9192

Diag. Cht. No. 8102-3.

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. PF-10-2-71

Office No. H-9192

LOCALITY

State Alaska

General Locality Clarence Strait

Locality Dewey Anchorage and Vicinity

19 71

CHIEF OF PARTY
H. R. Lippold, Jr.

LIBRARY & ARCHIVES

DATE 8-6-74

☆ U.S. GOV. PRINTING OFFICE: 1975—668-353

9192

Chron 6
Chart
8127
8161
8162

INKED
ADP

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-9192

FIELD NO.: PF-10-2-71

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: Clarence Strait

Locality: Dewey Anchorage and Vicinity

Scale: 1:10,000 Date of survey: ~~April - May 1971~~ April 28 - May 20, 1971

Instructions dated: 19 January 1971 Project No.: OPR-465-PF-71

Vessel: NOAA Ship PATHFINDER ~~and launches~~ Launches #1, #2 & #4

Chief of party: Capt. H.R. Lippold Jr.

Surveyed by: Ltjg R.L. Baker, Ltjg R.C. Roush, Ltjg R. Louis, Ltjg L.J. Oliver, Cdr S.C. Miller, Lt R.K. Matsushige, Lt D.E. Nortrup, Ltjg G.B. Mills,

Soundings taken by echo sounder, hand lead, pole: Raytheon 723 echo sounder, PFR

Graphic record scaled by: Ship's Personnel

Graphic record checked by: Ship's Personnel

Protracted by: ~~Ship's Personnel~~ inked Automated plot by: PMC Gerber Digital Plotter

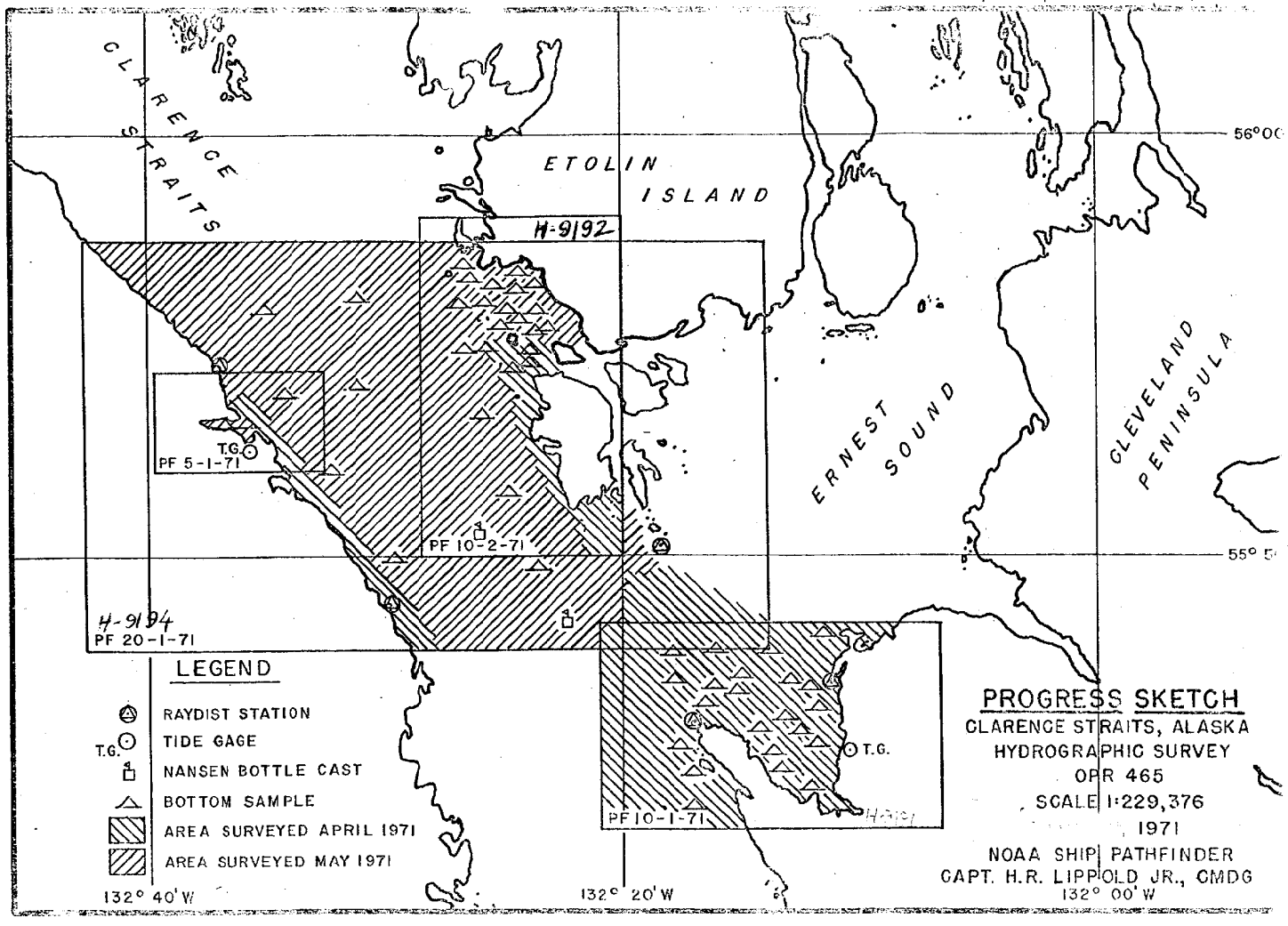
Soundings ~~penciled~~ inked by: ~~Ship's Personnel~~

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW

REMARKS:

Applied to stds 11-26-74 CB

USCOMM-DC 37009-P66


CLARENCE STRAITS
ETOLIN ISLAND
H-9192
ERNEST SOUND
CLEVELAND PENINSULA
56°00
55° 5
T.G.
PF 5-1-71
PF 10-2-71
H-9194
PF 20-1-71
PF 10-1-71
T.G.
T.G.
LEGEND
RAYDIST STATION
TIDE GAGE
NANSEN BOTTLE CAST
BOTTOM SAMPLE
AREA SURVEYED APRIL 1971
AREA SURVEYED MAY 1971
132° 40' W
132° 20' W
132° 00' W
PROGRESS SKETCH
CLARENCE STRAITS, ALASKA
HYDROGRAPHIC SURVEY
OPR 465
SCALE 1:229,376
1971
NOAA SHIP PATHFINDER
CAPT. H.R. LIPPOLD JR., CMDG

Descriptive Report to Accompany
Hydrographic Survey H-9192
Field No. PF 10-2-71
Scale 1:10,000

NOAA Ship PATHFINDER
Capt. H.R. Lippold Jr. Comdg.

A. PROJECT

The hydrography for this survey was completed in accordance with Project Instructions OPR-465-PF-71, Clarence Strait, Southeast Alaska, dated 19 January 1971.

B. AREA SURVEYED

H-9192
Boat sheet PF 10-2-71 covers the eastern shore of Clarence Strait, Alaska from latitude 55° 50' 30"N to 55° 58' 00"N, and is limited to the west at longitude 132° 28' 30"W. The area is also covered by (H-9194) PF 20-1-71, which junctions the work to the south and west. Hydrography began 28 April 1971 and ended 20 May 1971.
day 118 day 140

C. SOUNDING VESSEL

The hydrography in this area was done using the following PATHFINDER launches (position number color in parenthesis):

ML#1	(violet)	Pos. No. 1-354
ML#2	(brown)	" " 1111 — 1600
ML#4	(blue)	" " 5001-5976

D. SOUNDING EQUIPMENT

Raytheon DE 723 Fathometers, serial numbers 551, 552, 557, and 140, were used during the survey. Measured depths ranged from 0 to 260 fathoms. Echo sounder corrections were determined by bar checks, twice daily, and velocity corrections by water sample casts.

E. SMOOTH SHEET

Data sheets have been completed by personnel of Ship PATHFINDER in anticipation of the smooth sheet being plotted by the electronic plotter at the Pacific Marine Center.

F. CONTROL

Raydist electronic control was used for the work accomplished on this sheet. The Red station, operating on frequency 1635.015 KHz, was located at triangulation station SAL 1915. The Green station,
lat. 55°48'54.4", long. 132°29'49.9"

lat. 55°54'32.8", long. 132°36'53.9"
operating on frequency 1635.425 KHz, was located at ALE, an eccentric of triangulation station RATZ 1915 (24.8 meters, 349° 47' Az.). See the accompanying Raydist note for more details.

G. SHORELINE

The shoreline was transcribed from Incomplete Manuscripts T-12365, T-12370, T-12367, and T-12364. With the exception of T-12364, all shoreline has been field edited. Refer to T sheets for details. ✓
The above T-sheets have all been field edited.

H. CROSSLINES

Crosslines constitute approximately 8 per cent of the hydrography on the sheet. Crossline comparison was good considering the steep bottom slopes in much of the area. ✓

I. JUNCTIONS

The junction with ship hydrography on PF 20-1-71 (H-9194) on the south & west was good.
This survey also junctions on the north (was not verified at time of review) with H-9404 (1973) and on the east with H-9285 (1972).

J. COMPARISON WITH PRIOR SURVEYS

No discrepancies with prior surveys were indicated by the pre-survey review in the area of the sheet. ✓

K. COMPARISON WITH CHARTS *(Boat Sheet Comparison)* ✓

The area is covered by charts 8102, 8161 and 8124. The charted depths on chart 8102 are so sparse as to make comparison impossible. The depths on chart 8124 are in fair to poor ~~comparison~~ *agreement* with survey data.

A shoal area with a rock exposed 3 feet is located at ~~50°~~ 55° 52' 38"N latitude and 132° 23' 53"W longitude and is not shown on charts 8102 *and 8161*. ✓ *pos 1320* *The final smooth sheet sounding shows a rock awash showing 1' above MLLW*

A shoal area with minimum sounding 0.~~4~~ 3 fathom is centered at 55° *pos.* 53' 42"N and 132° 24' 17"W is shown on chart 8124 as rocks awash approximately 0.15 miles to the NNW. ~~Rocks carried forward from H-1239 as rocks awash.~~

A shoal area with minimum sounding of ~~2.9~~ 3.4 fathoms is centered at *pos 5949-50* 55° 55' 30"N and 132° 28' 26"W is not shown on chart 8124. *(shown on 1972 Ed of 8124) Final smooth sheet sounding 3⁴. The 2½ should be revised to agree with this sounding.*

A shoal area with a minimum sounding of 1.~~2~~ fathoms is centered at *pos 5975-76* 55° 55' ~~47~~ *58*"N and 132° 26' 41"W is not shown on chart 8124. *Final smooth sheet sounding is 1⁶*

A sounding of ~~5.5~~ *6.1* fathoms at 55° 56' ~~25~~ *24*"N and 132° 26' 0~~2~~ *6*"W is not indicated on chart 8124. *Final smooth sheet sounding 6¹. The 5½ on 1972 Ed. should be revised to agree with the 6¹ sounding.* *pos 5305-06*

L. ADEQUACY OF THE SURVEY

The survey is adequate for charting.

M. AIDS TO NAVIGATION

There are no aids to navigation in the survey area.

N. STATISTICS

B.S.

L#1 = ~~327 + 19 = 356~~ 354
L#2 = ~~472 + 17 = 489~~ 489
L#4 = ~~912 + 26 = 938~~ 975
~~1783~~ 1818

Number of positions:	~~1822~~ 1818
Lineal nautical miles:	281.5
Square nautical miles:	15
Bottom samples:	21

O. MISCELLANEOUS

None

P. RECOMMENDATIONS

The Dewey Anchorage portion of chart 8124 should be up-dated as soon as possible.

Q. REFERENCES TO REPORT

Descriptive Report PF 20-1-71. (H-9194)

Respectfully Submitted,

Donald E Nortrup

Donald E. Nortrup
Lt., NOAA

HORIZONTAL CONTROL

List of Stations on H- 9192 (PF- 10-2-71) Boatsheets ✓

SIGNAL NAME	ORIGIN OF POSITION	
	Photo	Triangulation Station
#080 (DOUBLE)	T- 12364 ✓	DOUBLE ~~1922~~ 1915
#081 (CENT)	T- 12367 ✓	CENT 1916
#082 (MABLE)	T- 12367 ✓	MABLE 1916
#083 (RAY)	T- 12367 ✓	RAY 1916
#084 (GULL)	T- 12367 ✓	GULL 1916
#085 (ERN)	T- 12370 ✓	ERN 1915

GULL 1916 is reference sta on H-9192 smooth sheet.

RAYDIST NOTE

This report describes the use of the Raydist DRS system used on OPR-465-PF-71, Clarence Strait, Alaska, during the year 1971.

The launches carried the DRS Raydist system made by Hastings Raydist Co. The launch installation consisted of a ZA-67A navigator, a TA96 transmitter, a strip chart recorder and a 10-15 foot fiberglass whip antenna mounted on the house. The Raydist equipment was powered by the launch battery banks which were charged by the launch alternator. Ground consisted of a copper plate on the launch hull.

All shore stations were one piece self-contained units which were sealed to withstand foul weather. The installations consisted of antennas of various heights constructed from 10 foot aluminum Tabet tower sections with a 20 foot whip antenna on top (the whip antenna was variable in lenght). The whole tower acted as an antenna and rested on an insulated base plate. Four sections of guys made of 3/8" polypropylene line were spaced at 90° intervals around the tower. A ground plane consisting of #18 insulated copper wire radials spread at equal intervals was constructed outward from the antenna base. Both stations were driven by Raydist Base Stations model AA60. The Green base station was serial #15 and the Red station was serial #14.

The shore stations were operated on 24 V.D.C. Eight 12 volt heavy duty 90 ampere-hour batteries operated the stations at low power for 8-10 days. These batteries were replaced by freshly charged batteries from the Ship when they were expended or charged at the station site with a portable gasoline powered generator. Except for replacing batteries, the stations were left unattended. Motorola FM receivers operating on 34-98 MHZ (the same frequency as the Ship's base station) were set up at each station site. These receivers were equipped with a filter which passed only a single tone and operated a relay to turn the stations on and off remotely at the end of each day of hydrography. The single tone was generated by an oscillator fed into the base station of the Ship and was of the order of 2 KHZ. These units extended the time between shore station replenishments.

Each unit operated as a set consisting of a transmitter and navigator. These units were shifted between launches and the Ship as the need arose.

Set #1	Set #2	Set #3
TA96 #20	TA96 #22	TA96 #34
ZA67A #26	ZA67A #47	ZA67A #54
3306.465 KHZ	3306.500 KHZ	3306.400 KHZ

Lane width 45.316 meters

Green Base Station	Red Base Station
AA60 #15	AA60 #14
1653.425 KHZ	1653.015 KHZ

Raydist shore stations were located as follows:

1. ANT (located by ground survey) "RED" off limits of H-9192
   Latitude 55° 46' 58.54"N Longitude 132° 11' 19.68"W

2. SLOW (triangulation station) "GREEN" off limits of H-9192
   Latitude 55° 50' 22.963"N Longitude 132° 18' 33.537"W

3. LEM OFFSET (offset of LEM 1916) "BLUE" off limits of H-9192
   Latitude 55° 46' 02.934"N Longitude 132° 16' 52.197"W

4. SAL 1915, 1922 (triangulation station) "GREEN" off limits of H-9192
   Latitude 55° 48' 54.401"N Longitude 132° 29' 49.895"W

5. ALE (offset of RATZ 1915, 1922) "RED" off limits of H-9192
   Latitude 55° 54' 32.832"N Longitude 132° 36' 53.874"W

Calibration was done in two ways; by calibration tower and by visual fixes on signals located by ground survey methods. The calibration towers were located by ground survey methods and checked by launches that had known Raydist counts. Visual fixes taken with sextants were radioed into the Ship and the exact position of the launch and the exact lane count were determined with the WANG Advanced Programming Calculator. For the program used, see the 1971 special report on the WANG.

The Raydist equipment operated satisfactorily and except for one breakdown, the shore stations were relatively trouble free. The sets on the launches experienced various breakdown due to vibration on the launches, poor grounding, poor connections, and minor electric breakdown. All Raydist failures have since been resolved.

ABSTRACT OF CORRECTIONS TO RAYDIST MEASUREMENTS

Each launch set their lane count and partial lane count as was necessary. Due to drift in the Raydist set or poor initial calibration due to adverse weather, the partial lane count would in rare cases, be off by as much as two or three tenths of a lane at the end of the day. In an attempt to keep descrepancies to less than a tenth of a lane, these correctors are applied. There are no correctors for days when launches calibrated within a tenth of the true values at the beginning and end of hydrography.

PF-10-2-71

CORRECTIONS TO RAYDIST

	JULIAN DAY	RED (BLUE) CORRECTION	GREEN CORRECTION
ML#1	119	0000.06	0000.05
ML#1	124	0000.05	0000.07
ML#2	119	1000.08	1000.09
ML#2	124	1000.02	1000.01
ML#2	125	1000.08	1000.09
ML#2	126	0000.06	0000.07
ML#2	127	0000.09	0000.06
ML#2	128	0000.08	0000.10
ML#4	118	0000.02	1000.10
ML#4	119	0000.08	0000.03
ML#4	124	0000.08	1000.10
ML#4	125	0000.08	0000.18
ML#4	126	0000.12	0000.03

VELOCITY CORRECTORS
PF 10-2-71

TABLE #6 (F)	ML #1
0.0 - 1.7	0.1
1.8 - 7.3	0.0
7.4 - 50	0.1
50.1 - 80	0.2
80.1 - 100	0.3
100.1 - 150	0.5
150.1 - 280	1.0
280.1 - 385	2.0

TABLE #7 (G)	ML #2
0.0 - 7.8	0.0
7.9 - 50	0.1
50.1 - 80	0.2
80.1 - 100	0.3
100.1 - 150	0.5
150.1 - 280	1.0
280.1 - 385	2.0

TABLE #8 (H)	ML #4
0.0 - 4.7	0.1
4.8 - 7.5	0.0
7.6 - 50	0.1
50.1 - 80	0.2
80.1 - 100	0.3
101.1 - 150	0.5
150.1 - 280	1.0
280.1 - 385	2.0

Bottom Sample Note To Accompany Boatsheet PF 10-2-71

Surface sediment characteristics for Clarence Strait, Alaska, (Dewey Anchorage) are tabulated on the bottom sample data log sheets accompanying this report. The bottom characteristics were determined by a representative sampling of the northern half of the project area, and sample spacing averages one nautical mile.

Twenty-one samples were obtained by PATHFINDER motor launch number four, using a ten pound clam shell type grab sampler. The sampling device was lowered with the aid of a sounding machine. Because the sounding machine was hand-powered, samples were seldom taken in water deeper than twenty fathoms. The samples were described briefly in the field and then stored in plastic bags in accordance with the Pacific Marine Center OPORDER.

Launches 1 and 2, which surveyed the southern half of the area did not take bottom characteristics.

FORM C&GS-733M
(8-23-60)

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

VESSEL	PROJ. NO.	YEAR		CHECKED BY	DATE CHECKED
Launch No 4 NOAA SP PATHFINDER	OPR-465	1971	Clarence Strait Alaska		

SERIAL NO.	DATE	SAMPLE POSITION LATITUDE N	SAMPLE POSITION LONGITUDE W	DEPTH (Fathoms)	WEIGHT OF SAMPLER	APPROX. PENETRATION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, cutter, etal. no., type of bottom, slope, plain, disposition, etc.)
5823	9 May '71	55°-56.8'	132°-24.3'	12	10 lb			gn	S ,	PF 10-2-71
5839	9 May '71	55°-55.8'	132°-22.7'	11				gn	S , Sh , G	
5877	19 May '71	55°-56'	132°-26.7'	2					hrd no sample 3 tries	
5878	19 May '71	55°-55.9'	132°-26.6'	16					Sh , G	
5894	✓	55°-56.1'	132°-25.6'	14					Sh	
5895	✓	55°-56.9'	132°-26.5'	17				gn	Sh , S	
5896	✓	55°-56.7'	132°-26.3'	35					Rk	
5897	✓	55°-56.5'	132°-25.3'	12				gn	S , Sh , Co	
5898	✓	55°-55.9'	132°-24.6'	17				gn	S	
5899	✓	55°-55.6'	132°-24.9'	13					Sh , S , coral or bryozoan	
5900	✓	55°-55.7'	132°-24.2'	6					Sh , S , G	
5901	✓	55°-56.4'	132°-24.3'	12				gn	S , Sh	
5902	✓	55°-56.3'	132°-23.7'	13				gn	S	
5903	✓	55°-55.9'	132°-23.5'	11					Sh	
5904	✓	55°-55.4'	132°-23.0'	19				gn	S , Rk	
5925	✓	55°-55.3'	132°-23.5'	11				gn	S , Sh , G	

Use more than one line per sample if necessary.

USCOMM-DC 822

FORM C&GS-733M
(8-23-60)

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

VESSEL	PROJ. NO.	YEAR		CHECKED BY	DATE CHECKED
Launch No. 4 NOAA SP PATHFINDER	OPR-465	1971	Clarence Strait, Alaska		

SERIAL NO.	DATE	SAMPLE POSITION LATITUDE N	SAMPLE POSITION LONGITUDE W	DEPTH (Fathoms)	WEIGHT OF SAMPLER	APPROX. PENETRATION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, dented cutter, stat. no., type of bottom relief i.e., slope, plain, disposition, etc.)	OBS. INIT.
5926 ✓	19 May '71	55°-54.9′	132°-23.7′	21	10lb	½"		gn	S	PF10-2-71	
5927 ✓	↓	55°-54.6′	132°-23.8′	13				gn	Rk , S		
5928 ✓		55°-54.4′	132°-24.4′	18				gn	Rk , trace of S	2 tries: hard bottom	
5929 ✓		55°-54.8′	132°-24.9′	19					hrd, no sample 3 tries		
5930 ✓		55°-55′	132°-25.6′	24					Rk		

APPROVAL SHEET

REGISTRY NO. H-9192

This Descriptive Report has been examined and approved.

[redacted]
Capt. NOAA
NOAA Ship PATHFINDER

TIDE NOTE

The standard tide gage at Ketchikan served as the reference station for the project. The accuracy of approximation cycle was 0.0010. Time correction for highs was +13 minutes and for lows +18 minutes. Correction to highs was 1.1 feet and to lows 0.0. The range ratio applied to highs was 1.0000 and to lows 1.0000.

The predicted tides thus corrected were used on Boatsheets PF-10-1-71, PF-10-2-71, PF-20-1-71, and PF-5-1-71.

Two Bubbler Tide Gages were installed to control the survey. One located at Union Bay, latitude 55° 45.8'N, longitude 132° 11.1'W, and the other located in Ratz Harbor, latitude 55° 52' 47"N, longitude 132° 35' 47"W. Operation at both sites was satisfactory.
Both Tide Gages fell outside limits of H-9192(1971)

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

TIDE NOTE FOR HYDROGRAPHIC SHEET 12/16/72

Processing Division: Pacific Marine Center

Hourly heights are approved for

Tide Station Used (NOAA form 77-12): Ratz Harbor, Alaska
Tide Sta. not on H-9192 lat. 55°52'47", long. 132°35'47"
Period: May 11, 1971-May 20, 1971

HYDROGRAPHIC SHEET: H9193, H9192

OPR: 465

Locality: Clarence Strait, Alaska (S.E.)

Plane of reference (mean lower low water): 4.0 feet
which is feet on tide staff.

Height of Mean High Water above Plane of Reference is 14.8 ft.

Remarks:

*Hourly heights have been revised in red and verified as follows:

DATE	HOUR
May 19	0800
	1000
	1100

Robert A Cummings
Chief, Tides Branch

GEOGRAPHIC NAMES

Survey No. H-9192

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	
CARLTON ISLAND										1
CENTER ISLAND										2
CLARENCE STRAIT										3
DEWEY ANCHORAGE										4
DOUBLE ISLAND										5
ERNEST POINT										6
ETOLIN ISLAND										7
GULL POINT										8
MABEL ISLAND										9
ONSLOW ISLAND										10
SPLIT ~~SPIT~~ ISLAND										11
KELP POINT										12
										13
										14
										15
										16
										17
										18
										19
						Approved				20
						Chas E. Herrington				21
						Staff Geogiepher				22
						31 Jan 1975				23
										24
										25
										26

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

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-9192

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

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

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES			1			
CAHIERS	1					
VOLUMES	11					
BOXES						

T-SHEET PRINTS *(List)* [redacted]

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		1784	47	
POSITIONS REVISED		58	9	
DEPTH SOUNDINGS REVISED		82	61	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		18	24	
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		Ø	—	
	TIME (MANHOURS)			
Verification of Control	2	8	2	
Verification of Positions		76	6	
Verification of Soundings		298	30	
Smooth Sheet Compilation		97		
ALL OTHER WORK		Ø	108	
TOTALS		479	146	

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY Matthew G. Sanders	BEGINNING DATE 10 Nov. 1973	ENDING DATE 25 July 1974
REVIEW BY K. Malycke	BEGINNING DATE 7 Feb, 1975	ENDING DATE 2 April 1975

Inspection J.T. Gallahan 75 hrs. 9 Mar. 76 4-14-76
Carstens 10 hr July 15, 1977

Reg. No. H-9192

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:

H-9192

Items for Future Presurvey Review

The bottom is considered adequately developed on the present survey.

Position Index		Bottom Change Index	Use Index	Resurvey Cycle
Lat.	Long.			
555	1323	1	1	50 years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE SURVEYS DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9192 FIELD NO. PF-10-2-71

Alaska, Clarence Strait, Dewey Anchorage and Vicinity

SURVEYED: April 28 - May 20, 1971

SCALE: 1:10,000 PROJECT NO.: OPR-465

SOUNDINGS: DE-723 Depth Recorder CONTROL: Raydist (Range-Range)

Chief of Party	H. R. Lippold, Jr.
Surveyed by	R. L. Baker
	R. Louis
	R. K. Matsushige
	S. C. Miller
	G. B. Mills
	D. E. Nortrup
	L. J. Oliver
	R. C. Roush
Automated Plot by	Gerber Digital Plotter (PMC)
Verified and Inked by	M. G. Sanders
Reviewed by	K. R. Malycke
	Date: April 2, 1975
Inspected by	J. T. Gallahan

1. Description of the Area

This survey covers the inshore area of Clarence Strait from Ernest Point to Kelp Point primarily in the Dewey Anchorage area.

The bottom slopes to a maximum depth of 261 fathoms with numerous islands, reefs, ledges, and rocks within the 50-fathom area.

Bottom characteristics are predominantly sand, shell, and rock.

2. Control and Shoreline

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

The shoreline originates with class I maps T-12364, T-12365, T-12367, and T-12370 of 1963-71.

The mean high water line is shown for guidance only; the true position is shown on the topographic surveys mentioned above.

3. Hydrography

a. Depths at crossings are in good agreement.

b. The usual depth curves were adequately delineated except where foul or rocky ledge areas made launch hydrography dangerous.

c. The development of the bottom configuration and the investigation of least depths are considered adequate.

4. Condition of Survey

The sounding records, smooth plotting, Descriptive Report, and printouts are adequate and conform to the requirements of the Hydrographic Manual and the Instruction Manual - Automated Hydrographic Surveys, except as follows:

a. The bottom characteristics were not taken south of latitude 55°54' in the areas surveyed by launches 1 and 2.

b. An unsurveyed area exists between Carlton Island and Onslow Island in the vicinity of latitude 55°54.6', longitude 132°23'.

c. The tributary in the vicinity of latitude 55°52.7', longitude 132°23' was not adequately developed.

d. Rocks, ledges, and kelp sometimes were not shown on the verified smooth sheet; reference to the boat sheets and sounding volume notes should have been utilized to properly delineate such features.

e. Bare rock elevations originating with topographic sheets were incorrectly shown in black.

f. Numerous detached position soundings taken by launches 1, 2, and 4 using the depth recorder did not reflect the TRA and velocity correctors in the Sounding Printout.

5. Junctions

An adequate junction has been effected with H-9404 (1973) on the north and with H-9285 (1972) on the east between Carlton Island and Etolin Island. The junction between H-9285 (1972) and the present survey between Carlton Island and Onslow Island was precluded because of the holiday in this area. The junction with H-9194 (1971) on the south and west will be discussed in the review of that survey.

6. Comparison with Prior Surveys

a. H-1742 (1886) 1:80,000
H-1739 (1886) 1:20,000

These early reconnaissance surveys which cover the area of the present survey could not be effectively compared with the present survey due to the inadequate control and the nature of the survey. Attention is directed to the following charted items originating with H-1739 (1886):

(1) The rock awash at latitude 55°54.4', longitude 132°23.9' has been carried forward to the present survey as a sunken rock.

(2) The three rocks awash charted in the vicinity of latitude 55°53.8', longitude 132°24.4' and two rocks awash in the vicinity of latitude 55°56.9', longitude 132°26.2' do not appear on T-3656 (1916) or T-12367 (1963-71) and were not found on the present survey. These rocks are considered nonexistent and should be disregarded.

(3) The following depths (dashed Presurvey Review items) are discredited by the present survey:

(a) 6 1/2 fathoms at latitude 55°54.9', longitude 132°24.1'

(b) 5 3/4 fathoms at latitude 55°55.1', longitude 132°23.9'

(c) 6 1/2 fathoms at latitude 55°55.3', longitude 132°25.3'

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

b. H-3793 W.D. (1915-16) 1:40,000

No conflicts exist between the present depths and the effective drag depths.

7. Comparison with Charts 8124, latest print date November 4, 1972
8161, latest print date June 16, 1973
17420 (8102), latest print date August 31, 1974

a. Hydrography

The charted hydrography originates with boat sheet information of the present survey (Bps. 81731-33 and 81787), the previously discussed prior surveys, and miscellaneous data. Because of use of preliminary correctors, boat sheet soundings are generally .4 to .6 fathom shoaler than smooth sheet soundings. Attention is directed to the following:

(1) The sunken rock Reported P.D. at latitude 55°55.62', longitude 132°22.25' is Presurvey Item No. 7 originating with a USGS Quadrangle. This item is more effectively covered by hydrography on H-9285 (1972) and will be discussed in the review of that survey.

(2) The 1-fathom sounding at latitude 55°54.55', longitude 132°25.1' orignates with boat sheet information (Bp-87187). A 7 sounding was erroneously transferred as a 1; therefore, the 1 sounding should be deleted.

(3) The charted rock awash baring 4 feet at latitude 55°57.05', longitude 132°26.45' originates with T-3656 (1916). This rock, which does not appear on T-12364 (1963-71) and has not been discredited by the present survey, should be retained as charted.

Except as noted above the present survey is adequate to supersede the charted hydrography in the common area.

b. Aids to Navigation

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

8. Compliance with Instructions

This survey adequately complies with project instructions except that:

a. The number of bottom samples taken were less than called for in project instructions.

b. Hydrography was inadequate in the area previously discussed in item 4b.

9. Additional Field Work

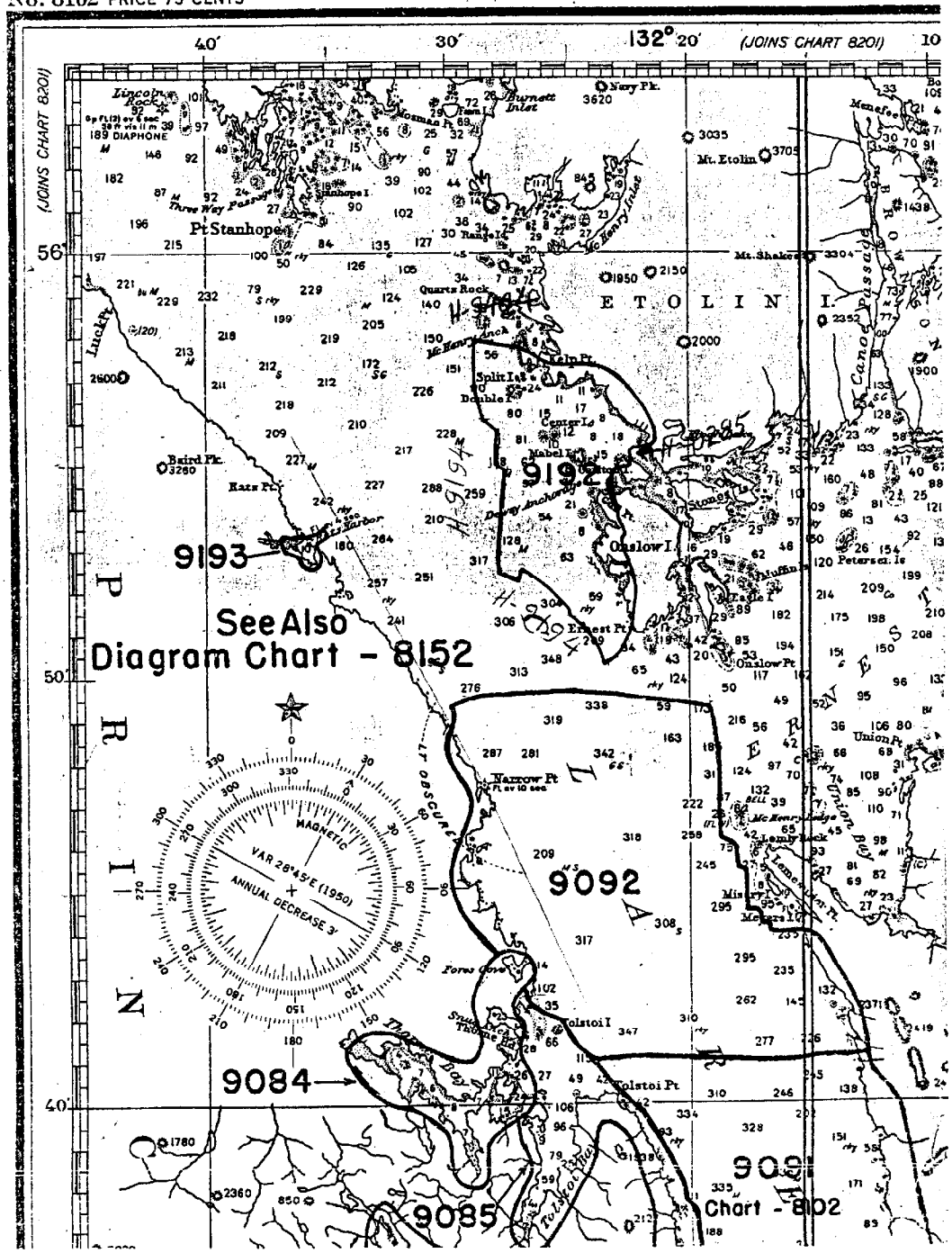
This is a good basic survey of the area covered. The holiday in the vicinity of latitude 55°54.6', longitude 132°23.0' should be surveyed at an opportune time.

Examined and Approved:

Chief
Marine Surveys Division

Associate Director
Office of Marine Surveys
and Maps

No. 8102 PRICE 75 CENTS



Form C&GS-8352
(9-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9192

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
8124	10/31/77	Mark J. Friese	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via Drawing No. App'd several * & revised ledges, added elev. to rocks, added bottom samples & Foul areas
8201	3/31/78	Kawis	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via Drawing No. Applied misc corrections thru Chart 8161 (Dwg # 15)
17423	8/22/80	Raitoh	Full ~~Part Before~~ After Verification Review Inspection Signed Via Drawing No. 9 Fully apply'd
17385	2-17-82	N.J. Borowski	Full ~~Part Before~~ After Verification Review Inspection Signed Via Drawing No. #17 App'd thru 17423 in common area, app'd directly to 17385 outside
17360	8/17/83	J. Bailey	Full ~~Part Before~~ After Verification Review Inspection Signed Via Drawing No. 3 Revised sndgs. curves, rocks, MHW. App'd. thru 17423 #9, 17385 #18, and directly from smooth sheet
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	
17420	6/25/84	B. Fernandez	Full ~~Part Before~~ After Verification Review Inspection Signed Via Drawing No. 32, Appd through CHT-17423 and CHT. 17385
			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.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.

Record of Application to Charts

CHART	DATE	CARTOG.	Remarks
8124	11/5/76	H.J. Bosowski	Part Appl'd After Review + Insp., Not Signed. Added Several Islets + Rocks Awash, Added Several Shoal Sndings, Revised Foul Limits, Added or Revised MLLW Ledges. Adjusted Shoreline NW Part of Dewey Anchorage.
8161	4-14-77	M. Sager	Part ~~Fully~~ Appl'd after Review & Inspection, Inspection NOT signed. Revised & added Soundings. ~~Not Applied to AREA of survey that falls in larger scale chart~~ 8124. ~~(chart 8124 in repro not available at this time~~.