8129

Diag. Cht. No. 8102-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HO-1554 *Office No.* H-8129

LOCALITY

State S. E. Alaska

General locality Prince of Wales Island

Locality Klakas Inlet

19 54

CHIEF OF PARTY

John Bowie

LIBRARY & ARCHIVES

DATE July 3, 1957

8-1870-1 (1)

8129

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-8129

Field No. HO- 1554

State S. E. Alaska

General locality ~~Cordova Bay~~ Prince of Wales Island

Locality Klakas Inlet ~~& Max Cove~~

Scale 1:10,000 Date of survey 26 May - 10 June 1954

Instructions dated 17 March 1953 & 8 January 1954

Vessel Ship HODGSON

Chief of party John Bowie

Surveyed by E. F. Hicks, Jr.

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

Fathograms scaled by R. Owens

Fathograms checked by C. R. Lehman

Protracted by C. R. Lehman

Soundings penciled by C R Lehman

Soundings in fathoms ~~feet~~ at ~~MEAN~~ MLLW are based on a velocity

REMARKS: of sound of 800 fm. per sec.

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY

NO. H-8129 (FIELD NO. HO-1554)

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

SURVEYED BY E. F. HICKS, JR.

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 Klakas Inlet between parallels 54° 55!4 and 55° 00!5 and all of Max Cove.

Field work on this survey began on 26 May 1954 and was completed 10 June 1954.

On the south this survey is joined by contemporary survey H-8127 (1954) Field No. HO-1354. Surveys to the north were deferred in accordance with Paragraph 4 of the supplemental instructions. H-8229 (1955) on north

C. VESSEL AND EQUIPMENT

This survey was executed with standard 30 foot hydrographic launch No. 98 except for bottom samples in the deep part of Klakas Inlet which were taken from the Ship HODGSON. The sounding launch had a turning radius of approximately 25 meters at standard speed.

808 fathometer No. 62S with reeds calibrated for avvelocity of 800 fathoms per second was used for all hydrography.

D. TIDE AND CURRENT STATIONS

A portable automatic tide gage was maintained in Max Cove, Lat. 54° 57!22, Long. 132° 23!63 during entire period of this survey and was used without time or range correction for reduction of all soundings.

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

E. SMOOTH SHEET

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

F. CONTROL STATIONS

No triangulation exists within the limits of this survey, all control being furnished by air photographic surveys, manuscripts Nos. T-11295, T-11298 and T-11300. (cf 1953-54-55).

Where stations were needed and there were no identifiable picture points nearby, the stations were located by sextant fixes at the stations using objects located by air photographic methods. A list of all signals and method of location is included in Vol. No. 1 of the sounding record.

G. SHORELINE AND TOPOGRAPHY

All shoreline is from Manuscript Nos. T-11295, T-11298 and T-11300 furnished by the Washington Office.

The only shoreline discrepancy noted was at Lat. 55° 00!1, Long. 134° 25!3. Sounding line, positions 139-140b was run along the beach and the point should be shown about five meters inside this line. The discrepancy is probably due to overhanging trees which made the photographic shoreline difficult to delineate. Adjusted to Hydrography.

The rock shown on the manuscript in Max Cove, Lat. 54° 55!5, Long. 132° 21!6 does not exist and should not be charted. (Not charted)

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 were made with 808 fathometer No. 628.

The fathometer initial was set so that with the bar at two fathoms the fathometer would read two fathoms eliminating any index or initial correction. Since the fathometer was calibrated for a velocity of 800 fathoms per second 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 comparisons were made and correction applied. Details of the phase comparisons and corrections are given in table 2 following this report.

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. Junctions with adjoining sheet is satisfactory and no holidays exist. Depth curves

can be adequately drawn at the junction.

K. CROSSLINES

There are approximately 18.5 miles of crosslines or approximately 9% of total hydrography is 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, Print date 12 May 1952. No soundings are shown on the chart in the area covered by this survey, and the only features shown outside the high water line are two sunken rocks near Lat. 54° 55!9, Long. 132° 25!0. Both of these are islands uncovered at all stages of the tide and are so shown on the topographic manuscripts. *See paragraph 6 of Review

N. DANGERS AND SHOALS

The main channels are free of shoals and there are no dangers to navigation except when within 100 yards of the beach. The entire shoreline except the northeastern part of Max Cove was inspected at low water or minus tide and all rocks were located. That part of Max Cove was examined at low water, but was very foul and the individual rocks were not located. That section is indicated as foul on the boat sheet.

O. COAST PILOT INFORMATION:

Klakas Inlet is deep with depths up to ~~112~~ 116 fathoms in the center. No dangers to normal navigation exist except within 100 yards of the beach.

Max Cove is free of dangers except close along the beach and five to six fathoms may be safely taken to the head of the cove by following mid-channel courses.

No anchorages for large craft exist in the area. Small craft may anchor at numerous places along the beach. Excellent holding ground, soft mud, in depths of six to nine fathoms will be found in the head of Max Cove but it is believed that strong williwaw winds may be experienced in this area. The survey ship did not anchor within the limits of this sheet.

During the period of this survey good weather conditions were experienced but the period was so brief no statement regarding weather can be made.

No current observations were made but based on sounding lines run in opposite directions currents up to one half knot may be experienced in mid-channel in Klakas Inlet. No unusual currents were noted.

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.

R. GEOGRAPHIC NAMES

No geographic names other than KLAKAS INLET and MAX COVE which appear on Chart 8147 are recommended.

S. SILTED AREAS

No significant silted areas were noted but the general bottom characteristic is soft green mud.

T. BY-PRODUCT INFORMATION

This survey was executed before opening of salmon season so the extent of the salmon run is unknown. Some shrimping activity was noted in Klakas but the extent of the catch is unknown.

U. MARKED STATIONS

The following stations were marked by standard disks: CON, INK, SAM and T.G.B.M. No. 1.

Z. TABULATION OF APPLICABLE DATA

Tidal Data
Air Photographs

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-8129, HO-1554

VOL.	DAY	DATE	VESSEL	POS.	STAT. MI.	H. L. SDG.
1		26 May	134	15		(Rocks)
1	a	2 June	98	141	36.5	
1	b	3 June	98	164	27.6	
2	b	3 June	98	47	11.5	
2	c	4 June	98	213	38.0	3
2	d	5 June	98	91	15.3	
3	d	5 June	98	116	15.4	
3	e	6 June	98	200	22.0	15
3	f	7 June	98	57	11.0	
4	f	7 June	98	149	21.1	
4	g	8 June	98	88	8.6	24
4	A	10 June	HODGSON	6	(Botton samples only)	6
		TOTALS - - - - -		1287	207.0	48

Area = 4.5 sq. stat. miles

TABLE 2

FATHOMETER CORRECTIONS - (PHASE)

808 FATHOMETER NO. 62S

	Feet	
	A	B
	44.9	44.5
	45.0	44.5
	45.0	44.3
	44.6	44.0
	44.3	44.0
	44.2	44.0
	44.3	44.0
	44.4	44.0
	44.2	44.0
	44.0	43.6
Mean	44.5	44.1

	Fathoms	
	A	B
	39.5	39.1
	39.0	39.0
	38.0	38.3
	37.3	37.7
	36.6	36.8
	35.8	36.0
	35.0	35.1
Mean	37.3	37.4

	Fathoms	
	A	B
	37.3	37.0
	38.2	37.8
	39.0	38.5
	39.9	39.2
	39.9	39.7
	39.5	39.3
	37.0	39.1
	36.9	37.0
	37.0	37.0
Mean	38.3	38.3

A-B		+0.4
		-0.1
		0.0
Mean		+0.1
B-C		+1.8
Correction	A Scale	0.0
	B Scale	+0.1
	C Scale	+1.9

	Fathoms	
	B	C
	78.9	77.2
	79.0	77.2
	79.0	77.2
	79.1	77.3
	79.2	77.4
	79.1	77.2
	79.0	77.1
	78.9	77.0
	78.9	77.0
	78.6	76.9
Mean	79.0	77.2

TIDE NOTE FOR HYDROGRAPHIC SURVEY

H-8129 , Field No. HO-1554

Tide Station - (Hydrographic Signal GAG)

Max Cove - Lat. 54° 57!22
Long.132° 23!63

MLLW on staff = 3.7 ft.

PROCESSING OFFICE NOTES H-8129 (HO-1554)

Smooth Sheet

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

Shoreline and Topography

Shoreline and topography was transfered from film positives of T-11295, T-11298 and T-11300.

Where their were differences in rock elevations between the topo and hydro surveys the elevation from the hydrographic source was shown in pencil on the smooth sheet.

All other subjects are covered by the field report.

Respectfully submitted,

William M. Martin

William M. Martin
Supervisory Cartographer, C&GS

Approved and Forwarded

Curtis Le Fever

CURTIS LE FEVER, Captain
Seattle District Officer

DIVISION OF CHARTS

REVIEW SECTION * NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 8129 FIELD NO. HO-1554

S. E. Alaska, Prince of Wales Island, Klakas Inlet

Surveyed: May - June 1954 Scale 1:10,000

Project No. 1357

Soundings: 808 Depth Recorder and hand lead Control: Sextant fixes on shore signals

Chief of Party---------- John Bowie
Surveyed by----------- E. F. Hicks, Jr.
Protracted by---------- C. R. Lehman (Seattle D.C.)
Soundings plotted by--------- C. R. Lehman
Verified and inked by--------- G. A. Kozemczak
Reviewed by---------- L. S. Straw Date: 9/21/59
Inspected by---------- R. H. Carstens

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys T-11295, T-11298 and T-11300 of 1953 - 55.

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

2. Sounding line crossings

The sounding line crossings are in good 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.

The bottom of that portion of Klakas Inlet covered by the present survey is irregular, and drops abruptly to depths of 30-50 fathoms, then slopes gradually toward the center where the depths in the trough are from 80 to 116 fathoms.

The character of the bottom in Max Cove is similar to Klakas Inlet except that the steep slope is indicated principally

by the 2 - 5 curves and; from the 5 fathom curve the bottom slopes gradually to the center where the depth is 30 fathoms at the entrance, and becomes progressively less to 7 fathoms at the head of the cove.

4. Junctions with Contemporary Surveys

Adequate junctions were effected on the north with H-8229 (1955) and on the south with H-8127 (1954).

5. Comparison with Prior Surveys

There are no prior surveys by this Bureau in the area covered by the present survey.

6. Comparison With Chart 8147 (latest print date 10/7/57)

A. Hydrography

The charted hydrography originates with the boat sheet of the present survey (Bp. 52030). As a result of verification, many of the charted soundings should be revised to agree with the present survey. Often, in depths over 50 fathoms, there are differences from 1 to 2 fathoms and in a few instances greater differences between the charted soundings and the depths on the completed present survey.

The present survey completely supersedes the charted information.

B. Aids to Navigation

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

7. Condition of Survey

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

b. The smooth plotting was excellent.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

This is a good basic survey and no additional work is recommended.

Examined and Approved:

Max G. Ricketts
Chief, Nautical Chart Branch

Ernest B. Lewey
Chief, Division of Charts

Lorin F. Woodcock
Chief, Hydrography Branch

Samuel B. Grenell
Chief, Division of Coastal Surveys

GEOGRAPHIC NAMES PENCILLED ON H-8129

KLAKAS INLET

MAX COVE

PRINCE OF WALES ISLAND

GEOGRAPHIC NAMES

Survey No. H-8129

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	
Southeast Alaska		(for title)								1
Cordova Bay		"	"							2
Prince of Wales Island										3
Klakas Inlet										4
Max Cove		(tide station)								5
										6
			Names approved 7-17-57. L. Heck							7
										8
										9
										10
										11
										12
										13
										14
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										25
										26
										27

M 234

R4C

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens 23 July 1957

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 8129

Locality Cordova Bay, Alaska

Chief of Party: J. Bowie in 1954

Plane of reference is mean lower low water, reading

3.7 ft. on tide staff at Max Cove Entrance

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

Height of mean high water above plane of reference is 11.7 feet.

Condition of records satisfactory except as noted below:

William Thafus
Signature

Chief, Tides Branch

Comm-DC 34330

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8129

Records accompenying survey:

Boat sheets 1; sounding vols. 4; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 2-Envelopes

special reports, etc. 1-Smooth sheet and 1-Descriptive report.

.....

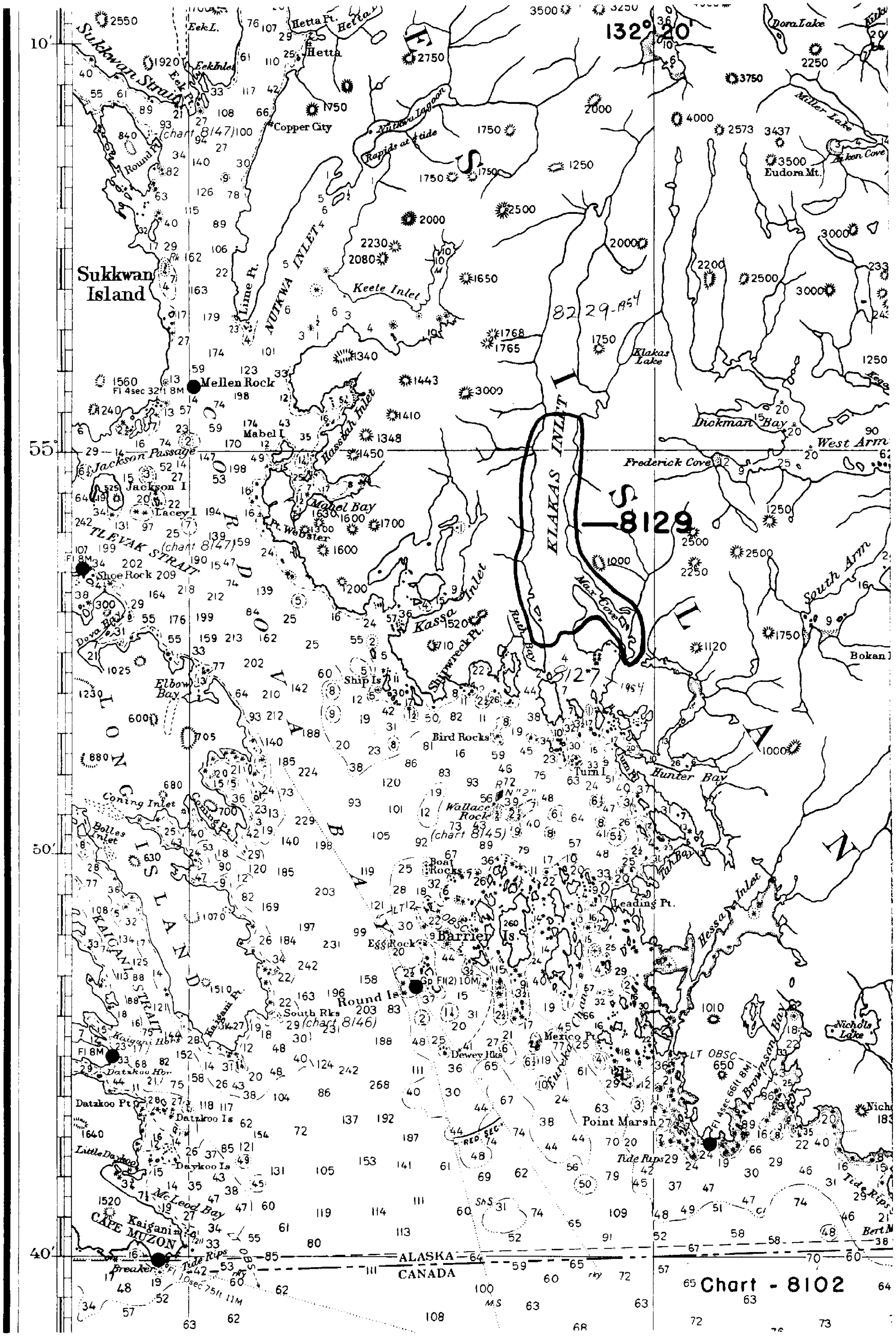
The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet		1286
Number of positions checked		40
Number of positions revised		0
Number of soundings revised (refers to depth only)		0
Number of soundings erroneously spaced		5
Number of signals erroneously plotted or transferred		0
Topographic details	Time	8
Junctions	Time	12
Verification of soundings from graphic record	Time	10

Verification by Geo A Kozemczak ....Total time 296.. Date 19 Jan 59

Reviewed by ..... Time 32 Date 21 Sept 1959

M-2232-1



132° 20'
Sukkwan Strait
Sukkwan Island
Eek Inlet
Hetta Pt.
Hetta
Copper City
Nutkwa Lagoon
Rapids at ½ tide
Nutkwa Inlet
Lime Pt.
Keete Inlet
(chart 8147)
Round Pt.
Dora Lake
Miller Lake
Eudora Mt.
Klakas Lake
8229-1954
Mellen Rock
Mabel I
Hassiah Inlet
Jackson Passage
Jackson I
Lacey I
Tlevak Strait
Mabel Bay
Pt. Webster
Shoe Rock
Dova Bay
Elbow Bay
Kassa Inlet
Shipwreck Pt.
Ship Is
Klakas Inlet
8129
Max Cove
8127-1954
Dickman Bay
Frederick Cove
West Arm
South Arm
Bokan
Hunter Bay
Bird Rocks
Turn I
Wallace Rock
(chart 8145)
Coning Inlet
Coning Pt.
Bolles Inlet
Boat Rocks
Barrier Is.
Leading Pt.
Egg Rock
Round Is
South Rks
(chart 8146)
Dewey Rks
Mexico Pt
Hessa Inlet
Nichols Lake
Brownson Bay
Point Marsh
Tide Rips
Kaigani Strait
Kaigani Hbr
Datzkoo Hbr
Datzkoo Pt
Datzkoo Is
Daykoo Is
McLeod Bay
Kaigani
Cape Muzon
Breaker
ALASKA
CANADA
Chart - 8102

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8129

Reviewed 9-21-59

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10-15-58	8102	R.E. Elkins	Partly applied Before ~~After~~ Verification and Review app thru chart 8147.
10-17-58	8152	R.E. Elkins	Partly applied Before ~~After~~ Verification and Review app thru chart 8102 dwg 11.
10-26-59	8102	R.K. DeLaunder	Completely applied ~~Before~~ After Verification and Review without going thru larger scale charts 8147
10-25-60	8152	R.E. Elkins	~~Before~~ After Verification and Review Fully applied thru chart 8102 dwg #13.
5/5/62	8147	H. Radden	~~Before~~ After Verification and Review Fully Applied
8-7-63	8147	h.j. keeler	~~Before~~ After Verification and Review ~~Appl. thru chart 8151~~ chart corr. only for T.O. print. KD
1/30/75	8147	M. D. KANIS	~~Before~~ After Verification and Review, inspection + signature - Re-examined for cartual / 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.

Examined before V&R - no copy until review to Ch E147

EHL 7/14/59