was maintained in the long, narrow arm of Keete Inlet, Lat. $54^{\circ} 04' 51''$ N, Long. $132^{\circ} 29' 22''$ W during entire period of this survey and was used without time or range correction for reduction of all soundings in the arm north of parallel $55^{\circ} 03' 55''$ (as shown on the boat sheet). (T.G. 01 31919/204)

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.

F. CONTROL STATIONS

Triangulation Stations

STATION	DATE	SOURCE	CHIEF OF PARTY
ATA	1918	USC&GS	J. W. M.
BOY	1918	"	"
COS	1918	"	"
END	1918	"	"
GULL	1918	"	"
HAS	1918	"	"
IN	1918	"	"
KEET	1918	"	"
LIME 2	1954	"	J. B.
LIT	1918	"	J. W. M.
MED	1918	"	"
NUT	1918	"	"
UP	1918	"	"

Other control stations were located from air photographs on manuscripts T-9903, T-11035, T-11294, T-11295.

Where stations were needed and there were no identifiable picture points nearby, the stations were located by sextant fixes at the station using objects located by photogrammetric methods.

A list of all signals and their origin are pasted to the cover sheet of Vol. No. 1 of the sounding record.

G. SHORELINE AND TOPOGRAPHY

All shoreline is from Manuscripts T-9903, T-11035, T-11294 and T-11295 furnished by the Washington Office.

Very slight shoreline discrepancies were noted in the areas marked as approximate on the manuscripts. A few isolated shoals and rocks were found which did not appear on the manuscripts and one rock symbol was deleted. These are noted on the boat sheet and field photographs.

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 or 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 initial would read two fathoms eliminating any index correction. Since the fathometers were calibrated for a velocity of 800

fathoms per second no velocity correction was made.

Bar checks were made three times daily at two fathoms 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.

27 bottom samples were taken throughout the area.

I. CONTROL OF HYDROGRAPHY

All hydrography was controlled by visual sextant angles on shore 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 48 miles of crosslines or slightly over 8% of all lines run are crosslines. All crossings appear to be satisfactory.

L. COMPARISON WITH PRIOR SURVEYS

No prior surveys exist in this area.

M. COMPARISON WITH CHART

This survey was compared with Chart 8147, third edition, published August 1931, reprint date 12 May 1952. There are 15 charted soundings within the limits of this survey across the entrance to Nutkwa Inlet. These soundings and the soundings of this survey compare satisfactorily. The 2 P. D. rocks in Nutkwa Inlet were found and positions corrected. This survey should supersede all charted data. The charted shoreline is shown dotted as approximate and is out of position. The comparison with the charted rocks is as follows:

CHART LOCATION	CHART NOTATION	NEW LOCATION	NEW NOTATION	REMARKS
55-02.96✓ 132-37.45✓	20 ft. island✓	55-02.96✓ 132-37.45✓	20 ft. island	Small island that ✓ ATA 1918 is located on.
55-03.03✓ 132-37.43✓	2 small islands✓	55-03.00✓ 132-37.44✓	1 large rock 6 ft. above MHWL	The two charted islands are one large rock. ✓

see
p 6
Review

CHART LOCATION	CHART NOTATION	NEW LOCATION	NEW NOTATION	REMARKS
55-03.09 132-37.43	Sunken rock danger to navigation	55-03.05 132-37.39	3 ft. above MHWL	Rock is not a sunken rock. Shows 95 bare rock (3) on H-8132.
55-03.17 132-37.50	Sunken rock, danger to navigation.	55-03.12 132-37.41	Uncovered 1 ft. MLLW	Hand lead sdg. was taken on rock. (pos. 11c. blue)
55-03.20 132-37.52	2 small islands	--	--	These islands were not found. (Deleted from chart 8147 (10-7-57))
55-03.17 132-34.76	Sunken rock. Danger to navigation	55-03.16 132-34.75	Cov. 4 ft. MLLW	Hand lead sdg. on highest part of sunken rock.
55-04.06 132-34.83	2 sunken rocks. P. D.	(a) 55-03.93 132-34.64 pos. 5 and 6 "e" MLLW	Uncov. 8 ft. 5 ft. MLLW	These are the 2 P. D. rocks on chart. A 3rd rock nearby bares on minus tide. Area too congested to plot 3rd rock.
		(b) 55-03.93 132-34.57	Cov. 3 fms.	Small shoal area.
55-04.40 132-34.16	2 small islands	55-04.38 132-34.13	Highest pt. of rock island	One island with ledge area around it. @ NOB
55-02.98 132° 33.52	Sunken rock	55-02.97 132-33.58	Rock awash MLLW @ Pol	Outermost of string of rocks extending out from beach.
55-03.07 132-31.34	Rock awash	55-03.05 132-31.30	Rock ^{uncov.} 6 ft. MLLW	(Vol. 9, pg. 5.) 2 rocks. ^{uncov.} 5 & 6 ft. MLLW.
55-02.80 132-31.26	Small island	55-02.80 132-31.26	Reef attached to large island	
55-02.76 132-29.97	2 small islands	55-02.75 132-29.96	Large ^{ft} of 2 small islands	bars 3 ft. MHW (see 3/5 for delineation of bare rock)
55-02.81 132-29.30	small island	55-02.81 132-29.30	Bares 4 ft. MLLW	Vol. 10 pg. 22 RK "K" = 7 ft MLLW (2) on T-11295 accepted
55-03.26 132-29.30	small island	55-03.25 132-29.30	Bares 8 ft. MLLW	Vol. 10 pg. 22 RK "M" = 11 ft MLLW (12) on T-11295 accepted.
55-03.19 132-28.90	small island	55-03.18 132-28.92	Bares 9 ft. MLLW	Vol. 10 pg. 22 RK "Q" = 10 ft MLLW (12) on T-11295 accepted.
55-03.26 132-28.63	small island	55-03.26 132-28.63	Bares 3 ft. MHW	@ EYE
55-03.34 132-29.01	small island	55-03.33 132-29.04	small island	Island, wooded, no height estimated.
55-03.39 132-30.21	sunken rock	55-03.39 132-20.24	reef awash MHW	Outer tip of reef extending from beach

CHART LOCATION	CHART NOTATION	NEW LOCATION	NEW NOTATION //	REMARKS
55-04.20	small island	55-04.19	Bares 4 ft.	Vol. 10 pg. 27 Reef "W" (A UP 1918)
132-29.48		132-29.49	MHW MLLW	= 11 ft MLLW. (QWASH MHW (12) on F-11035 accepted)
55-04.37	4 small is-	55-04.38	One large reef	O PRY ✓
132-29.52	lands	132-29.52		

N. DANGERS AND SHOALS

Listed in the table below are uncharted dangers, shoals and significant soundings found: (Comparison made with Chart 8147, dated 5-12-52)

LOCATION	DEPTH	POSITION	REMARKS
55-03.84	Unconv. 2 ft. MLLW	12c	High pt. of shoal ✓
132-38.16	06		
55-02.75	4 ² fms.	10-11b	small shoal ✓
132-37.48		128-129 "c", vol. 2, p. 50	
55-02.42	3 ² fms.	44-45g	Least depth on small shoal ✓
132-35.80		56-57g confirmed by 56-57 "g" (vol. 4)	
55-02.81	3 ¹ fms. ✓	174-175b	Least sdg. on shoal. ✓
132-35.20	4 ² fms. ✓	224-225a	Hand lead sdg. ✓
55-02.74	0 ² 1 fm. ✓	16d	
132-34.83		15d ✓	Hand lead sdg. on high pt. of shoal ✓
55-02.76	1 fm. ✓	177-178 "c" vol. 2, p. 59	
132-34.55		11d ✓	Hand lead sdg. on hi pt. of shoal ✓
55-03.29	291 ⁴ fm. ✓	20d	Hand lead sdg. on hi pt. of sunken rock. ✓
132-34.74		Pos. 156 "a", Vol. 1 p. 38 is shallower at this spot	
55-03.43	6 fms. ✓	27-28k (vol. 6)	Least depth on shoal ✓
132-36.12		97-98 "c", vol. 2, p. 45	
55-03.25	3 ⁴ fms. ✓	213-214f	Least depth on shoal ✓
132-33.41		24-25m confirmed by 24-25 "m"	
55-03.41	5 ² fms. ✓	27-28m	Least depth on shoal ✓
132-33.77		also see 175-176 "f", vol. 4, p. 19	
55-04.52	0 ² 1 fm. ✓	5-8 "1" vol. 6, p. 4	Hand lead sdg. on hi pts. of rocks ✓
132-34.08			
55-04.67	5 ¹ fms. ✓	64-65k	Least depth on shoal ✓
132-35.58		Pos. 118-119 "e" (vol. 3, p. 37)	
55-05.12	6 ² fms. ✓	76-77	Least depth on shoal ✓
132-35.50		122-123j	
55-05.59	4 ⁵ fms. ✓	9 "1"	Hand lead on hi pt. of shoal
132-34.48	3 ² -	161-162h	Least depth on shoal ✓
55-03.11	0 ⁸ 4 ² fms. ✓	1g	Least depth on shoal ✓
132-32.38	17		

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

O. COAST PILOT INFORMATION

Nutkwa and Keete Inlets lie at the head of Cordova Bay eastward of Lime Point.

5203-10/3-10
Nutkwa Inlet is $1\frac{1}{2}$ miles wide at its entrance and extends about 5 miles north-northeastward. Depths vary from 90 fathoms at the entrance to 10 fathoms at its head with several shoals of 4 to 6 fathoms in between. Two dangerous rocks, bearing 8 and 5 feet at MLLW, lie 0.47 mile southwest of Nutkwa Point. Off Keete Island are 2 more dangerous rocks, one is $\frac{1}{4}$ mile north and covers $\frac{1}{2}$ fathom at MLLW and the other is 0.37 miles north and covers 1 fathom at MLLW. Both are marked by thin kelp. (See vol. 3, page 6)

Nutkwa Lagoon is a narrow body of water about 3 miles in length with midchannel depths from 40 fathoms at the southwest end to 20 fathoms at the northeastern part. Nutkwa Lagoon has several good salmon streams at its head. Mining and lumber activities are in evidence but no work has been done since World War II. (H-8133, 1954)

Nutkwa Falls, at the head of Nutkwa Inlet, obstructs passage into Nutkwa Lagoon. Several dangerous rocks are in the channel at and directly below the falls. Rapids exist above and below the falls except at high water slack. The water levels off at the falls at a tide elevation of 10 feet above MLLW. On the higher water slacks, a draft of 3 to 4 feet can be carried into Nutkwa Lagoon but passage should not be attempted without local knowledge. (H-8133)

Keete Inlet extends eastward 2 miles from Keete Point and then narrows and extends northward about $1\frac{1}{2}$ miles. Depths vary up to 30 fathoms in mid-channel. ~~A~~ dangerous rock bearing ~~5~~ feet at MLLW, is 1 mile east of Keete Point. Deep water lies midway between this rock and the north shore. Good anchorage in 20 fathoms, mud bottom, can be found south of the small island at the bend in the inlet. Local fishermen, going from Cordova Bay to Keete Inlet, usually pass to the south of Keete Island.

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. The jelly fish gave no return on the fathometer and the possibility of a shoal was disproved by dropping a lead line over the side.

P. AIDS TO NAVIGATION

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

Q. LANDMARKS FOR CHARTS

There are no landmarks for charts within the limits of this survey. ✓

R. GEOGRAPHIC NAMES

See special report on Geographic Names submitted by this party. ✓

The existing charted names within the limits of this survey are: ✓
LIME POINT, KEETE INLET, NUTKWA INLET and NUTKWA LAGOON.

The following names are recommended in order to provide some named features in this area:

- (a) The island Lat. 55° 02:186, Long. 132° 34:74 be named KEETE ISLAND.
- (b) The point Lat. 55° 03:107, Long. 132° 33:29 be named KEETE POINT.
- (c) The point Lat. 55° 04:30, Long. 132° 34:07 be named NUTKWA POINT.

S. SILTED AREAS

No significant silted areas in this survey. ✓

T. BY-PRODUCT INFORMATION

No significant by-product information was noted in this area. ✓

U. MARKED STATIONS

The following stations were marked by standard topographic disks: ✓
FLUE, TRY, and BIG.

Z. TABULATION OF APPLICABLE DATA

Tide Data
Air Photographs

Respectfully submitted,

R. C. Munson

R. C. Munson,
Ens., USC&GS

Approved and forwarded:

John Bowie
John Bowie,
CQB, USC&GS
Comdg., Ship HODGSON

STATISTICS

for

HYDROGRAPHIC SURVEY H-8132 (1954)

USC&GSS HODGSON

PROJECT CS-357

VOL.	DAY	DATE	VESSEL	POSITION	STAT. MILES	H.L.
1	a	24 Aug.	Launch 98	230	52.9	
1	b	25 Aug.	" "	126	20.1	
2	b	25 Aug.	" "	124	23.6	
2	c	27 Aug.	" "	227	39.8	1
3	d	28 Aug.	" "	60	8.0	10
3	e	30 Aug.	" "	190	43.3	
3	f	31 Aug.	" "	85	17.4	
4	f	31 Aug.	" "	130	27.8	
4	g	8 Sept.	" "	143	20.6	
4	h	9 Sept.	" "	97	17.8	
5	h	9 Sept.	" "	102	23.1	
5	j	10 Sept.	" "	241	38.5	
6	k	11 Sept.	" "	228	37.9	
6	l	13 Sept.	" "	102	18.4	9
7	m	14 Sept.	" "	253	39.5	
7	n	15 Sept.	" "	70	12.3	
7	p	16 Sept.	" "	5	1.3	
7	q	26 Sept.	" "	19	4.3	
7	h	28 Sept.	" 134	16		16
8	a	30 Aug.	" "	73	14.9	
8	b	31 Aug.	" "	74	13.7	
8	c	1 Sept.	" "	223	28.1	
9	c	1 Sept.	" "	3	0.4	
9	d	23 Sept.	" "	141	17.3	
9	e	24 Sept.	" "	220	29.4	
9	f	25 Sept.	" "	49	9.3	
10	f	25 Sept.	" "	140	14.2	
10	g	26 Sept.	" "	106	6.4	13
Totals - - - -				3477	580.3	49

Area = 13.9 sq. stat. miles

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

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	<u>79.0</u>	Mean	<u>108.4</u>
	<u>77.2</u>		<u>106.6</u>

A-B +0.4
 -0.1
 0.0
 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	16.1	72.9	73.4 Mean
40.5	41.8 Mean		

$$A-B = -1.3$$

$$B - C = -0.5$$

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

TIDE NOTE

FOR

HYDROGRAPHIC SURVEY H-8132, FIELD NO. HO-1854

NUTKWA INLET

Lat. ⁵⁵~~54~~° 02' 50.4" N
Long. 132° 34' 39.0" W

MLLW = 3.4 ft. on staff

KEETE INLET

Lat. ⁵⁵~~54~~° 04' 51" N
Long. 132° 29' 22"W

MLLW = 5.8 ft. on staff

The Nutkwa Inlet tide gage results were used for all of Nutkwa Inlet and Keete Inlet except north of parallel 55° 03'.55 N in the N-S arm of Keete Inlet. The results from the Keete Inlet gage were used in this arm.

PROCESSING OFFICE NOTES H-8132 (HO-1854)

SMOOTH SHEET

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

Items under other headings have been checked or corrected as shown in black ink on the field report.

Respectfully submitted



William M. Martin
Supervisory Cartographer

Approved and forwarded



CURTIS LE FEVER
Captain C&GS
Seattle District Officer

GEOGRAPHIC NAMES PENCILED ON SMOOTH SHEET H-8132

CORDOVA BAY

KEETE I.

KEETE LNLET

KEETE PT.

LIME PT.

NUTKWA INLET

NUTKWA PT.

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens

21 November 1957

Plane of reference approved in
10 volumes of sounding records for

HYDROGRAPHIC SHEET 8132

Locality Cordova Bay, Alaska

Chief of Party: J. Bowie in 1954

Plane of reference is mean lower low water, reading
5.8 ft. on tide staff at Keete Inlet
12.0 ft. below B.M. 2 (1918)
3.4 ft. on tide staff at Nutkwa Inlet
15.2 ft. below B.M. 1 (1954)

Height of mean high water above plane of reference is:

Keete Inlet	12.0 ft.
Nutkwa Inlet	11.9 ft.

Condition of records satisfactory except as noted below:


Signature

Chief, Tides Branch

GEOGRAPHIC NAMES

Survey No. H-8132

GEOGRAPHIC NAMES		Survey No. H-8132		On Chart No.		On previous survey No.		On U. S. quadrangle Maps		From local information		On local Maps		P. O. Guide or Map		Rand McNally Atlas		U. S. Light List		
Name on Survey		A	B	C	D	E	F	G	H	K										
Southeast Alaska				(for title)															1	
Cordova Bay																			2	
Lime Point																			3	
Keete Inlet				(tide station)															4	
Keete Island																			5	
Keete Point																			6	
Nutkwa Point																			7	
Nutkwa Inlet				(tide station)															8	
																			9	
				Names approved 11-15-57. L. Heck																10
		(All of above names applied on latest print of chart 8147)																	11	
																			12	
																			13	
																			14	
																			15	
																			16	
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																			25	
																			26	
																			27	

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ⁸¹³²...

Records accompanying survey:

Boat sheets ²...; sounding vols. ¹⁰...; wire drag vols.;
bomb vols.; graphic recorder rolls ⁴... Envelopes
special reports, etc. ¹-Smooths sheet and ¹-Descriptive report.
.....

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

Number of positions on sheet		3477..
Number of positions checked		..28.
Number of positions revised	1. 16 "d" (brown) replotted
Number of soundings revised (refers to depth only)		...35 (to smooth) curves
Number of soundings erroneously spaced	0
Number of signals erroneously plotted or transferred	0
Topographic details	Time7hr.
Junctions	Time3hr.
Verification of soundings from graphic record	Time	...17hr. ⁸
<div style="position: absolute; left: 810px; top: 520px; transform: rotate(-90deg); font-size: small;"> hrs. required to ink curves, because of extremely irregular bottom. </div>		
Verification by <i>L. Rose</i>	Total time	277.6hr.
	Date	Apr. 1.8 '58
Reviewed by <i>Lu Zieslund</i>	Time	44
	Date	5/21/58

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8132

FIELD NO. HO-1854

Southeast Alaska, Cordova Bay, Nutkwa and Keete Inlets

Surveyed September, 1954

Scale 1:10,000

Project No. CS-357

Soundings:

Control:

Lead line
808 Depth Recorder

Sextant fixes on
shore signals

Chief of Party - J. Bowie
Surveyed by - R. C. Munson and J. J. Dermody
Protracted by - C. A. J. Pauw
Soundings plotted by - C. A. J. Pauw
Verified and inked by - S. Rose
Reviewed by - I. M. Zeskind
Inspected by - R. H. Carstens

Date: 5/21/58

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys T-9903 (1953-55), T-11035 (1953-55), T-11294 (1953-55) and T-11295 (1953-55).

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

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated, except

close inshore where the foul character of the bottom generally prevented development to the low-water line.

The bottom is very irregular. Submarine features such as ledges, reefs, pinnacles, shoals, deeps and ridges contribute to the bottom irregularity.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-8133 (1954) on the north. The junction with H-8130 (1954) on the southwest and with H-8134 (1954) on the west will be considered in the reviews of those surveys.

5. Comparison with Prior Surveys

There are no prior surveys by this bureau within the area of the present survey.

6. Comparison with Chart 8102 (Latest print date 12/2/57)
Chart 8147 (Latest Print date 10/7/57)

A. Hydrography

The charted hydrography originates with the boat sheet of the present survey (Bps. 52093-4-5). Only minor differences of 0.2 fm. to 2 fm. are noted between the charted depths and the present survey depths after verification and review.

1. The islet surrounded by reef charted in lat. $55^{\circ}03.3'$, long. $132^{\circ}30.2'$ from the advance manuscript of air-photographic survey T-11294 was erroneously delineated. This feature is shown on T-11294 as an island whose high-water line coincides with the charted reef limits.
2. The rock awash charted in lat. $55^{\circ}04.38'$, long. $132^{\circ}34.13'$ originates with advance manuscript of air-photographic survey T-9903, where it is delineated as a reef. This feature was revised on the present survey to an islet surrounded by a reef in accordance with a statement on page 4 of the Descriptive Report. (Signal NOB is located on the islet.)
3. The rock awash located on the present survey in lat. $55^{\circ}05.49'$, long. $132^{\circ}32.70'$ has not been charted.

B. Aids to Navigation

There are no aids to navigation within the area of the

present survey.

7. Condition of the Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth-plotting was accurately done.

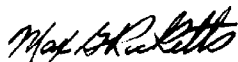
8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Work Recommended

The survey is considered basic and no additional work is recommended. However, as a matter of record it is noted that the ridge in lat. $55^{\circ}03.8'$, long. $132^{\circ}36.4'$ is only sparsely developed.

Examined and approved:



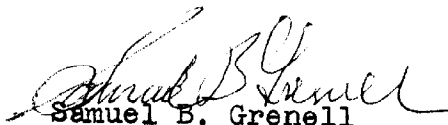
Max G. Ricketts
Chief, Nautical Chart Branch



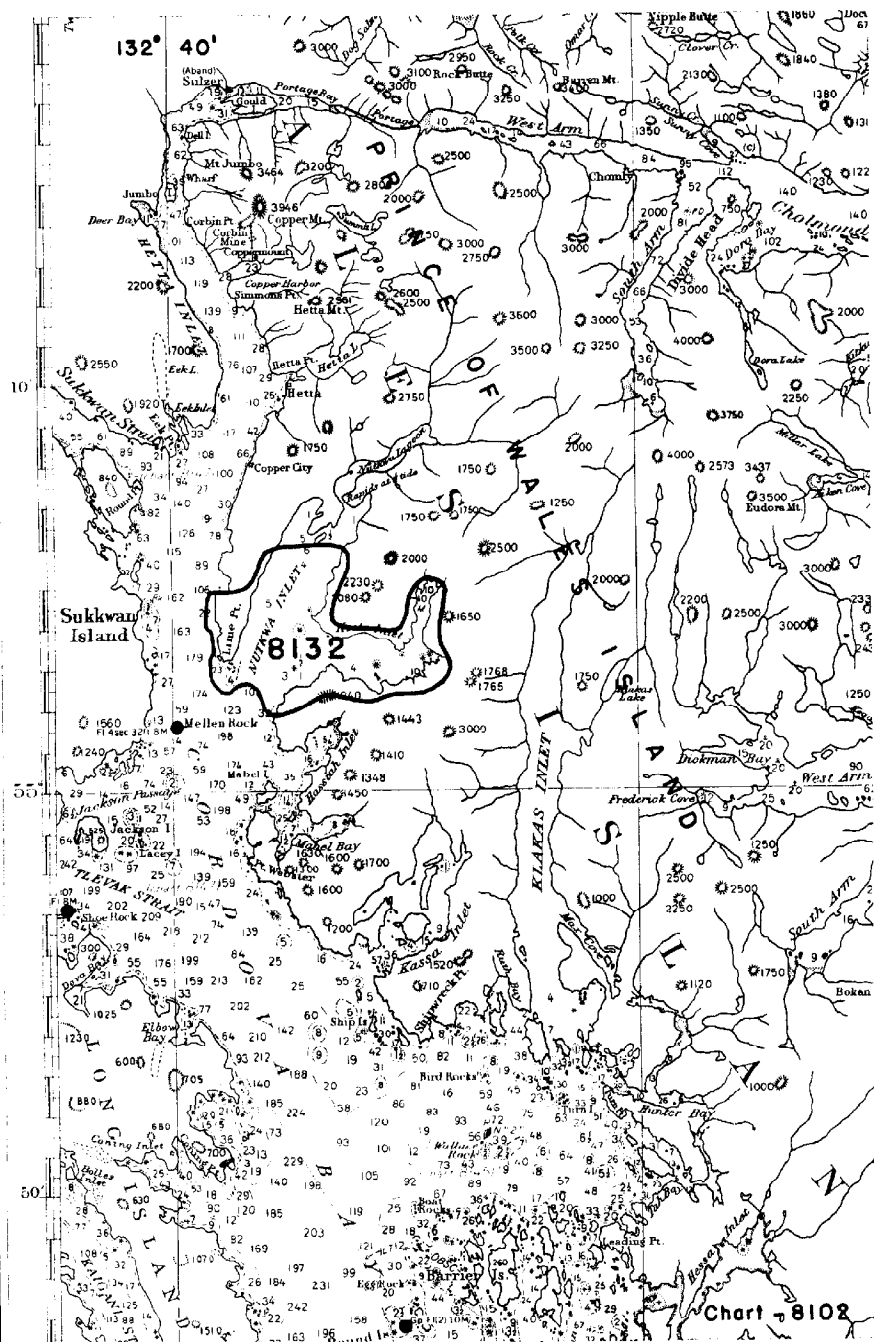
Ernest B. Lewey
Chief, Division of Charts



Karl B. Jeffers
Chief, Hydrography Branch



Samuel B. Grenell
Chief, Division of Coastal Surveys



NAUTICAL CHARTS BRANCH

SURVEY NO. H-8132

Reviewed 5-21-58

Record of Application to Charts

[illegible]

M:216B-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.