9213

Diag. Cht. No. 8201-3.

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey ..... HYDROGRAPHIC .....

Field No. ..... DA-10-1-71 .....

Office No. ..... H-9213 .....

LOCALITY

State ..... ALASKA .....

General Locality ..... KEKU STRAIT .....

Locality ..... THREEMILE ARM TO SECLUSION HARBOR .....

19 71

CHIEF OF PARTY
R. E. MOSES

LIBRARY & ARCHIVES

DATE ..... 1/4/74 .....

☆U.S. GOVERNMENT PRINTING OFFICE: 1974-763-098

9213

FORM C&GS-537 (5-66)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO. H-9213

FIELD NO. DA-10-1-71

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

State ALASKA

General locality ~~Southeast Alaska~~ Keku Strait

Locality ~~Keku Strait~~ Threemile Arm to Seclusion Harbor

Scale 1:10,000 Date of survey 8 April-30 April 1971

Instructions dated 2 February 1971 Project No. OPR-448

Vessel DA-2 (Launch 2), WZ-3041 (17' Whaler), WZ-3044

Chief of party Cdr. R. E. Moses
F.T. Smith

Surveyed by R.A. Arnold, H.W. Herz, W.K. Taguchi, JST F. Paranada

Soundings taken by echo sounder, ~~[illegible]~~ Raytheon DE-723, Nos. 919, 142, 1276
Hand lead

Graphic record scaled by Ship's Personnel

Graphic record checked by Ship's Commissioned Officers

Positions verified by John E. Lotshaw Automated plot by Gerber Digital Plotter (PMC) ~~Seattle~~

Soundings verified by John E. Lotshaw

Soundings in fathoms ~~[illegible]~~ at ~~[illegible]~~ MLLW

REMARKS:

Chart
8201
8272

USCOMM-DC 37009-P66

DESCRIPTIVE REPORT

DA-10-1-71

A. PROJECT

This survey was accomplished according to Project Instructions: OPR-448, Keku Strait, Southeast Alaska dated 2 February 1971.

B. AREA SURVEYED

The survey covered the area of Keku Strait in the vicinity of Three Mile Arm and Seclusion Harbor between the latitudes 56° 36.8'N and 56° 32.6'N and longitudes 133° 46.1'W and 133° 55.7'W.

Work was accomplished between 8 April 1971 and 30 April 1971.

The survey makes a junction with the following sheets:

DA-10-6-70	H-9160	Contemporary Survey
DA-10-2-71	H-9214	Contemporary Survey

C. SOUNDING VESSEL

The following vessels were used to obrain soundings on this survey:

VESSEL	POSITION NUMBER COLOR
Launch 2	Red
17' Whaler	Violet

Bottom samples were taken by Launch 2 and are shown in red.

Detached positions were taken by Launch 2 and the 17' Whaler and are shown in orange.

A summary of each vessels work by position number is attached.

D. SOUNDING EQUIPMENT

Raytheon DE-723 fathometers were used:

Launch 2	#142, #919
17' Whaler	#1276

Echo sounder corrections were determined from bar checks taken daily by the vessels. Launch and Whaler fathometers were initialed at 0.0. All soundings are in fathoms. Differences between actual and assumed initial values are compensated for with an Initial Corrections (TC/TI) tape. A special Corrections To Echo Sounders section is included in the appendix.

E. SMOOTH SHEET

The smooth sheet will be constructed and plotted by the Processing Division, Pacific Marine Center, Seattle, Washington.

F. CONTROL

Visual three-point fixes were used for control in this survey. There were three types of visual signals used: triangulation, photo-hydro and hydrographic. The triangulation signals were hand plotted by the PATTON'S Ship's Officers and checked with a machine-plotted overlay from PMC, in turn checked by the Ship's Commissioned Officers. Photo-hydro signals were obtained from the 69E photographs of the area. Overlap was sufficient in most cases to obtain a three ray intersection. Hydrographic signals were located with sextants fixes. An abstract of signals is included in the appendix.

G. SHORELINE

Shoreline and shoal area outlines were traced onto the boat-sheet from the photo manuscripts (see appendix) by the Ship's Commissioned Officers. Verification of the shoreline was carried out by the Ship's Commissioned Officers and Mr. Lowell O. Neterer, Photogrammetry Division, AMC. Features were checked by visual inspection, estimated distances from photo-identifiable objects and by comparing features already located

or developed on this hydrographic survey sheet. Compilation of the manuscripts was good, The lower low water line was defined by soundings except in places where the beach was very steep or kelp too thick for a motor launch to enter. Field edit was completed and revisions to the manuscripts were suggested. See Field Edit Reports OPR-448 1971.

H. CROSSLINES

The percentage of crosslines run was 4% (13.00 miles). There is good agreement at crossings.

I. JUNCTIONS

Junctions were made with the following sheets:

DA-10-6-70	H-9160	Contemporary Survey
DA-10-2-71	H-9214	Contemporary Survey

Soundings agree at these junctions.

J. COMPARISION WITH PRIOR SURVEYS

Comparisions were made with the two prior surveys of the area. The two surveys, H-2150 and H-2151 had sparse soundings and comparison was difficult. Most of the shoal areas indicated on those surveys were found to be very nearly correct, although the location of a few of these areas seemed to be shifted slightly.

Fifteen (15) areas from the Prior Surveys were investigated:

1. Sounding of 3 fm at 56° 33.10'N, 133° 47.68'W. A shoaler sounding of 1.2 fm was obtained in this area.
2. Sounding of 25 fm at 56° 33.19'N, 133° 47.34'W. A shoaler sounding of 2.2 fm was obtained in this area.

3. Sounding of 9 fm at 56° 33.68'N, 133° 47.69'W. A sounding of ~~11~~ 5.2 fm was obtained in this area.

4. Sounding of 6.25 fm at 56° 34.61'N, 133° 48.25'W. A sounding of ~~6.7~~ 4.4 fm was obtained in this area.

5. Sounding of ~~3.5~~ 3.8 fm at 56° 34.68'N, 133° 50.28'W. A shoal~~er~~ sounding of ~~3.3~~ 4.0 fm was obtained in this area.

6. Sounding of 2.25 fm at 56° 34.28'N, 133° 50.~~00~~ .10'W. A sounding of ~~6.3~~ 5.2 fm was obtained in this area.

7. Rock awash at 56° 33.82'N, 133° 49.~~87~~ .97'W, ~~A sounding of 3.8 fm was obtained in this area. A reef exists 100 meters west of this position. Rock was searched for but not found and rock awash symobl should be removed.~~ 2.1 falls within limits of reef and should be retained

8. Rock awash at 56° 33.~~71~~ .76'N, 133° 49.41'W, ~~A large reef was found 50 meters to the NE.~~ falls within limit of reef.

9. Sounding of 5.75 fm at 56° 32.72'N, 133° 49.73'W. A shoaler sounding of ~~3.9~~ 4.2 fm was obtained in this area, approx. 90 meters east.

10. ~~Rock awash~~ Submerged rock at 56° 33.~~27~~ .28'N, 133° 50.~~82~~ .80'W. A sounding of ~~4.4~~ 2.5 fm was obtained in this area. ~~Rock awash~~ Submerged rock symbol at this position ~~should be removed.~~ is carried forward from the prior survey, H-2150 (1893). The prior sounding is carried forward from H-2150 (1893)

Pre-Survey Review item #18

11. Rock awash at 56° 33.~~22~~ 20'N, 133° 51.~~23~~ .21'W. A sounding of 1.~~1~~ .2 fm was obtained in this area. approx. 90 meters NW The shoal was lead lined with a least depth of ~~6.5~~ 7.1 feet (MLLW). Recommend~~ed~~ rock awash symbol be removed.

12. Sounding of 0.25 fm at 56° 33.33'N, 133° 51.11'W. A rock awash was found 25 meters to the NE.

13. Sounding of 0.25 fm at 56° 33.36'N, 133° 52.22'W. ~~A sounding of 1.9 fm was obtained in this area.~~ A rock awash was found ~~100~~ 40 meters $W of this position..

14. Sounding (rock) of 0.5 fm at 56° 34.~~01~~ 02'N, 133° 48.~~63~~ 85'W. A sounding of ~~10.8~~ 2.3 fm was the shoalest depth found in this area. A shoal exists ~~400~~ 200 meters to the west with a least depth of 0.7 fm. The 0.5fm rock is carried forward from H-2150 (892).

15. Sounding of 0.5 fm at 56° 33.45'N, 133° 52.21'W. A sounding of 0.8 fm was obtained in this area.

K. COMPARISON WITH THE CHART

Comparison of soundings and depth curves with C&GS chart 8201, 16th edition, Nov. 7, 1970 was made and the few soundings available from this chart are in good agreement.

L. ADEQUACY OF SURVEY

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

M. AIDS TO NAVIGATION

There are no aids to navigation located in the survey area.

N. STATISTICS

VESSEL	NO. OF POSITIONS	SOUNDING LINES(NM)	BOTTOM SAMPLES	DETACHED POSITIONS
Launch 2	2799	306.3	33	16
17' Whaler	205	16.8	--	24

The total area surveyed is 9.8 square miles. A Climatronics logger and Friden flexowriter were used for recording while underway. As a result, both sounding volumes and original printouts constitute the "original records" of the survey. There are 20 printouts/volumes with this survey.

O. MISCELLANEOUS

A tide gage installed and maintained at Monte Carlo Island will be used for reduction of soundings on the smooth plot. Soundings on the boat sheet are reduced to MLLW using the predicted tides for Monte Carlo Island, Keku Strait, Alaska. Time meridian 105° west was used for the entire survey. Further information can be found in the "tide note" in the appendix.

Detached positions, minus soundings, zero soundings, missed soundings and bottom sample soundings were all logged as 0000 in the sounding column of the data printouts. The verifier should therefore refer to the original sounding printouts / volumes for all 0000 soundings to determine what they represent.

P. RECOMMENDATIONS

It is recommended that this survey be accepted as complete.

Q. DEVELOPMENTS

Several developments between latitudes 56° 32.5'N and 56° 34.2'N, and longitudes 133° 47.5'W and 133° 50.0'W were plotted on tracing paper overlays. Position numbers and soundings are plotted on these overlays, copies of which are included in the appendix.

R. REFERENCES TO REPORTS

Field Edit Report OPR-448-1971
Corrections To Echo Sounders OPR-448-1971
Tide Gage Report

Respectfully submitted,

Russell C. Arnold

Russell C. Arnold
LTJG. NOAA

Attachments:

Tide Note
Tidal Data (To be forwarded when available)
List of Stations
Abstract of Positions
Form #1
Approval Sheet
Developments (2 sheets)
Progress Sketch

TIDE NOTE

The tide station used for this survey was located at Monte Carlo Island.

Location:	Lat. 56° 32.1' Long. 133° 45.9'
Time Meridian	105° West
Plane of Reference	MLLW
Type of Gage	Portable Bubbler

The tide height data were corrected for differences in time and height.

LIST OF MANUSCRIPTS

T-12214

T-12215

T-12218

T-12219

LIST OF STATIONS ON DA-10-1-71

SIGNAL NUMBER	ORIGIN OF STATION
101	T-12219
102	T-12219
103	TOP, 1929
104	FAD, 1929
105	LAR, 1929
106	T-12215
107	T-12215
108	T-12215
109	T-12215
110	T-12215

111	Vol. 1, pg. 4
112	NIP, 1929
113	ARM, 1929
114	Vol. 1, pg. 4
115	Vol. 1, pg. 3
116	DAT, 1929
117	CAP, 1929
118	Vol. 1, pg. 4
119	POW, 1929
120	T-12214
121	T-12214
122	T-12214
123	T-12214
124	Vol. 1, pg. 3
125	HAP, 1929
126	Vol. 1, pg. 3
127	FOR, 1929
128	Vol. 1, pg. 3
129	MILE, 1929
130	Vol. 1, pg. 4
131	Vol. 1, pg. 4
132	SID, 1929
133	Vol. 1, pg. 5
134	HAR, 1929
135	T-12218
136	T-12218
140	Vol. 1, pg. 5

141	T-12218
142	SECLUSION, 1929
143	NEW, 1929
144	PORT, 1927
145	Vol. 1, pg. 5
146	T-12219
147	Vol. 1, pg. 5
148	T-12219
149	T-12219
150	T-12219
151	T-12219
155	T-12215
156	T-12215
157	T-12215
158	T-12218
159	T-12215
160	T-12215
161	T-12215
162	T-12218
163	T-12218
164	T-12214
165	T-12214
166	T-12214
167	T-12214
168	T-12218
169	T-12218
170	Vol. 1. pg. 6

ABSTRACT OF POSITIONS

DAY	LAUNCH 2	WHALER	BOTTOM SAMPLES	DP'S
098	1-207			
099	208-438			
100	439-647			4001-4004
101	648-934			4005-4008
102	935-1169			4009-4010
103	1170-1335			
104	1336-1543			
105	1544-1756			4011
110	1757-1866			
111	1867-2028			
112	2029-2237			4012-4013
113	2238-2406			4014-4015
116		3000-3124		4016-4023
117	2407-2630			4024-4025
118	2631-2744		5001-5026	
119	2745-2774		5027-5034	
119		3125-3205	5035	4026
120	2775-2799			

O's computed 4-7-72
Shot limits changed

SIGNAL PLOTTER CARDS

H-NO.			LATITUDE	LONGITUDE	X	Y	X	
31031	101		71	56322046	133460690	11503	00342	101
31031	102		71	56332370	133454[illegible]7	11918	02396	102
31031	103		71	56332874	133472822	10043	02558	103
31031	104	FAD	71	56342043	133473906	09847	04236	104
31031	105		71	56350091	133481898	09131	05551	105
31031	106		71	56350818	133474822	09683	05787	106
31031	107		71	56350708	133475782	09511	05751	107
31031	108		71	56350718	133480978	09296	05754	108
31031	109		71	56351293	133481928	09126	05941	109
31031	110		71	56351807	133482168	09083	06108	110
31031	111		71	56352302	133485971	08401	062[illegible]8	111
31031	112		71	56352813	133492332	07978	06434	112
31031	113		71	56355037	133500844	07170	07157	113
09213	114		71	56361762	133500428	07245	08041	114
31031	115		71	56363627	133505370	06360	08647	115
31031	116		71	56361426	133520363	05107	07933	116
31031	117		71	56363530	133525505	04187	08617	117
31031	118		71	56365186	133540129	03001	09156	118
31031	119		71	56365447	133543623	02375	09242	119
31031	120		71	56363585	133551899	01609	08638	120
31031	121		71	56363304	133554274	01183	08547	121
31031	122		71	56363181	133544274	02258	08506	122
31031	123		71	56362017	133541682	02722	08127	123
31031	124		71	56363598	133540756	02888	08641	124
31031	125		71	56362421	133533634	03447	08258	125
~~31031~~	~~126~~		~~71~~	~~56355881~~	~~133530428~~	04020	07432	126
31031	127		71	56354798	133522391	04743	07080	127
09213	128		71	56352396	133514324	05471	06300	128
31031	129		71	56350847	133510211	06208	05796	129
31031	130		71	56345005	133492689	07914	05198	130
31031	131		71	56344358	133495383	07432	04988	131
31031	132		71	56342088	133502343	06901	04251	132
31031	133		71	56341303	133502905	06800	03996	133
31031	134		71	56333411	133510544	06147	02732	134
31031	135		71	56333637	133515544	05251	02806	135
31031	136		71	56332767	133524537	04355	02524	136
09213	140		71	56330986	133504109	06584	01944	140
31031	141		71	56325425	133514606	05418	01438	141
31031	142		71	56323333	133513909	05543	00759	142
31031	143		71	56321229	133495289	07448	00075	143
31031	144		71	56321280	133473897	09851	00091	144
31031	145		71	56324801	133503968	06609	01235	145
31031	146		71	56332683	133465573	10625	02496	146
09213	147		71	56323776	133502452	06881	00902	147
31031	148		71	56333854	133465269	10680	02876	148
31031	149		71	56333220	133463718	10958	02671	149

31031	150	71	56334862	133464391	10837	03204	150
31031	151	71	56335515	133465773	10589	03416	151
31031	155	71	56354161	133484237	08712	06872	155
09213	156	71	56355561	133490938	08228	07327	156
31031	157	71	56360265	133485697	08450	07555	157
31031	158	71	56331788	133525409	04198	02206	158
31031	159	71	56361713	133490463	08313	08026	159
31031	160	71	56360908	133482638	08998	07764	160
31031	161	71	56355926	133480938	09303	07446	161
31031	162	71	56334035	133530012	04091	02936	162
31031	163	71	56334277	133531048	03905	03014	163
31031	164	71	56335713	133534550	03278	03482	164
31031	165	71	56340268	133541019	02835	03662	165
31031	166	71	56335270	133543624	02368	03339	166
09213	167	71	56334911	133550849	01789	03223	167
09213	168	71	56333757	133545673	02000	02848	168
31031	169	71	56334261	133542272	02610	03011	169
31031	170	71	56334542	133534204	03339	03101	170

000000

PARAMETERS FOR DIGITAL COMPUTING
POLYCONIC PROJECTION

(1) Project No. 448 (4) Requested by COE Ray E Moses

(2) H No. _____ (5) Ship or Office DAWSON

(3) Field No. E (6) Date Required _____

(7) Visual [X] Pt.(0) or Fathoms (1) [ ] (8) Electronic [ ] (fill out form 48)

(10) XKN (SP 5) Distance from CMER to East Edge (NYX = 1) or West Edge (NYX = 0). (Origin) 748542 Meters

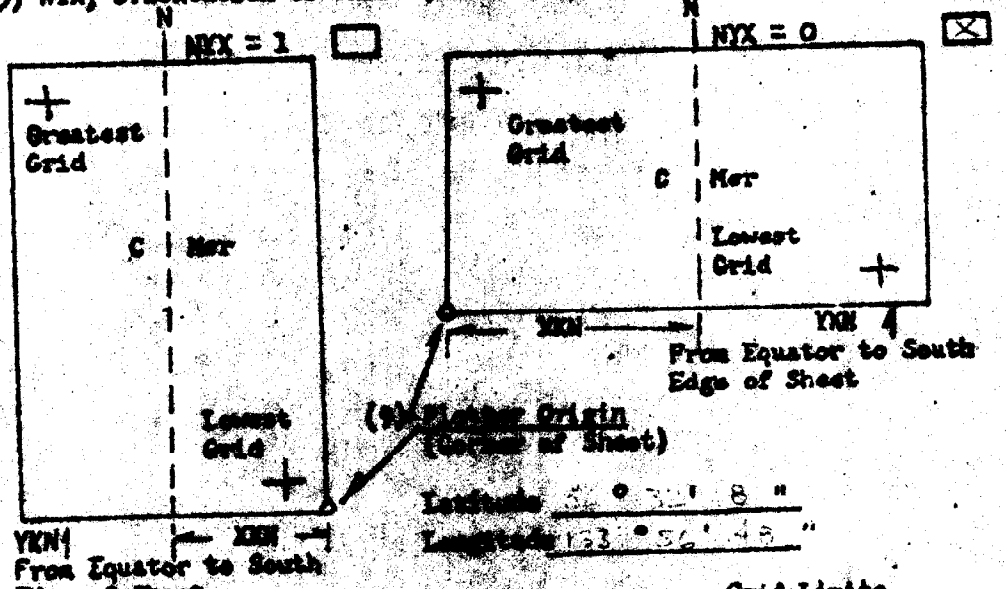
(11) YKN (SP 241) Distance from Equator to South Edge of Sheet. (Origin) 6,268,291.418 Meters

(12) Central Meridian 133 ° 49 ' 30 "

(13) Survey Scale 1:10,000

(14) Size of Sheet (Check one) 36x60 [X] 42x60 [ ]

(15) NYX, Orientation of sheet (Check one)



(9) Station Origin (Center of Sheet)

Latitude 56 ° 32 ' 8 "

Longitude 133 ° 56 ' 48 "

Grid Limits

(16) Greatest Latitude 56 ° 37 ' 30 "

(17) Lowest Latitude 56 ° 32 ' 30 "

(18) Difference 5 ' 00 "

(19) 5 ' 00 "

(20) 300 YSN

(21) Greatest Longitude 134 ° 00 ' 30 "

(22) Lowest Longitude 133 ° 42 ' 30 "

(23) Difference 18 ' 00 "

(24) 18 ' 00 "

(25) 360 XSN

(Projection Line Interval Page 4 Hydro Manual)

9213

H
Field No. OPR 448
Date 2-22-71

~~TDPO II AND III PARAMETER CARD~~

31031

PARAMETER CARD II

			1	2	3	4	5	6	7	8	9	10
Semi major axis of the earth	6,378,206.4	RDA	6	3	7	8	2	0	6	4	0	7
X Constant- Distance from central meridian to origin of plotter SP 5	meters	XKN	7	4	8	5	4	2	0	0	0	4
Y Constant - Distance from equator to origin of plotter SP 241	0 ' meters	YKN	6	2	6	8	0	4	4	0	0	7
Central Meridian of Projection	133 49 30.00	CMR	4	8	1	7	7	0	0	0	0	6
Plotter Scale/Survey Scale	*30498.6876 1:10,000	SCA	1	0	4	9	8	6	8	8	0	1
North/south axis of sheet - to correspond to (Y axis - 0) (X axis - 1) of plotter		NYX										0
Feet/Fathom indicator	0 - feet 1 - fathom	FOF										1
H Identification No.		JN						3	1	0	3	1
		YR									7	1

FOF - 1

PARAMETER CARD III

			1	2	3	4	5	6	7	8	9	10
Lowest Lat. Intersection	56 32 30.00	YST	2	0	3	5	5	0	0	0	0	6
Lowest Long. Intersection	133 42 00.00	XST	4	8	1	3	2	0	0	0	0	6
Difference between Grid	30.00	DXY	3	0	0	0	0	0	0	0	0	2
Interval (Long)		XSN									2	9
Interval (Lat)		YSN									0	9

Computed EHT
Punched CP
Checkdd
Date

APPROVAL SHEET

Hydrographic Survey

H-9213 DA-10-1-71

Keku Strait, S.E. Alaska

The field work on this survey was accomplished under my supervision. Frequent inspections were made of the boatsheet and other records.

Ray E. Moses
CDR. NOAA
Commanding Officer
NOAA Ship DAVIDSON

APPROVAL SHEET

The smooth sheet has been inspected, is complete, and meets the requirements of the General Instructions for automated surveys and the Hydrographic Manual. (Note: All exceptions are listed in the Verifier's Report)

Examined and approved,

James S. Green
Supervisory Cartographic Technician

Approved and forwarded,

Walter F. Forster, Cdr., NOAA
Chief, Processing Division
Pacific Marine Center

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY 8/16/72

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center

Hourly heights are approved for tide tape printout for smooth tape

Tide Station Used (NOAA Form 77-12): Monte Carlo Island

Period: April 8 to May 11, 1971

HYDROGRAPHIC SHEET H9213 and H9214

OPR 448

Locality: Keku Strait, S.E. Alaska

Plane of reference (mean lower low water) on printout is 4.7 ft. which is 4.7 feet on tide staff.

Height of Mean High Water above Plane of Reference is 11.7 ft.

Remarks: Missing hourly heights have been enclosed for April 9 and 10 and May 11

Approved
9-19-72

Chief, Tides Branch

GEOGRAPHIC NAMES

Survey No. H-9213

Name on Survey	A: On Chart No. 8201	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	
KUIU ISLAND	X									1
SECLUSION HARBOR	X									2
one word THREE MILE ARM	X									3
SALT LAGOON			X							4
Keku Strait										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
					Approved by:					18
					Chas. E. Harrington					19
					STAFF GEOGRAPHER					20
					6 MAY 1974					21
										22
										23
										24
										25

NOAA FORM 77-27
(9-72)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-9213

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & PNO	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	3

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	1					
VOLUMES	5					
BOXES			2			

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				
POSITIONS CHECKED		3073	77	
POSITIONS REVISED		69	14	
DEPTH SOUNDINGS REVISED or added		255	382	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0	45	
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	1	
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		80	40	
JUNCTIONS		20	20	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		28	60	
SPECIAL ADJUSTMENTS		0	60	
ALL OTHER WORK		389	149	
TOTALS		517	329	

	BEGINNING DATE	ENDING DATE
PRE-VERIFICATION BY		
VERIFICATION BY John E Lobaton	7/5/72	12/11/73
REVIEW BY Robert W. Derkazarian	3/3/75	7/23/75

Cons. Insp: G. K. Meyers 33hrs.

* U.S. G.P.O. 1972-769-562/439 REG.#6

Reg. No. H9213

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE_____ TIME REQ'D_____ INITIALS_____

REMARKS:

Reg. No. _____

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE_____ TIME REQ'D._____ INITIALS_____

REMARKS:

H-9213

Items for Future Presurvey Review

The bottom has remained basically unchanged since the prior surveys of 1892-1927.

Least depths should be investigated on features listed in item 2c of the review.

Position Index Lat.	Long.	Bottom Change Index	Use Index	Resurvey Cycle (Years)
563	1335	2	1	50
563	1340	2	1	50

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

MODIFIED HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9213 FIELD NO. DA-10-1-71

Alaska, Keku Strait, Threemile Arm to Seclusion Harbor

SCALE: 1:10,000 PROJECT NO.: OPR-448

SOUNDINGS: DE-723 Depth Recorders
Leadline

CONTROL: Sextant Fixes
on Shore
Signals

Chief of Party	R. E. Moses
Surveyed by	F. T. Smith
	W. K. Taguchi
	H. W. Herz
	R. C. Arnold
	F. S. Paranada
Automated Plot by	Gerber Digital Plotter (PMC)
Verified by	J. E. Lotshaw
Reviewed by	R. W. Derkazarian
	Date: July 23, 1975
Cursory inspection made--survey processing considered complete	G. K. Myers Date: February 9, 1976

1. Control and Shoreline

The origin of control is adequately covered in part F of the Descriptive Report.

The shoreline originates with reviewed photogrammetric manuscripts T-12214 (1961-71), T-12215 (1961-71), T-12217 (1961-71), T-12218 (1961-71), and T-12219 (1961-71). The mean high water line on the smooth sheet is for guidance only; the true position is shown on the topographic surveys mentioned.

The reef awash on T-12215 in latitude 56°34.7', longitude 133°48.35' is shown as awash at mean lower low water. The present survey determined the reef to uncover 5 feet at mean lower low water which is considered the correct value.

Several foreshore characteristics shown as "Rocky" or "rky" on several of the above manuscripts are described by the more appropriate "boulders" on the smooth sheet of the present survey.

2. Hydrography

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

B. The usual depth curves are adequately delineated. Dashed depth curves were inked during review in some areas to emphasize critical features.

C. The development of the bottom configuration and the investigation of least depths are considered adequate. However, additional development for least depths and verification by handlead would have been desirable on the following features:

Depth (fms.)	Latitude	Longitude
2.5	56°34.90'	133°49.93'
1.6	56°34.24'	133°49.18'
6.9	56°32.97'	133°51.44'
5.4	56°32.86'	133°48.82'
1.2	56°34.07'	133°48.85'

A sunken rock charted at latitude 56°33.28', longitude 133°50.8' (presurvey review item 18) was not proved or disproved on the present survey.

3. Condition of the Survey

The field work, sounding records, smooth plot, sounding printouts, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual, supplemented by the Instruction Manual - Automated Hydrographic Surveys except for the following:

A. Many soundings were excessed in error which detracted from the delineation of the bottom. These were manually plotted by the reviewer.

B. Many sounding numbers were too dimly printed by the Gerber plotter.

C. No descriptive information was furnished for signals on the survey; in some instances signals fell outside the high water line.

D. The automated plot of soundings in areas of reefs and ledges inadequately delineated the bottom configuration. This necessitated a manual plot of many soundings during review.

E. Two triangulation stations were not identified on the smooth sheet. These stations marked shore signals used as control.

4. Junctions

Adequate junctions were effected with H-9160 (1970) on the east and H-9214 (1971) on the south.

5. Comparison with Prior Surveys

H-2150	(1892)	1:40,000
H-2151	(1892)	1:10,000
H-4763	(1927)	1:20,000

These prior surveys, taken together, cover the entire area of the present survey. No noteworthy differences exist between prior and present depths. However, in areas of deepest depths prior soundings appear deeper probably as a result of the methods of surveying.

The two islets located at latitude 56°33.57', longitude 133°46.15' from T-4330 were not observed above mean high water and are considered superseded by the ledge on the present survey.

The present survey obtained shoaler soundings in several instances due to its more detailed hydrography.

Some prior depths, rocks, and a number of bottom characteristics have been carried forward. With these additions, the present survey is adequate to supersede the prior surveys in the common area.

6. Comparison with Charts 8201 (latest print date Mar. 2, 1974)
17372 (8272) (latest print date Nov. 9, 1974)

A. Hydrography

The charted hydrography originates primarily with a partial application of the boat sheet (Bp 81812) and verified smooth sheet of the present survey, supplemented with soundings from the previously discussed prior surveys. The prior surveys require no further consideration.

The present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

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

7. Compliance with Project Instructions

This survey adequately complies with Project Instructions.

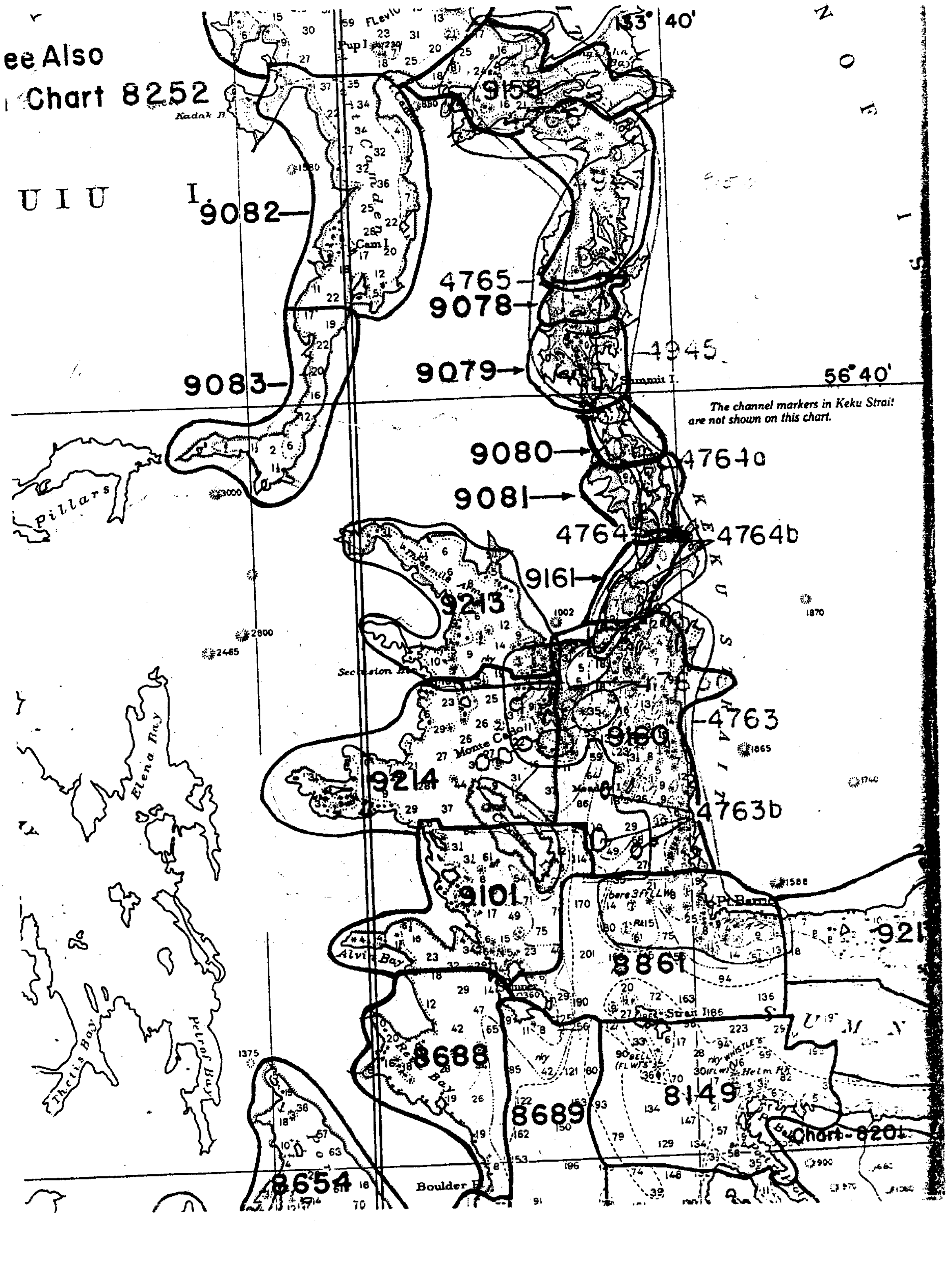
8. Additional Field Work

This survey is considered to be a good basic survey. Although drift sounding with a handlead over the features listed in Item 2c might reveal somewhat shoaler depths, the present development is considered adequate for charting.

Examined and Approved:

R K Hamlet
Chief
Marine Chart Division

Robert C. Munson
Associate Director
Office of Marine Surveys
and Maps



ee Also
Chart 8252
9082
9083
4765
9078
9079
9080
9081
4764
9161
9213
9214
9101
8688
8689
8654
8861
8149
9158
4764a
4764b
4763
4763b
133° 40'
56°40'
The channel markers in Keku Strait are not shown on this chart.
Chart 8201
Alvin Bay
Thetis Bay
Elena Bay
Pillars
Summit I.
Boulder

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

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9213

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	5/3/74	S. Mantoy	~~Full~~ Part Before ~~After Verification~~ Review ~~Inspection Signed Via~~
			~~Drawing No.~~ Suggested Notice to Mariners pencilled on Aid Proof.
8272	5/3/74	S. Mantoy	~~Full~~ Part Before ~~After Verification~~ Review ~~Inspection Signed Via~~
			~~Drawing No.~~ No Corr. Examined for Notice to Mariners only
8201	11/2/75	[illegible]	Full Part ~~Before~~ After ~~Verification~~ Review Inspection Signed Via
			Drawing No. #25 Appl'd misc corrections after Review directly to chart 8201
8201	3/28/78	KANIS	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. Exam for critical corrections only - corrections Applied
8272	7/31/78	J. Bailey	~~Full~~ Part ~~Before~~ After ~~Verification Review~~ Inspection Signed Via
			Drawing No. ~~Critical Corr's only~~ No corr. Exam^d Descriptive report only & Survey Sheet.
17360 (8201)	8/16/83	J. Bailey	Full ~~Part Before~~ After ~~Verification Review~~ Inspection Signed Via
			Drawing No. 31 Revised sndgs, curves, rocks, MHW.
17372	8/14/89	Carter	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 11, 8th Ed.
			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.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P63