8232

Diag. Cht. No. 8102-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PA-1455 *Office No.* H-8232

LOCALITY

State S. E. Alaska

General locality Hetta Inlet

Locality Jumbo Island to Gould Island

19 55

CHIEF OF PARTY

J. C. Partington

LIBRARY & ARCHIVES

DATE January 20, 1959

B-1870-1 (1)

8232

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER NO. ~~H-8230, 8231,~~ 8232

Field No. ~~PA-1255, 1355,~~ 1455

State S. E. Alaska

General locality ~~South East Alaska~~ Hetta Inlet

Locality ~~Hetta Inlet~~ Jumbo I. to Gould I.

Scale ~~1:10,000~~ Date of survey ~~18 May~~ 4 August - 20 August 1955

Instructions dated 7 January 1955

Vessel USC&GS Ship PATTON

Chief of party J. C. Partington

Surveyed by W. C. Russell and F. J. Tucker

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

Fathograms scaled by P. T. Pediangco & F. J. Tucker

Fathograms checked by D. A. Doe, W. L. Piner & B. W. Hayes

Protracted by H-8230, C. A. J. Pauw; H-8231, C. R. Lehman ; H-8232, V. F. Flor

Soundings penciled by H-8230, C. A. J. P.; H-8231, C. R.L.; H-8232, V. F. F.

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW and based on velocity of sound of 800 fms./sec.

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 16—66520-1

R.T.M.

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEYS NOS. H-8230 (PA-1255), H-8231 (PA-1355),

AND H-8232 (PA-1455)

HETTA INLET, S. E. ALASKA

SCALE 1:10,000 - DATE 1955

U. S. C. & G. S. S. PATTON, J. C. PARTINGTON, COMDG.

# # # # #

A. PROJECT:

This survey was accomplished under Revised Instructions - Project 1357, dated 7 January 1955, issued by The Director.

B. SURVEY LIMITS AND DATES:

The three boat sheets join in consecutive order and cover that part of Hetta Inlet north of Latitude 55° - 05' and west of Longitude 132° - 40.5', at junction with HODGSON 1954 Field Season (HO-1754, HO-2154, and HO-1854) to the head of Portage Bay. The western limit, at the south-east end of Sukkwan Strait, is bounded by a north-south line at Longitude 132° - 44.0'.

Field work on all three sheets was started on 18 May 1955 and completed on 20 August 1955

C. VESSEL AND EQUIPMENT:

All hydrography was done in Launch No. 87 operating from the Ship PATTON. Soundings were taken with an 808-A recording fathometer No. 51, calibrated for a velocity of 800 fms/sec., supplemented by hand lead soundings on shoals and rocks. Bottom samples were taken by wire with hand sounding machine mounted on the launch.

D. TIDE AND CURRENT STATIONS:

Three portable automatic tide gages were established within the limits of the survey. The tidal data from each tide station applied to an entire sheet. The number of the sheets and the location of the tide station to which it applies, are as follows:

D. TIDE AND CURRENT STATIONS - Contin.

Sheet No.	Location	Latitude	Longitude
H-8230 (PA-1255)	Mud Bay	55° - 04.95'	132° - 37.90'
H-8231 (PA-1355)	Copper Harbor	55° - 12.65'	132° - 37.50'
H-8232 (PA-1455)	Sulzer	55° - 17.18'	132° - 37.28'

Current station was observed on a 9-fathom shoal in Latitude 55° - 06.75', Longitude 132° - 38.40'.

E. SMOOTH SHEETS:

All work on the smooth sheets will be done by the Seattle Processing Office and will be covered by an addenda to this report.

F. CONTROL STATIONS:

Sheet H-8230 (PA-1255):

The following triangulation stations were used for hydrographic control:

BRETT 1908-14, CEDAR$_2$ 1908, CLOSE 1908-14, EASY$_2$ 1908, FOG 1908, GRASS 1905, 1954, LIME$_2$ 1954, LOG 1908-14, POINT 1908, and ROUND 1908-14.

The following stations were first located as photo-hydro signals and later located by triangulation and their positions computed:

ABE, BIB, ERA, ICE, OAT 1954, PLY.

During hydrography, when shifting fixes from one side to the other side of Hetta Inlet, slight jumps occurred in the lines and in the locations of reefs on the west side of inlet, indicating a possibility that signals BIB, OAT 1954, ABE, and PLY were slightly out of relation with the other control. It is recommended that the computed positions of these signals be used for their location on the smooth hydrographic sheet.

Not Applicable

Stations ICE and ERA were cut in by triangulation after their location was made by photogrammetric methods. Their positions vary slightly from the photo-hydro locations. It is recommended that the computed positions of these signals be used for their location on the smooth hydrographic sheet.

Hydro signals SAL, TRY, VAN, WAR, and YET in Mud Bay were first located from photographs. At the start of hydrography in Mud Bay, jumps in the lines were noted. The above stations were then located by sextant cuts, holding photo-hydro signals BIB and PIE fixed. Using the sextant locations of these stations, no jumps in the lines occurred. On these stations, the sextant locations are recommended to be used on the smooth hydrographic sheets.

During hydrography, certain photo-hydro signals were ascertained to be out in position, and were relocated by sextant cuts. The sextant location of the following stations was used:

BAG, FLY, LEO, LIP, PEN

F. CONTROL STATIONS - Contin.

All other signals were located from manuscripts (photo-hydro). All signals are listed in alphabetical order, together with their source, in the index sheet of Vol. 1.

Not applicable

Sheet H-8231 (PA-1355):

The following triangulation stations were used for hydrographic control:

AMO 1955, ANTON 1955, BAT 1955, BRETT 1908-14, COPPER$_2$ 1908, EASY$_2$ 1908, ERA 1955, EVA 1955, FIG 1955, GAS 1955, HETTA 1955, HEX 1955, ICE 1955, IDA 1955, MAR 1955, PARKA 1955, POD 1955, POINT 1908, SIGN 1955, SIMON 1955, TALON 1955, YAM 1955.

Not applicable

Stations ERA, ICE, YAM, and MAR, above, were located as photo-hydro signals and used for hydrography prior to being located by triangulation. Their triangulation positions should be used on the smooth hydrographic sheet.

All other signals were located from manuscripts (photo-hydro). All signals are listed in alphabetical order, together with their source, in the index sheet of Vol. 1.

Sheet H-8232 (PA-1455):

All signals on this sheet were located from manuscripts (Photo-hydro stations) and are listed in alphabetical order in the index sheet of Vol. 1.

G. SHORELINE AND TOPOGRAPHY:

The shoreline and topography will be compiled from air photographs field inspected by this party during the current season. The delineation of the shoreline, ledges, and offlying rocks, as transferred to the boat sheets from the incomplete manuscripts, were checked during the hydrographic surveys. The shoreline which was dashed on the manuscripts appeared to be in good agreement to existing shoreline. No shoreline discrepancy was noted.

It was impractical to delineate the low water line in all cases due to steep and rocky shore. At the mouth of the larger creeks, there usually were tide flats which dropped off abruptly at the outer edge. The dotted line, taken from the manuscripts and shown on the boat sheets outside of high water line, delineates in general, the low water line. Sounding lines were run as close to the beach as circumstances would permit.

H. SOUNDINGS:

Soundings were taken with an 808 type recording fathometer No. 51, operated on the fathom scale. Hand lead soundings were made on shoals and isolated rocks. Wire soundings were taken when obtaining bottom samples.

H. SOUNDINGS - Contin.

The fathometer initial was set at zero on the fathogram and bar checks taken three times daily, at 2, 4, and 7 fathoms. The recorded index corrections together with the phase comparisons have been applied as one correction in the sounding volumes. A summary of the index and phase corrections for each sheet are given in Table 2, following this report.

The wire soundings, especially in deep water, did not in general, agree favorably with the corrected fathometer sounding, due principally to a soft mud bottom, and in some instances, due to currents, sloping the wire. As a result, the wire soundings were not considered for fathometer comparisons.

I. CONTROL OF HYDROGRAPHY:

The hydrography was controlled by three point sextant fixes on signals ashore, with the one exception in the narrow Gould Passage, H-8232 (PA-1455) where hydrography was controlled by estimating distances off signals, when three point sextant fixes could not be obtained. No unusual or substandard methods were used.

J. ADEQUACY OF SURVEY:

This survey is complete and is adequate to supersede prior surveys for charting. Junctions with adjoining sheets are satisfactory and no holidays exist. Depth curves at the junctions between Sheets H-8230, (1455) H-8231, (1355) and H-8232 (1355) were checked by overlay tracing and found to be adequate. Junction of Sheet H-8230 with the northern limits of HODGSON 1954 season's work was found adequate.

K. CROSSLINES:

Sheet H-8230 (PA-1255):

Approximately 45 miles of crosslines or approximately 8% of all lines are crosslines.

Sheet H-8231 (PA-1355):

Approximately 36 miles of crosslines or approximately 10% of all lines are crosslines.

Not Applicable

Sheet H-8232 (PA-1455):

Approximately 18 miles of crosslines, or approximately 9% of all lines are crosslines.

All crossings appear to be satisfactory.

L. COMPARISON WITH PRIOR SURVEYS:

Sheet H-8230 (PA-1255):

This survey covered parts of old surveys H-2787, a 1905, 1:40,000 survey, H-3690, a 1914, 1:10,000, and H-2788, a 1905, 1:20,000 survey.

L. COMPARISON WITH PRIOR SURVEYS - Contin.

Sheet H-8231 (PA-1355):

This survey covered parts of old survey H-2788, 1905, 1:20,000.

Sheet H-8232 (PA-1455):

This survey covered parts of old survey H-2788, 1905, 1:20,000. and joins H-8231(1955) on the south.

The above old surveys were of a reconnaissance nature and all information from them was noted on the chart and items under this will be taken up under Paragraph M.

M. COMPARISON WITH CHART:

The three surveys were compared with Chart 8147, Third Edition, Print date 12 May 1952. Locations are from the boat sheets and depths are from predicted tides. These may be revised slightly when smooth plot is made.

CHARTED LOCATION	CHART DEPTH	NEW LOCATION	NEW DEPTH	REMARKS
		Sheet H-8230 (PA-1255)		
55 - 05.05 132 - 37.90	Sunken Rock	55 - 05.02 132 - 37.92	1.5 fms.	
55 - 09.17 132 - 43.12	2 rocks awash in this area	55 - 09.15 132 - 43.10	2 rock reefs uncovered 2 ft. at MLLW	
55 - 07.78 132 - 41.73	Islet	55 - 07.80 132 - 41.80	Rock reef uncovered 10 ft. at MLLW	North end of general foul area
55 - 06.90 132 - 41.36	Rock bares 2' at MLLW	55 - 06.88 132 - 41.35	Rock reef bare 8' at MLLW	S. end of foul area extending N. to shore
55 - 06.73 132 - 41.58	Rock awash	55 - 06.75 132 - 41.58	Rock reef bare 14' at MLLW	E. side of general foul area
55 - 06.50 132 - 42.50	Islet	55 - 06.53 132 - 42.48	Rock reef bare 5' at MLLW	
55 - 06.52 132 - 42.88	Sunken rock	55 - 06.55 132 - 42.85	Rock reef bare 9' at MLLW	General foul area
55 - 05.90 132 - 41.90	Islet	No trace found		Delete from chart
55 - 05.90 132 - 42.36	Islet	No trace found		Delete from chart
55 - 05.63 132 - 42.28	Islet	No trace found		Delete from chart

Not Applicable

M. COMPARISON WITH CHART - Contin.

CHARTED LOCATION	CHART DEPTH	NEW LOCATION	NEW DEPTH	REMARKS
	Sheet H-8230 (PA-1255) Contin.			
55 - 05.35 132 - 41.40	Islet	No trace found		Delete from chart. Rock ledge in area covered at HW
55 - 05.82 132 - 41.35	Three sunken rocks	55 - 05.73 132 - 41.33	One rock reef bare 8' at MLLW	
	Sheet H-8231 (PA-1355)			
55 - 08.40 132 - 39.40	Two rocks awash	55 - 08.42 132 - 39.37	One rock reef awash at MLLW ✓	Not Applicable
55 - 09.78 132 - 35.02	Rock awash	55 - 09.75 132 - 35.07	Rock reef uncovers 3' at MLLW ✓	
55 - 10.18 132 - 34.90	Three sunken rocks	55 - 10.15 132 - 34.93	Rock ledges awash at MLLW	General foul area ✓
55 - 10.1 132 - 34.7	Three sunken rocks	55 - 10.1 132 - 34.6	Rock reef and ledge awash at MLLW	General foul area ✓
55 - 12.75 132 - 37.80	Rock awash	55 - 12.72 132 - 37.80	Rock ledge awash at MLLW ✓	
	Sheet H-8232 (PA-1455)	Compared with Print Date	Chart 8147 5/12/52. by field Party.	
Item 1 55 - 16.85 ✓ 132 - 34.48 ✓	Sunken rock	No trace found ✓	*	Delete from chart. Rocky beach in vicinity is bare at MLLW
2 55 - 16.81 132 - 34.80	Rock awash	*55 - 16.68 132 - 34.68	* Rock ledge uncovers 4' at MLLW	Outside of general foul area ✓ Apply to chart.
3 55 - 15.05 132 - 40.20	4 fms. From H-2788 (1905) soundings were read to the nearest fathom.	55 - ~~15.01~~ 14.99 ✓ 132 - 40.20 ✓	4½ fms. ✓ use this depth for charting. L.S.S. 2/24/60	Investigation requested on preliminary review 1/26/53
4 55 - 14.63 132 - 40.32	7 fms.	55 - 14.55 ✓ 132 - 40.~~12~~ 31	1½ fm. ✓	Investigation requested on preliminary review 1/26/53 Position 145f ✓
5 55 - 15.40 132 - 40.12	* Islet ✓	No trace found ✓		Delete from chart ✓

* Not charted on present print (Revision 10/7/57 - 8147)

M. COMPARISON WITH CHART - Contin.

CHARTED LOCATION	CHART DEPTH	NEW LOCATION	NEW DEPTH	REMARKS
		Sheet H-8232 (PA-1455) Contin.		
6 55 - 17.26 132 - 36.33	Sunken rock	*55 - 17.14 132 - 36.34	Rock reef uncovered 8' at MLLW	E. edge of General foul area
7 55 - 17.31 132 - 36.52	Rock awash	*55 - 17.22 132 - 36.53	Rock ledge uncovered 8' at MLLW	Outside edge of rock ledge to HWL
8 55 - 17.28 132 - 37.01	Rock awash	*55 - 17.16 132 - 37.00	Rock reef ~~awash~~ at MLLW	General foul area
9 55 - 17.25 132 - 37.08	Sunken rock	*55 - 17.12 132 - 37.10	~~1½~~ or uncovered 7ft. fm.	General foul area

*The above new locations noted with asterisks, are slightly south of the charted locations due to a displacement of the topography between the chart and the boat sheet. Shoreline on Prior Surveys inaccurate.

See next page.

N. DANGERS AND SHOALS:

Listed below are dangers and shoals and critical soundings found in addition to those listed under Paragraph "M".

LOCATION	DEPTH	REMARKS
	Sheet H-8230 (PA-1255)	
55 - 06.43 132 - 42.35	Bare 2.5 ft. at MLLW	Rock reef - 70 m
55 - 04.43 132 - 41.11	0.9 fms.	Rock - 1 s
55 - 04.05 132 - 40.98	4½ fms	Shoal sounding 208 - 209 g
55 - 04.32 132 - 41.18	3½ fms.	Shoal sounding 3 - 4 s
	Sheet H-8231 (PA-1355)	
55 - 10.17 132 - 35.10	2⅘ fms. 2± "	Shoal sounding 1 l " " 110 - 111g
55 - 10.26 132 - 34.92	2⅔ fms.	Shoal sounding 2 l

Not Applicable

N. DANGERS AND SHOALS - Contin.

LOCATION	DEPTH	REMARKS
	Sheet H-8232 (PA-1455)	
10 55 - 15.15 / 132 - 40.03	2 fms.	Shoal sounding 87 ft apply to chart instead of 1fm originating from Bp of BS 53238
11 55 - 16.68 / 132 - 37.78	2 fms.	Shoal sounding 30 k apply to chart - instead of 1fm originating with Bp 53238 of BS.
12 55 - 16.25 / 132 - 37.80	Islet uncovered 2½ft. at MHW 4ft	Position of outside of ledge of Islet 84 g
13 55 - 17.15 / 132 - 36.65	Rock reef awash at MLLW	Position 3 h. West edge of foul area

In addition to the above, there are numerous small reefs and ledges which were located but are not listed on account of being close inshore.

The small passage in Latitude 55° - 16.6', Longitude 132° - 35.6' was too foul for launch hydrography.

O. COAST PILOT INFORMATION:

Additions and corrections to U. S. Coast Pilot - Southeast Alaska - 1952:

Page 221, Line 27: Delete - "including Portage Bay at the head".

Page 221, Line 34: Add sentence - There is a sunken rock, covers by 1-1/2 fathom, 100 yards north of the north end of islet on south side of Mud Bay.

Page 221, Line 37: Delete - "either Mud Bay or".

Page 221: Add - Y Bay (recommended geographic name), the small bay on the west side of Hetta Inlet 1.5 miles southwest of Round Point is seldom used for anchorage, and only by those fishermen with local knowledge. The bay is divided by a chain of islands. The north portion is narrow and dangers exist. By steering mid channel courses between the small rock island and the north shore, at the entrance to the bay, into the south portion of the bay, good anchorage in mud bottom for small craft can be obtained near the head and midway of the south portion of the bay, in 5 to 8 fathoms.

Page 221, Line 41 through Line 43: Delete and add - Eek Inlet, on the west side of Hetta Inlet, at the northern side of Sukkwan Strait Entrance has been used by fishermen in small craft, with local knowledge. Mid channel courses should be steered to anchorage in 8 fathoms, midway in the inlet, about 0.3 mile northwest of the narrow entrance.

Page 222, Line 2: Add to the sentence - by fishermen who have local knowledge of the area. There are numerous reefs and shoal soundings in the cove.

Page 222, Line 5: Add - after "there is anchorage in" - 10 to 20 fathoms.

Page 222, Line 16: Add sentence: The west channel should be attempted only at high water, since there is a 1 fathom shoal in mid-channel at the south entrance.

O. COAST PILOT INFORMATION - Contin.

Page 222, Line 23: Add to end of sentence (Gavin Passage) - and should not be attempted at any stage of the tide as a through passage into Portage Bay, because of tidal current and numerous rocks and dangers at the east end of the passage.

Page 222, Line 25: Add sentence - It (Sulzer Passage) should be navigated by only those who have thorough local knowledge.

The survey vessel anchored in Mud Bay, Copper Harbor, and off Sulzer, during the course of the survey.

During the period of this survey the weather was good to bad, with strong southerly breezes preventing field work for four days.

P. AIDS TO NAVIGATION:

No fixed or floating aids to navigation are within the limits of this survey.

Q. LANDMARKS FOR CHARTS:

None recommended.

R. GEOGRAPHIC NAMES:

On 22 July 1955, Mr. James Edenso, whose address is Hydaburg, Alaska, was interviewed, and was at that time employed as a watchman at Eek Inlet for the U. S. Fish and Wildlife Service. Mr. Edenso, a member of the Indian race, was born at Howkan village in Kaigani Strait, and is about 60 years old. He has fished most of his life in and around Cordova Bay. Mr. Edenso stated that the following geographic names are in local use:

Blanket Island - The island at the southeast entrance to Sukkwan Strait whose northeast point is charted as Round Point. No specific reason was given for this name.

Y Bay - The small bay on the west side of Hetta Inlet and just south of the above Blanket Island. The name Y Bay is used to denote this body of water because of a slide at the head of the bay shaped like the letter Y.

Mud Bay - On the east side of Hetta Inlet, about 2-1/2 miles north of Lime Point. The Coast Pilot mentions this name although the name is not charted. Local fishermen call this Mud Bay because of its usefulness as an anchorage.

The sites of Copper City, Coppermount, Corbin Mine, and Sulzer no longer exist. They are abandoned and in complete ruins. The aerial tramway and pipeline shown on the chart at Coppermount, together with the aerial tramway leading to Copper Mt., and the flume at Sulzer, are no longer in existence and should be removed from Chart No. 8147.

S. SILTED AREAS:

What appeared to be silted areas on the fathograms was found to be soft green mud obtained by bottom samples. No significant silted areas were noted 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:

Sheet H-8230 (PA-1255):
None. FLUE 1954 was recovered, but was not used as a signal.

Sheet H-8231 (PA-1355):
None

Not Applicable

Sheet H-8232 (PA-1455):
DIP, NOW

Z. TABULATION OF APPLICABLE DATA:

Photogrammetric Report and data, Project 6117, 1955 Season
Triangulation Report, Project 1357, 1955 Season

Applicable data attached to this report:

Table of Statistics
Fathometer Corrections
Tidal Notes

Respectfully submitted by

William C. Russell

William C. Russell
CDR USC&GS

Forwarded:

J. T. Jarman

J. T. Jarman
CDR USC&GS
Cmdg., USC&GSS PATTON

TABLE NO. 1

STATISTICS FOR HYDROGRAPHIC SURVEY Contin.

SHEET H-8232 (PA-1455)

VOL.	DAY	DATE	VESSEL	POS.	STAT.MI.	H. L. & WIRE SOUNDINGS
1	a	4 August	Launch 87	198	26.7	2
2	b	5 "	"	188	26.6	1
3	c	7 "	"	113	15.4	-
3 & 4	d	8 "	"	190	27.5	-
4 & 5	e	9 "	"	189	24.0	-
5 & 6	f	10 "	"	176	20.0	5
6 & 7	g	11 "	"	145	17.3	2
7 & 8	h	18 "	"	154	14.0	7
8 & 9	j	19 "	"	179	23.2	5
9	k	20 "	"	78	4.6	18
		TOTALS:		1610	199.3	40

Area = 6.4 sq. stat. miles

TABLE NO. 2

FATHOMETER CORRECTIONS - (PHASE AND INDEX)

808 FATHOMETER NO. 51

Same corrections apply to Sheets H-8230 (PA-1255), H-8231 (PA-1355) and H-8232 (PA-1455) and are as follows:

Average of Index Corrections on A scale =	+0.4 fathoms
Average of Phase Corrections on A - B scale	+1.0 fathoms
Average of Phase Corrections on B - C scale	0.0 fathom
Average of Phase Corrections on C - D scale	-0.4 fathom

Index and Phase Corrections applied to the soundings:

Index Correction to A scale =	+0.4 fathom
Index and Phase Correction to B scale =	+1.4 fathoms
Index and Phase Correction to C scale =	+1.4 fathoms
Index and Phase Correction to D scale =	+1.0 fathom

TIDE NOTES FOR HYDROGRAPHIC SURVEYS

SHEET H-8230 (PA-1255)

Tide Station located in Mud Bay on southwest side of small island, Latitude 55° - 04.95', Longitude 132° - 37.90'

MLLW on staff = 3.9 feet

Not Applicable

SHEET H-8231 (PA-1355)

Tide Station - Hydrographic Signal EBB on south side of Copper Harbor, Latitude 55° - 12.65', Longitude 132° - 37.50'.

MLLW on staff = 3.4 feet

SHEET H-8232 (PA-1455)

Tide station located at Sulzer, Latitude 55° - 17.~~12~~10', Longitude 132° - 37.~~22~~32'

MLLW on staff = 5.8 feet

LIST OF SIGNALS - SHEET H-8232 (PA-1355)

SIGNAL	SOURCE	SIGNAL	SOURCE
ACE	Photo-hydro	JAR	Photo-hydro
ADO	"	JOB	"
ALP	"	JOY	"
AMP	"	JUT	"
ART	"		
		KED	"
BIB	"	KEY	"
BOB	"	KIN	"
BUM	"		
BUS	"	LAD	"
BUT	"	LEO	"
		LOW	"
CAB	"	LUG	"
CAT	"		
COB	"	MAG	"
COD	"	MAN	"
COP	"	MOP	"
COT	"	MUG	"
COW	"		
CUT	"	NED	"
DAY	"	NOW (Marked)	"
DIP (Marked)	"	NUT	"
DOG	"		
DON	"	ODD	"
DOT	"	OFF	"
DUO	"	OIL	"
EAT	"	PEG	"
EGO	"	PIN	"
EMO	"	PUP	"
END	"		
ERA	"	RAG	"
EVA	"	RAT	"
		RIG	"
FAT	"	RIO	"
FEZ	"	SAL	"
FIN	"	SET	"
FOG	"	SOL	"
FRY	"	SOP	"
		TAX	"
GAD	"	TOM	"
GAS	"	TOY	"
GIN	"	TUB	"
GUM	"	USE	"
		VAN	"
HEX	"	VET	"
HOE	"	WAG	"
HOP	"	WAR	"
HUT	"	WAS	"
		WHO	"
ICE	"	YAM	"
IDA	"	YAK	"
IRK	"	YES	"
IVY	"	ZIG	"
		ZOO	"

PROCESSING OFFICE NOTES H-8232

SMOOTH SHEET

The smooth sheet was hand constructed and checked by the Seattle Hydrographic Processing Unit.

CONTROL STATIONS

As stated in the hydrographer's report, the control is from photo manuscripts. Some difficulty was encountered using signals COW and JOY, which was reported to Washington. The Signals were relocated along with signals HEX and IDA. The positions of COW and JOY, along with the shoreline in the vicinity of the signals, were changed to agree with the new locations. Since the shift in location of HEX and IDA was small, they weren't moved. Changing the location of the latter two signals appeared to have little if any effect on the sounding lines.

SHORELINE AND TOPOGRAPHY

The shoreline and off shore detail was transfered from advance (1954-55-56) (1954-55) (1954-55-56) (1954-56) Manuscripts T-11494, T-11495, T-11498 and T-11499. Shoreline in the vicinity of signals COW and JOY was changed to agree with the replot dated 10/28/58.

ADEQUACY OF SURVEY

The survey is complete and adequate for charting. The junction with H-8231 (1955) has been compared and found to be satisfactory. Depth curves at the junction can be adequately drawn.

COMPARISON WITH CHART

This survey was compared with Chart 8147 4th Ed. Revised 10/7/57, which was made from the boat sheet. The agreement between the chart and the survey appears to be very good. A tracing at the scale of the chart is enclosed showing three soundings that are one fathom deeper than the charted depths. The sounding records have been checked and no soundings of the charted depths can be found.

Soundings charted from reproduction of Boat Sheet of Present Survey. Correct values are shown on S.S. after ver. & Review. L.S.S. 2/26/60

Respectfully submitted

William M. Martin

WILLIAM M. MARTIN
Supervisory Cartographer

Approved and forwarded

E. H. Kirsch

E. H. KIRSCH
CAPTAIN, C&GS
SEATTLE DISTRICT OFFICER

GEOGRAPHIC NAMES PENCILED ON H-8232

BEAVER CR.

CORBIN PT.

DEER BAY

DELL I.

GOULD I.

GOULD PASSAGE

HETTA INLET

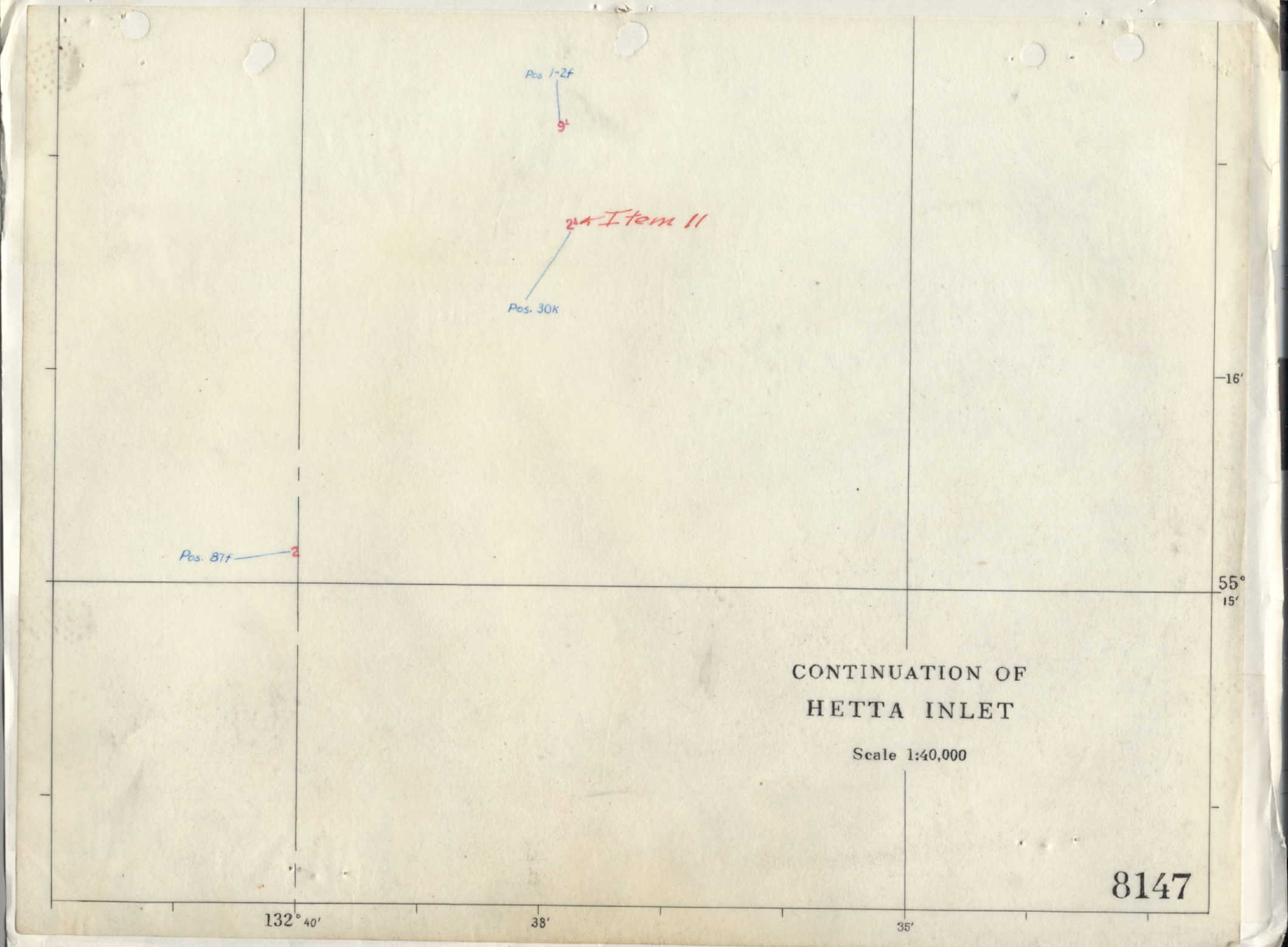
JUMBO CR.

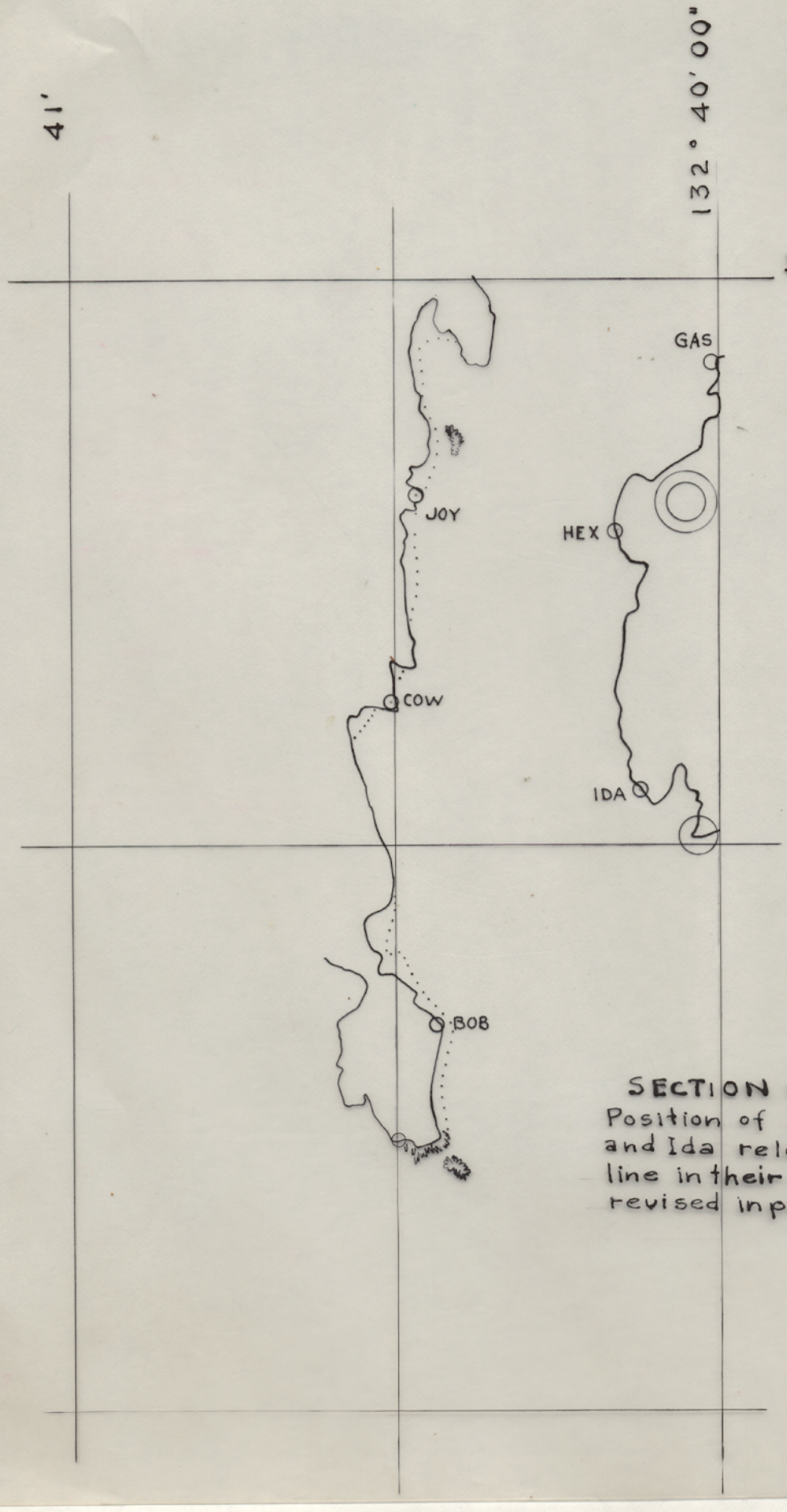
JUMBO I.

PERRY CR.

PORTAGE BAY

SULZER PASSAGE


Pos 1-2f
9½
2¼ Item 11
Pos. 30K
Pos. 87f
2
16′
55°
15′
CONTINUATION OF
HETTA INLET
Scale 1:40,000
8147
132° 40′
38′
35′



SECTION OF T-11498
Position of Joy, Cow, Hex and Ida relocated. Shore line in their vicinity also revised in position.

10-28-58

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8232

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Alaska			(title)							1
Southeast Alaska			"							2
Hetta Inlet										3
Corbin Point										4
Deer Bay										5
Jumbo Creek										6
Jumbo Island										7
Dell Island										8
Ferry Creek										9
Beaver Creek										10
Sulzer Passage										11
Gould Island										12
Gould Passage										13
Portage Bay										14
				Names approved 1-29-59						15
						L. Heck				16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Form 946

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8232

Records accompanying survey: Smooth sheets 1;

boat sheets 1; sounding vols. 9; wire drag vols. ;

Descriptive Reports 1; graphic recorder envelopes 2;

special reports, etc. .....

.....

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

Number of positions on sheet		1610
Number of positions checked		164
Number of positions revised		0
Number of soundings revised (refers to depth only)		0
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	8
Junctions	Time	✓
Verification of soundings from graphic record	Time	2
Special adjustments	Time	✓

Verification by J. C. Chambers Total time 226 Date 11/14/59

Reviewed by [signature] Time 25 Date 2/26/60

RHC

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens 26 February 1959

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8232

Locality Hetta Inlet, Alaska

Chief of Party: J. C. Partington in 1955

Plane of reference is mean lower low water, reading

5.8 ft. on tide staff at Sulzer, Hetta Inlet

15.1 ft. below B.M. 1 (1955)

Height of mean high water above plane of reference is 12.0 feet.

Condition of records satisfactory except as noted below:

Signature

Chief, Tides Branch

Comm-DC 34330

DIVISION OF CHARTS

REVIEW SECTION -- NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8232 FIELD NO. PA 1455

S. E. Alaska, Hetta Inlet, Jumbo Island to Gould Island

SURVEYED: August 1955 SCALE: 1:10,000

PROJECT NO. 1357

SOUNDINGS: 808 Depth Recorder
Hand Lead
Wire (Bottom samples)

CONTROL: Sextant fixes on shore signals

Chief of Party	J. C. Partington
Surveyed by	W. C. Russell and F. J. Tucker
Protracted by	V. F. Flor
Soundings plotted by	V. F. Flor
Verified and inked by	J. C. Chambers
Reviewed by	L. S. Straw
Inspected by	R. H. Carstens

DATE: 26 Feb 1960

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys T-11494 (1954-56), T-11495 (1954-55), T-11498 (1954-56), and T-11499 (1954-56).

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

2. Sounding Line Crossings

The depths at sounding line crossings are in adequate agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated, except close inshore where the steep shore and rocky bottom prevented development of the low water-line as well as portions of the 1-, 2-, 3-, and 5-fathom curves.

The bottom of that portion of Hetta Inlet covered by the present survey is very irregular. Gould Passage southeast of Gould Island is not navigable because of rocks and insufficient depth. Sulzer Passage on the north side of Gould Island is extremely dangerous, with minimum depths of 1 to 2 fathoms at charting datum.

4. Junctions with Contemporary Surveys

An adequate junction was effected on the south with H-8231 (1955), the only adjoining survey.

5. Comparison with Prior Surveys

H-2788 (1905), 1:20,000

Survey H-2788 (1905) which contains both topography and hydrography is the only prior survey made by this Bureau in the area covered by the present work. The development on a scale of 1:20,000 is so sparse that the 1905 work is considered little more than a reconnaissance survey. Differences in depths generally do not exceed 1 fathom.

The present survey which covers the area in greater detail is adequate to entirely supersede the prior survey within the common area.

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

A. Hydrography

The charted information originates with Bp 53238, which is a reproduction of the Boat Sheet of the present survey. There are only differences of about 1 fm. between smooth sheet and charted depths. The present survey supersedes the charted information.

B. Aids to Navigation

There are no official fixed or floating aids to navigation with in the limits of the present survey.

7. Condition of 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 Field Work Recommended

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

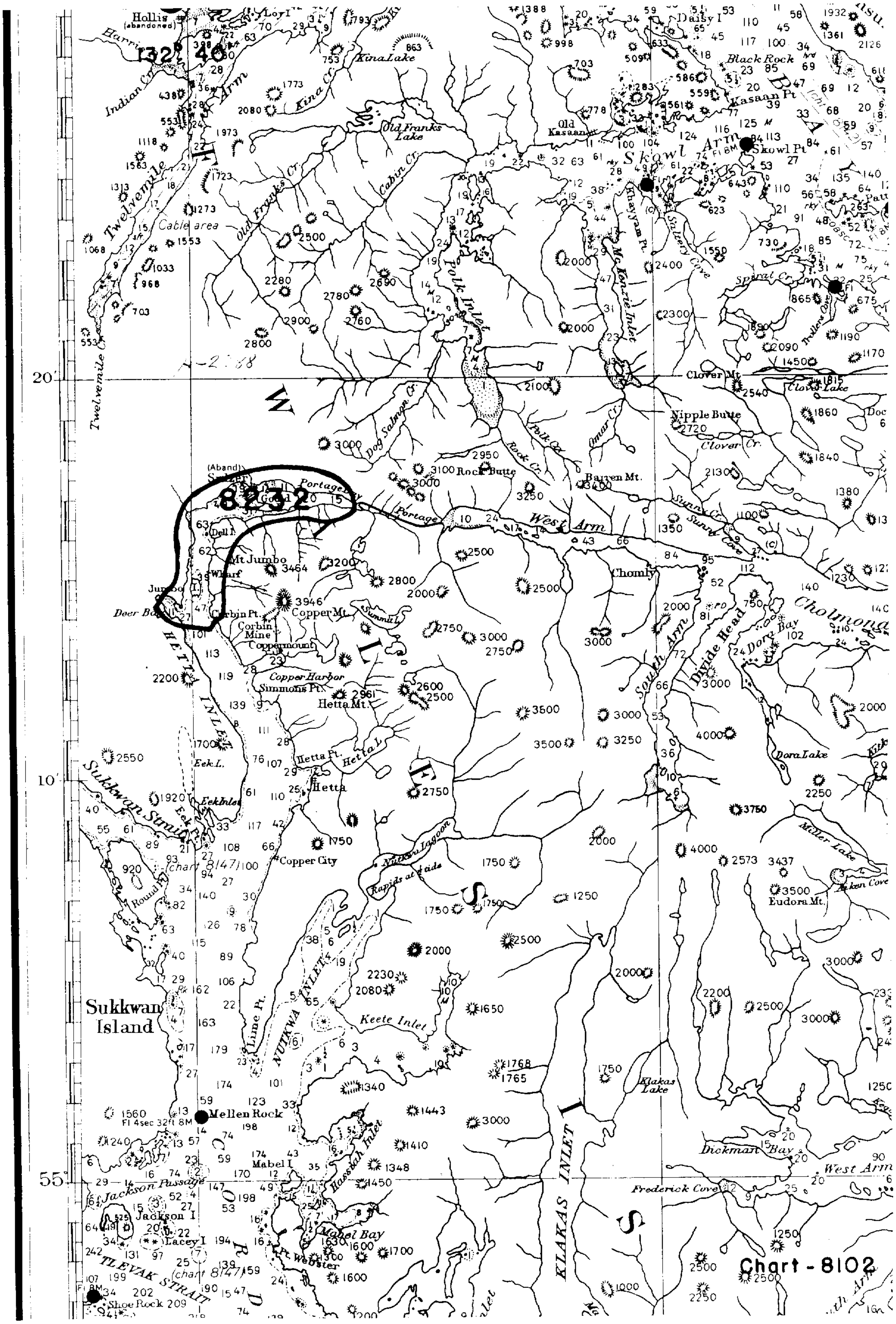
Examined and Approved:

Chief, Nautical Chart Branch

Chief, Division of Charts

Chief, Hydrography Branch

Chief, Division of Coastal Surveys



Hollis (abandoned)
132° 40'
Indian Cr.
Twelvemile Cr.
Cable area
Kina Lake
Kina Cr.
Old Franks Lake
Old Franks Cr.
Cabin Cr.
Polk Inlet
Old Kasaan
Daisy I
Black Rock
Kasaan Pt
Skowl Arm
Skowl Pt
Khayyam Pt.
McKenzie Inlet
Saltery Cove
Spiral Cr.
Clover Mt.
Clover Lake
Nipple Butte
Clover Cr.
Dog Salmon Cr.
Rock Butte
Rock Cr.
Polk Cr.
Omar Cr.
Barren Mt.
Portage Bay
Portage
West Arm
Sunny Cr.
Sunny Cove
Chomly
Cholmondeley
8232
Dell I
Mt Jumbo
Wharf
Jumbo I.
Deer Bay
Corbin Pt.
Copper Mt.
Summit L
Corbin Mine
Coppermount
Copper Harbor
Simmons Pt.
Hetta Mt.
Hetta Inlet
Hetta Pt.
Hetta L
Hetta
South Arm
Divide Head
Dora Bay
Dora Lake
Miller Lake
Eudora Mt.
Eek L.
Eek Inlet
Eek Pt.
Sukkwan Strait
Round L
Copper City
Nutkwa Lagoon
Rapids at tide
Nutkwa Inlet
Lime Pt.
Keete Inlet
Sukkwan Island
Mellen Rock
Mabel I
Hassiah Inlet
Mabel Bay
Pt. Webster
Jackson Passage
Jackson I
Lacey I
Tlevak Strait
Shoe Rock
Klakas Inlet
Klakas Lake
Dickman Bay
Frederick Cove
West Arm
(chart 8147)
Chart - 8102

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8232

Reviewed 2-26-60

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5-22-59	8102	M. Rogers	Examined Before ~~After~~ Verification and Review No Corrections
10-27-60	8152	R.E. Elkins	~~Before~~ After Verification and Review Fully applied from smooth sheet without going thru large scale chart 8147 (Prelim)
1/9/61	8102	E.E. Thomas	~~Before~~ After Verification and Review Fully applied thru 8152 above
14 Mar 61	8002	Earl M Brogan Jr	~~Before~~ After Verification and Review No hydro at this scale, considered comp. appd
5/24/62	8147	H. Ladd	~~Before~~ After Verification and Review Fully Applied
8-10-63	8147	h.j. keeler	~~Before~~ After Verification and Review ~~Appld. thru chl. 8151~~ hist cor only for T.O. print RKD
2/6/73	8147	M.D. KAMIS	~~Before~~ After Verification and Review, Inspection + signature - Re-examined for critical corrections
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

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