8688

Diag. Cht. No. 8201-3.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HO-10-2-62 *Office No.* H-8688

LOCALITY

State Alaska

General locality Sumner Strait

Locality Reid Bay & Approaches

19 62-65

CHIEF OF PARTY

E. W. Richards & J. K. Richards

LIBRARY & ARCHIVES

DATE May 1969

USCOMM-DC 37022-P66

8688

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-8688

Field No. HO-10-2-62

State ~~S. E.~~ ALASKA

General locality Sumner Strait

Locality Reid Bay and Approaches see also 2nd Titlesheet for 1963 work

Scale 1:10,000 Date of survey July - September 1962

Instructions dated Revised Instructions, 1-28-60 Supplemental Instructions, 12-8-60 & Supplemental Inst. 2-5-62

Vessel Ship HODGSON's - Launch CS-1192 and Port Motor Whaleboat

Chief of party Eugene W. Richards

Surveyed by E.W. Richards, H.E. McCall, B.F. Karwisch and D.E. Kimbell

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

Fathograms scaled by Fathometer Operators

Fathograms checked by Ship's Officers and Fathometer Operators

Protracted by Clarence R. Lehman

Soundings penciled by Clarence R. Lehman

Soundings in fathoms XXXX at XXXX MLLW

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY H-8688
(Field No. HO-10-2-62)

Scale 1:10,000

1962

Ship HODGSON

CDR E. W. RICHARDS COMDG.

A. PROJECT

OPR-446 in 1965

Project No. OPR-347 (originally CS-347).

Instructions:

Revised Instructions - Project CS-347, Sumner Strait, Southeast Alaska, No. S-2-HO, dated 28 January 1960.

Supplemental Instructions - Project OPR-347, Sumner Strait, Southeast Alaska, No. S-2-HO, dated 8 December 1960.

Supplemental Instructions - Project OPR-347, Sumner Strait, Southeast Alaska, No. S-2-HO, dated 5 February 1962.

B. AREA SURVEYED

The area surveyed includes the westerly inshore portion of Sumner Strait from Lat. 56°19.2' northward to Lat. 56°23.2' and Reid Bay.

Junctions with prior surveys:

None

Junctions with contemporary surveys:

H-8689 (1962)

HO-12.5-1-62, Scale 1:12,500 - along the easterly limits from Lat. 56°19.2' to Lat. 56°23.2'.

H-8653 (1961-62)

HO-10-1-61, Scale 1:10,000 along the southerly limits from Long. 133°49.0' to Long. 133°50.0'.

C. SOUNDING VESSEL

All soundings were obtained with Launch 1192 and the Port Motor Whaleboat.

Day letters for all launch hydrography are blue lower case letters.

Day letters for all whaleboat hydrography are brown lower case letters.

D. SOUNDING EQUIPMENT

DE-723 Fathometer, Serial No. 146, was used in all launch hydrography.

808 Fathometer, Serial No. 147, and 808 Fathometer, Serial No. 62-S, were used in all whaleboat hydrography.

E. SMOOTH SHEET

The projection was made by the Washington Office. The remainder of the processing was done by junior officers and ship's personnel.

F. CONTROL

Control is based on recovered triangulation stations for which data is published, photo-identified points and hydrographic points.

All hydrography was controlled by visual fixes using the above mentioned type of signals.

The main system of sounding lines were run in an E - W direction. At the shoreline, a series of sounding lines were run parallel to the shore to provide maneuvering room for the launch.

G. SHORELINE

Shoreline was transferred to the smooth sheet from 1:10,000 scale blue-line prints of Photogrammetric Manuscripts T-10706, T-10707, T-10708 and T-10715.

All shoreline was visually inspected from a skiff with the use of ~~photographic~~ azalia prints, except in areas where the high water line was questionable on the manuscripts. In these areas, sextant fixes were taken at the high water line.

G. SHORELINE (cont'd.)

The low water line is not defined by soundings in some areas due to the near vertical shore line which exists. In all other areas where the low water line is not defined, it is due to the existence of reefs and foul areas at the low water line.

H. CROSSLINES

Crosslines consisted of 11% of the regular system of sounding lines. There was general agreement at all crosslines.

I. JUNCTIONS

Junctions with contemporary surveys gave satisfactory results in all areas.

J. COMPARISON WITH PRIOR SURVEYS

The only prior survey of the entire area of this survey is H-1754 (1886) scale 1:80,000. Lack of detail and doubtful positioning on H-1754 makes a comparison with that survey impracticable. This survey completely supercedes H-1754 in the common area. There are no features on H-1754 which should be retained for charting purposes.

K. COMPARISON WITH THE CHART

In the area of this survey, Chart 8201 is apparently based entirely on the prior survey discussed in the preceding paragraph.

A number of shoal areas were found which were not previously located on Chart 8201.

L. ADEQUACY OF SURVEY

Survey completed in 1965

This survey is not completed. However, the completed portion is considered adequate in all respects to supercede prior surveys for charting purposes. No part of the surveyed area is considered substandard. All areas of shoaling on the completed area of this survey are considered adequately developed.

M. AIDS TO NAVIGATION

There are no fixed or floating aids to navigation within the area of this sheet.

N. STATISTICS

	No. Positions	Miles
Launch 1192 (Visual Control)	935	121.5
Port Motor Whaleboat (Visual Control)	838	90.5
Totals	1,773	212.0

Total Area - Sq. Nautical Miles	7.9
No. of Tide Stations	2
No. of Bottom Samples	66
No. of Serial Temperature Observations	3

O. MISCELLANEOUS

None

P. RECOMMENDATIONS

It is recommended that the survey of this area be continued northward on this sheet extending into and including Alvin Bay.

Q. REFERENCES TO REPORTS

Reports	Date Fwded.	Trans. Ltr. #
Fathometer Report 1962		
Records Forwarded Separately		
Field Edit Data	10/11/62	HO-51-62
Photographs	10/3/62	HO-47-62
Temperature and Salinity Data		
Port Beauclerc Tide Marigrams	5/18/62	HO-18-62
	8/5/62	HO-28-62
Port Beauclerc Tide Station Report and Leveling Records	5/2/62	HO-16-62
	8/5/62	HO-28-62
Reid Bay Tide Marigrams	8/5/62	HO-28-62
	9/24/62	HO-44-62
Reid Bay Tide Station Report and Leveling Records	7/19/62	HO-24-62
	8/5/62	HO-28-62
	8/8/62	HO-38-62

Records Forwarded With Sheet

1 Boat Sheet, HO-10-2-62
9 Sounding Volumes, HO-10-2-62
DE-723 Fathograms
808 Fathograms
Tide Curves and Tabulated Tide Reducers

TIDE NOTE

Project OPR-347 Sumner Strait, S. E. Alaska

Sheet No. H-8688 Field No. HO-10-2-62

Tide Station used on this survey:

Station	Latitude	Longitude	Time Meridian	Height MLLW on Staff
Reid Bay	56°23.3'N	133°53.1'W	120° W	4.0'

The Reid Bay tide gage was used on all hydrography.

All hourly heights were scaled directly from the marigrams for the tide stations except for launch hydrography positions 1f through 138f and whaleboat hydrography positions 1g through 96k. The hourly heights for these positions were furnished by the Washington Office.

ABSTRACT OF ECHO CORRECTIONS

SHEET HO-10-2-62 (H-8688)

Launch 1192 - Fathometer DE-723 #146

Apply 7/23/62 thru 7/26/62

DEPTH (fms)	CORRECTIONS (fms)
0.0 - 2.4	+ 0.3
2.5 - 9.0	+ 0.4
9.1 - 18.0	+ 0.5
18.2 - 28.8	+ 0.6
29.0 - 31.0	+ 0.7
31.5 - 41.0	+ 0.6
41.5 - 69.0	+ 0.8
69.5 - 97.5	+ 1.0
97.5 -101.0	+ 1.2
102 -129	+ 1.0
130 -150	+ 1.5
152 -184	+ 1.0

Apply 9/12/62 thru 9/18/62

0.0 - 3.8	+0.4
3.9 - 7.7	+ 0.5
7.8 - 16.6	+ 0.6
16.8 - 30.6	+ 0.7
30.8 - 58.0	+ 0.8
58.5 - 86.0	+ 1.0
86.5 - 101.0	+ 1.2
102 - 118	+ 1.0
119 - 150	+ 1.5
152 - 169	+ 1.0

ABSTRACT OF ECHO CORRECTIONS

SHEET HO-10-2-62 (H-8688)

Port Motor Whaleboat - Fathometer 808 No. 62S

Apply throughout survey for Fathometer 62S

DEPTH (fms)	CORRECTIONS (fms)
0.0 - 5.0	+ 0.2
5.1 - 9.0	+ 0.3
9.1 - 19.6	+ 0.4
19.8 - 31.0	+ 0.5
31.5 - 33.5	+ 0.4
34.0 - 61.5	+ 0.6

Port Motor Whaleboat - Fathometer 808 No. 147

Apply throughout survey for Fathometer 147

DEPTH (fms)	CORRECTIONS	
	A-Scale	B-Scale
0.0 - 2.0	0.0	
2.1 - 2.5	+ 0.1	
2.6 - 3.0	+ 0.2	
3.1 - 3.9	+ 0.3	
4.0 - 5.0	+ 0.4	
5.1 - 6.6	+ 0.5	
6.7 - 9.0	+ 0.6	
9.1 - 15.0	+ 0.7	
15.2 - 26.0	+ 0.8	
26.2 - 31.0	+ 0.9	
31.5 - 38.0	+ 0.8	
38.5 - 65.0	+ 1.0	- 3.6

LIST OF STATIONS - H-8688 (HO-10-2-62)

Name Used in Survey	Origin of Station
AMY	T-10715
ART	T-10707
BAD	T-10707
BAN	Vol.5, Pg. 27
BAY	BAY, 1929
BAR	T-10707
BAZ	Vol. 5, Pg. 28
BEG R.M. #1	BEG, 1929
BUD	T-10707
BIG	T-10707
BOU	BOULDER, 1915
BUM	T-10715
CAT	T-10715
COW	T-10715
DEB	T-10715
DIK	T-10707
DON	T-10715
ELF	T-10715
FAL	Vol. 2, Pg. 37
FOE	T-10715
FOR	T-10706
GUS	T-10715
HIL	T-10706

LIST OF STATIONS - H-8688 (HO-10-2-62)

Name Used in Survey	Origin of Station
HIS	Vol. 5, Pg. 28
HUG	T-10715
IVY	T-10715
JAW	T-10715
LEG	T-10707
LIP	T-10715
MAW	T-10715
NER	NER, 1929
NOW	Vol. 2, Pg. 37
NOR	T-10706
NUT	Vol. 5, Pg. 27
OHM	T-10708
OLE	T-10707
POL	T-10715
POM	POM, 1929
POP	Vol. 5, Pg. 28
PUP	T-10707
RAT	Vol. 5, Pg. 29
REID	REID, 1929
TAG	Vol. 5, Pg. 28
TEN	T-10707
TID	Vol. 6, Pg. 3
TOE	T-10707

LIST OF STATIONS - H-8688 (HO-10-2-62)

Name Used in Survey	Origin of Station
TOP	T-10707
TRE	T-10706
TUB	T-10707
TURN	TURN, 1929
WHO	T-10707
YEL	Vol. 5, Pg. 27

APPROVAL SHEET

Project OPR-347
Sheet H-8688

Reid Bay
Sumner Strait
Southeast Alaska

The field work on this survey was done under the direct supervision of the Commanding Officer. Boat sheets and records were examined daily. Field work was in progress until terminated by the close of the 1962 field season. An effort was made to clean up all holidays in the area surveyed and to bring the survey to an orderly close.

The Operations Division advised in separate correspondence that this sheet will be considered complete since the project will be terminated this year. The area surveyed is considered complete and adequate, however, the smooth plot, which was not started at the time of this approval, may disclose a need for additional work.

Harold E. McCall

Harold E. McCall
LT, C&GS

Eugene W. Richards

Eugene W. Richards
CDR, C&GS
Comdg., Ship HODGSON

FORM C&GS-712
(3-9-64)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

July 17, 1964

Seattle Regional Officer
~~Nautical Chart Division~~

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8688

Locality: Reid Bay, Summer Strait, Alaska

Chief of Party: E.W. Richards (1962)

Plane of reference is mean lower low water

Tide Station Used (Form C&GS-681): Reid Bay

Height of Mean High Water above Plane of Reference is as follows: 11.6 feet

Remarks Tide reducers for all positions prior to Sept. 17 have been revised in red and verified, due to a discrepancy in the plane of reference furnished the field party.

J. M. Symons

Chief, Tides and Currents Branch

USCOMM-DC 6680-P64

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-8688

Field No. HO-10-2-62

State Southeast Alaska

General locality Sumner Strait

Locality Reid Bay ~~to Sumner Island~~ and Approaches

Scale 1:10,000 Date of survey May, 11-24 1965

Instructions dated 12-9-64

Vessel USC&GSS PATTON

Chief of party LCDR James K. Richards

Surveyed by J. K. Richards, D. A. Moore

Soundings taken by fathometer, graphic recorder, [illegible]

Fathograms scaled by J. J. Saladin

Fathograms checked by Ship's Officers

Protracted by Clarence R. Lehman

Soundings penciled by Clarence R. Lehman

Soundings in fathoms [illegible] at [illegible] MLLW

REMARKS:

This survey is the completion of the sheet started by the HODGSON in 1962.

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

DESCRIPTIVE REPORT

To accompany

HYDROGRAPHIC SURVEY H-8688 (HO-10-2-62)

Scale 1:10,000

USC&GSS PATTON J. K. Richards, Comdg.

MAY, 1965

A. PROJECT

This survey is part of project OPR-448, Keku Strait, Southeast Alaska. INSTRUCTIONS were dated December 9, 1964.

B. AREA SURVEYED

Hydrographic surveying on this sheet was begun by the HODGSON in 1962. The sheet was completed by the PATTON in 1965. The information contained in this descriptive report refers only to that part of the sheet that was surveyed by the PATTON in 1965.

This survey, located in Sumner Strait, Southeast Alaska, covers the area west of Sumner Island to Kuiu Island, and extends between latitudes 56° 23' N and 56° 25' N. Hydrography was accomplished between May 11 and May 26, 1965.

This survey is covered by prior surveys H-2150, 1:40,000, 1892 and H-1749, 1:80,000, 1886. The survey junctions on the north with contemporary survey PA-10-3-65; on the east with survey H-8689, 1:12,500, 1962; and on the south with the 1962 hydrography on the same sheet.

C. SOUNDING VESSEL

Launch No. CS-1191 was used for all echo soundings on this survey. Launch position numbers and day letters are shown in violet on the boat sheet.

Some detached positions on rocks were obtained with the skiff. These positions are indicated in blue on the boat sheet.

Five bottom samples were obtained from the Ship PATTON. These positions are shown in violet capital letters.

D. SOUNDING EQUIPMENT

All echo soundings were obtained with a Raytheon DE-723B (No. 556) portable depth recorder, mounted in launch 1191. Depths were recorded in fathoms. The fathometer operated satisfactorily throughout the duration of this survey.

Echo sounding corrections were determined by bar checks to a depth of seven fathoms. Velocity corrections for greater depths were computed from temperature and salinity observations. Details relating to the determination of echo-sounding corrections are given in the 1965 Fathometer Correction Report.

Critical least depths were verified by leadline soundings. The sounding pole was used for determining heights of rocks.

E. SMOOTH SHEET

The 1965 field work on this sheet has not yet been smooth plotted.

F. CONTROL

Control of hydrography was obtained solely by visual three-point sextant fixes on shore signals. Most of the shore signals were built over triangulation stations and photo-hydro points. Ten signals were located by graphic control on planetable sheet PA-A-65 in areas where the shoreline was obscured by tree shadows on the photographs.

Photo-hydro signals were identified on 1955 single-lens photographs, and located by the pass-point method on manuscripts T-10707 and T-10708 (PH-5702).

G. SHORELINE

Shoreline details are obtained from manuscripts T-10707 and T-10708. The southern parts of these manuscripts, which had been field edited in 1962, were designated "advance". The northern areas of the manuscripts - where the 1965 hydrography was accomplished - had been designated as "incomplete", and were field inspected in 1965. The field inspection revealed a few discrepancies in the shoreline; details are contained in the 1965 field edit report.

All offshore rocks were located by three-point sextant fixes by the hydrographic party. There were small discrepancies between the photogrammetric and hydrographic (boat sheet) locations of two rocks awash: one at Lat. 56° 23.20' N, Long. 133° 51.62' W, and one at Lat. 56° 23.66' N, Long. 133° 52.34' W. This should be verified when the smooth sheet is plotted. The hydrographic locations of these rocks should supercede the photogrammetric locations. Images of rocks on the photographs are often difficult to define because of surrounding kelp and debris.

In many areas the low-water line was not defined by soundings because of the steep, rocky shoreline and foul areas.

H. CROSSLINES

The primary system of sounding lines was run in an east-west direction. Crosslines represent over 10% of the hydrography, exclusive of developments. All crossings appeared satisfactory.

I. JUNCTIONS

The junction with contemporary survey H-9101 (1965-70) PA-10-3-65 was excellent. The junction with survey H-8689, 1:12,500, 1962 on the east appears to be satisfactory in view of the steep slopes in this area. The junction with the 1962 work on the same sheet appears satisfactory in most places, but there are a few discrepancies in the southeast corner of the survey which should be checked further on the smooth sheet; the junction overlapped more than one sounding line in this area.

J. COMPARISON WITH PRIOR SURVEYS

The two old surveys that cover this area (H-2150, 1:40,000, 1892 and H-1749, 1:80,000, 1886) contain so few soundings and are at such a small scale that a comprehensive comparison is impracticable. The 1965 survey of course, defined the underwater topography in much greater detail than was possible on the prior surveys.

The only numbered presurvey review item that is within the limits of the survey is item No. 13. The presurvey review requested an investigation of the 12¼ fm. sounding at Lat. 56° 24.45' N, Long. 133° 52.10' W, stating that the exact location of this sounding was doubtful, and that it probably should fall

about 550 meters to the westward. The 1965 survey indicates that this theory is correct. Several closely-spaced lines were run in the vicinity of the 12¼ fm. sounding. It was found that this is an area of relatively smooth bottom with depths of about 21-22 fathoms. The nearest 12-fm. depths are about 580 meters to the westward.

The two rocks shown on prior survey H-1749 in the vicinity of Lat. 56° 23.1' N, Long. 133° 50.2' W are incorrectly located. Additional details regarding this feature are given in section K of this report.

K. COMPARISON WITH CHART

The largest scale chart of this area is C&GS Chart 8201, which is too small a scale to permit a detailed comparison.

The rock awash shown on the chart at Lat. 56° 23.0' N, Long. 133° 51.5'W is the most significant danger to navigation within the area of the hydrography. There are actually two prominent rocks in this vicinity: one 5 ft. above MLLW at Lat. 56° 23.15' N, Long. 133° 51.58' W, the other 6 ft. above MLLW about 100 meters northwestward.

The most significant discrepancy in the chart is the two rocks awash shown at Lat. 56° 23.1' N, Long. 133° 50.2' W. There are no rocks in this area. These rocks evidently originated with prior survey H-1749 (1:80,000) 1886. It is probable that the rocks located on H-1749 were in fact the two rocks mentioned in the preceding paragraph, but that poor control, small scale, and datum changes contributed to erroneous positions for these rocks. The area where the rocks are shown has general depths of about 50 fathoms. The shoalest sounding obtained in this vicinity was 35 fathoms at Lat. 56° 23.03' N, Long. 133° 50.24' W; this peak was developed by several closely-spaced lines, and no shoaler sounding was indicated. It is recommended, therefore, that the two rocks shown at Lat. 56° 23.1' N, Long. 133° 50.2 W be deleted from the chart.

The narrow passage at Lat. 56° 24.8' N, Long. 133° 49.4' W, between Sumner Island and the first small island to the northwest, is obstructed in part by several rocks awash, as shown on the boat sheet.

A 10-fm. shoal (Pos. 152e) was developed at Lat. 56° 24.97' N, Long. 133° 50.90' W.

L. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede prior surveys for charting.

M. AIDS TO NAVIGATION

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

N. STATISTICS

	Launch CS-1191	Skiff	Ship PATTON
No. of Positions	977	10	5
Nautical Miles of Sounding Lines	123.6		
Total Area Surveyed (square nautical miles)			4.3
Number of bottom samples			12
Temperature and Salinity Observations			1

P. RECOMMENDATIONS

No other field work is recommended.

Q. REFERENCES TO REPORTS

Other reports related to this survey are:

Season's Report)
Field Edit Report) - Submitted November 1965
Coast Pilot Report)
Fathometer Correction Report - Submitted December 1965

TIDE NOTE

To accompany Hydrographic Survey H-8688

1965 WORK

A Bristol pressure tide gage, located on the northeast side of Sumner Island, controlled the 1965 hydrography on this sheet.

Station:	Sumner Island T.G.
Position:	Lat. 56° 24' 36" N. Long. 133° 47' 33" W.
Time Mer.:	120° W.

Position is off survey

Value of MLLW on Staff: 3.5 ft. above staff zero.

No corrections for time or height were applied to the observed tides.

ABSTRACT OF CORRECTIONS TO ECHO SOUNDINGS

LAUNCH 1191

RAYTHEON DE-723 FATHOMETER #556

These corrections to be used for all days of launch hydro (May 11-May 26, 1965) on hydrographic survey HO-10-2-62 (H-8688), and for "a", "b", "c", and "d" days of launch hydro (May 20-May 26, 1965) on hydrographic survey HO-12.5-1-62 (H-8689):

Correction (fms.)	To Depth (fms.)
+ 0.2	6.3
+ 0.3	30.6
+ 0.4	58.7
+ 0.5	83.0
+ 0.6	Deepest Sounding

For derivation of these corrections, refer to the 1965 Fathometer Correction Report.

LIST OF SIGNALS

on Sheet H-8688 (HO-10-2-62)

used for 1965 Work

Name used in Hydrographic Survey	Origin of Station
Ask	T-10708
Bay	BAY, 1929
Beg	BEG, 1929-1962
Box	T-10708
Cal	PA-A-65
Dub	T-10708
Erg	PA-A-65
Fan	PA-A-65
Fox	Vol. 12, Pg. 17
Gal	PA-A-65
Gum	PA-A-65
Ham	PA-A-65
Ike	PA-A-65
Joy	T-10707
Kim	T-10708
Liv	ALVIN, 1929
Ner	NER, 1929
Net	PA-A-65
Ohm	T-10708

LIST OF SIGNALS

on Sheet H-8688 (HO-10-2-62)

used for 1965 Work

(continued)

Name used in Hydrographic Survey	Origin of Station
Pat	PA-A-65
Rip	T-10707
Row	PA-A-65
Sue	T-10707
Sum	T-10708
Toy	Vol. 11, Pg. 3
Vat	Vol. 10, Pg. 32
Vin	VIN, 1929
War	T-10708

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8688

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	
Boulder Point										1
Kuiu Island										2
Reid Bay										3
Sumner Island										4
Sumner Strait										5
Alvin Bay	8201									6
		DEW								7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
				PREPARED BY						19
				Frank W. Pickett						20
				CARTOGRAPHIC TECHNICIAN						21
										22
				APPROVED BY						23
				A. J. Wright BY						24
				CHIEF GEOGRAPHER						25
								ER		26
										27

FORM C&GS-712
(3-9-64)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

October 24, 1966

~~Nautical Chart Division~~ Pacific Marine Center

Plane of reference approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 8688

Locality: Summer Strait, Alaska

Chief of Party: J. K. Richards, 1965

Plane of reference is mean lower low water

Tide Station Used (Form C&GS-681):

Summer Island

Height of Mean High Water above Plane of Reference is as follows:

11.7 feet

Remarks

J. M. Symons
Chief, Tides and Currents Branch

USCOMM-DC 6680-P64

FORM C&GS-946
(REV. 3-1-64)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
NAUTICAL CHART DIVISION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-8688

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	BOAT SHEETS	2
DESCRIPTIVE REPORT	2	OVERLAYS	NONE

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	1					
VOLUMES	14					
BOXES						

T-SHEET PRINTS *(List)*

SPECIAL REPORTS *(List)*

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				2765
POSITIONS CHECKED		1,105	50	1155
POSITIONS REVISED		66	2	68
DEPTH SOUNDINGS REVISED		59	10	69
DEPTH SOUNDINGS ERRONEOUSLY SPACED		73	5	78
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	0	0
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		13	10	23
JUNCTIONS		13	6	19
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		338	57	395
SPECIAL ADJUSTMENTS		0	32	32
ALL OTHER WORK		211		211
TOTALS		575	105	

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY Vincent Flor (Seattle)	BEGINNING DATE	ENDING DATE 3/19/68
REVIEW BY George Meyers	BEGINNING DATE August 18, 1971	ENDING DATE Sep 2, 1971

Insp Westbrook Carstens, 14 37 11/26/75 12/6/72

USCOMM-DC 6641-P64

APPROVAL SHEET

H-8688 (HO-10-2-62)

1965 WORK

The 1965 field work on this sheet was performed under the direct supervision of the Commanding Officer. The boat sheet was inspected at the end of each day's work. All field records have been examined and found to be complete and adequate. No additional field work is recommended.

Since the 1965 work has not yet been smooth plotted, this approval applies only to the boat sheet and field records.

James K. Richards
LCDR, C&GS
Comdg., Ship PATTON

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8688 FIELD NO. HO-10-2-62

Alaska - Sumner Strait - Reid Bay and Approaches

SURVEYED: July 19, 1962 through September 25, 1962 and
May 11, 1965 through May 24, 1965

SCALE: 1:10,000 PROJECT NO.: OPR-347 (1962)
OPR-448 (1965)

SOUNDINGS: 808 Depth Recorders, Raytheon DE723 Depth Recorders, Leadline CONTROL: Visual fixes on shore signals

Chief of Party	E.W. Richards (1962)
	J.K. Richards (1965)
Surveyed by	E.W. Richards
	J.K. Richards
	H.E. McCall
	B.F. Karwisch
	D.E. Kimbell
	D.A. Moore
Protracted by	C.R. Lehman
Soundings plotted by	C.R. Lehman
Verified and Inked by	V.F. Flor
Reviewed by	G.K. Myers
	Date: September 2, 1971
Inspected by	D.E. Westbrook

1. Description of the Area

This is an inshore survey which covers Reid Bay and approaches on the western side of Sumner Strait. There are two islands and several offlying rocks in the entrance to Reid Bay and rocks awash south of the islands near mid-channel. Ledge marked with kelp, reefs, and boulders extend along most of the shore. The bottom in the survey area is irregular and slopes steeply from shore.

Predominant bottom characteristics in this area are green mud, coral, and stones.

2. Control and Shoreline

The source of the control is adequately described in the Descriptive Report.

The shoreline is from advance photogrammetric manuscripts T-10706 (1955-62), T-10707 (1955-65), T-10708 (1955-65), and T-10715 (1955-62).

3. Hydrography

A. Depths at crossings are in good agreement considering the nature of the irregular bottom.

B. The usual depth curves are adequately delinated except for some inshore depth curves which are in close proximity to ledges and reefs.

Numerous dashed and brown depth curves have been added to emphasize important bottom features.

C. The investigation of least depths and delineation of bottom configuration are adequate except that the 3.2 fm. soundings in lat. 56°22.96', long. 133°54.69' should have been investigated for least depth.

4. Condition of the Survey

The field plotting, Pacific Marine Center verification, sounding records, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual. However, it was necessary for the reviewer to make numerous revisions in depth curves and to add curves that were omitted. In addition, the tenths on soundings between 1 and 11 fathoms were in many instances inked too small.

5. Junctions

An adequate junction was effected with H-8653 (1961-62) on the south. The junctions with unverified surveys H-9101 (1965)-70 on the north and H-8689 (1962) on the east will be discussed in the review of those surveys.

6. Comparison with Prior Surveys

H-1749 (1886) 1:80,000
H-1753 (1886) 1:80,000
H-1754 (1886) 1:80,000
H-2150 (1892) 1:40,000

These prior surveys constitute the only prior survey coverage of the present survey area. The sparsity of soundings and lack of development on these smaller scale surveys preclude an adequate comparison with the present survey. However, attention is directed to Section J "Comparison with Prior Surveys" in the Descriptive Report of the 1965 season regarding errors in the prior positions of rocks awash in lat. 56°23.0', long. 133°51.5'.

The present survey is adequate to supersede the prior surveys in the common area.

7. Comparison with Chart 8201 (latest print date November 7, 1970)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which need no further consideration supplemented by the boatsheets (Bp's 63114, 68693-94), and the verified smooth sheet of the present survey.

The present survey is adequate to supersede the charted information in the common area.

B. Aids to Navigation

There are no aids to navigation within the area covered by the present survey.

8. Compliance with Project Instructions

The present survey complies with the Project Instructions.

9. Additional Field Work

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

Examined and Approved:

Chief
Marine Chart Division

Associate Director
Office of Marine Surveys
and Maps

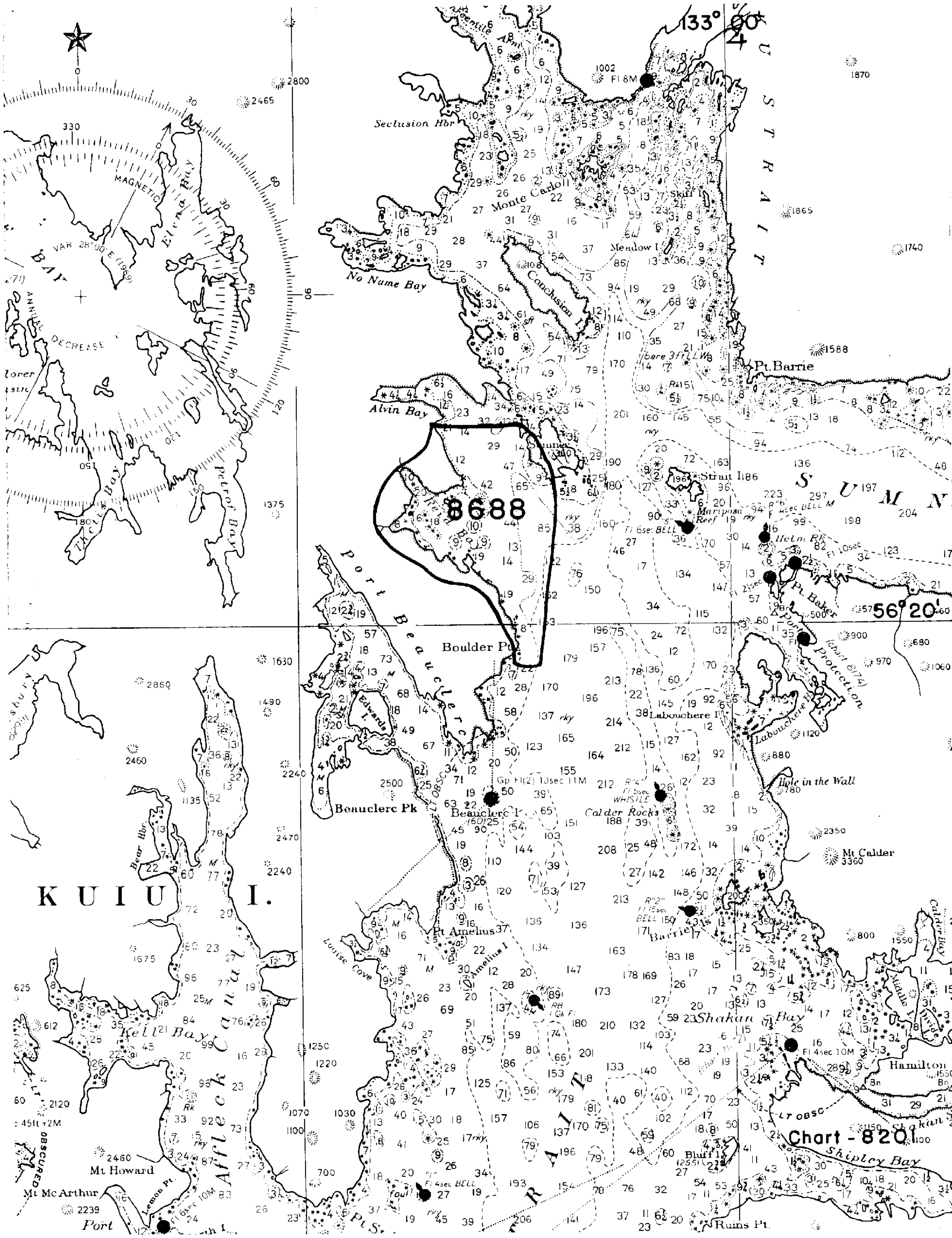
H-8688

Items for Future Pre-Survey Review

This is an inshore survey of Reid Bay and approaches. The lack of development on the earlier surveys precludes any detailed comparison between prior and present depths. However, no substantial changes in the bottom are noted.

Position Index	Bottom Change Index	Use Change Index	Resurvey Cycle
Lat. 561, Long. 1335	2	1	50 yrs.
Lat. 562, Long. 1335	2	1	50 yrs.
Lat. 562, Long. 1340	2	1	50 yrs.

The 3.2-fm. soundings in lat. 56°22.96', long. 133°54.69' should be investigated for least depth on any future survey of this area.


8688
Chart - 8201
133° 00'
56° 20'
KUIU I.
Seclusion Hbr
Monte Carlo I
No Name Bay
Conclusion I
Meadow I
Alvin Bay
Pt. Barrie
Strait I
Mariposa Reef
Helm Rk
Pt. Baker
Port Protection
Port Beauclerc
Boulder Pt
Edwards I
Beauclerc Pk
Beauclerc I
Labouchere I
Hole in the Wall
Calder Rocks
Mt Calder
Pt Amelius
Amelius I
Louise Cove
Kell Bay
Bear Hbr
Affleck Canal
Mt Howard
Mt McArthur
Lemon Pt
Shakan Bay
Hamilton I
Shipley Bay
Bluff I
Ruins Pt.
Barrie
MAGNETIC
VAR 28°00' E (1969)
ANNUAL DECREASE

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8688

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
8201	9-16-69	H. Knoll	Full Part Before After Verification Review Inspection Signed Via
			Drawing No. Examined for critical depths
8201	8-24-72	James Graham	~~Full P~~art Before After Verification Review before ~~Inspection~~ Signed Via
			Drawing No. 13 Revised misc. sndgs. and
			curves after review before inspection
8201	10-18-73	James Graham	Full ~~Part Before Af~~ter Verification Review Inspection Signed Via
			Drawing No. #24 Fully app'd hydro after
			final inspection
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
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