

10048

10048

Diagram No. 8201-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey .. Navigable Area Hydrographic ...

Field No. RA-10-5-82

Registry No. H-10048

LOCALITY

State Alaska

General Locality Smeaton Bay

Sublocality Wilson Arm and Bakewell Arm

1982

CHIEF OF PARTY

CAPT R.J. Land

LIBRARY & ARCHIVES

DATE March 1, 1984

☆U.S. GOV. PRINTING OFFICE: 1985-566-054

Area 6

17424 ✓

17420 ✓

16016

Cartog.

sign off in

Back of D.R.

HYDROGRAPHIC TITLE SHEET

H-10048

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

FIELD NO.

RA-10-5-82

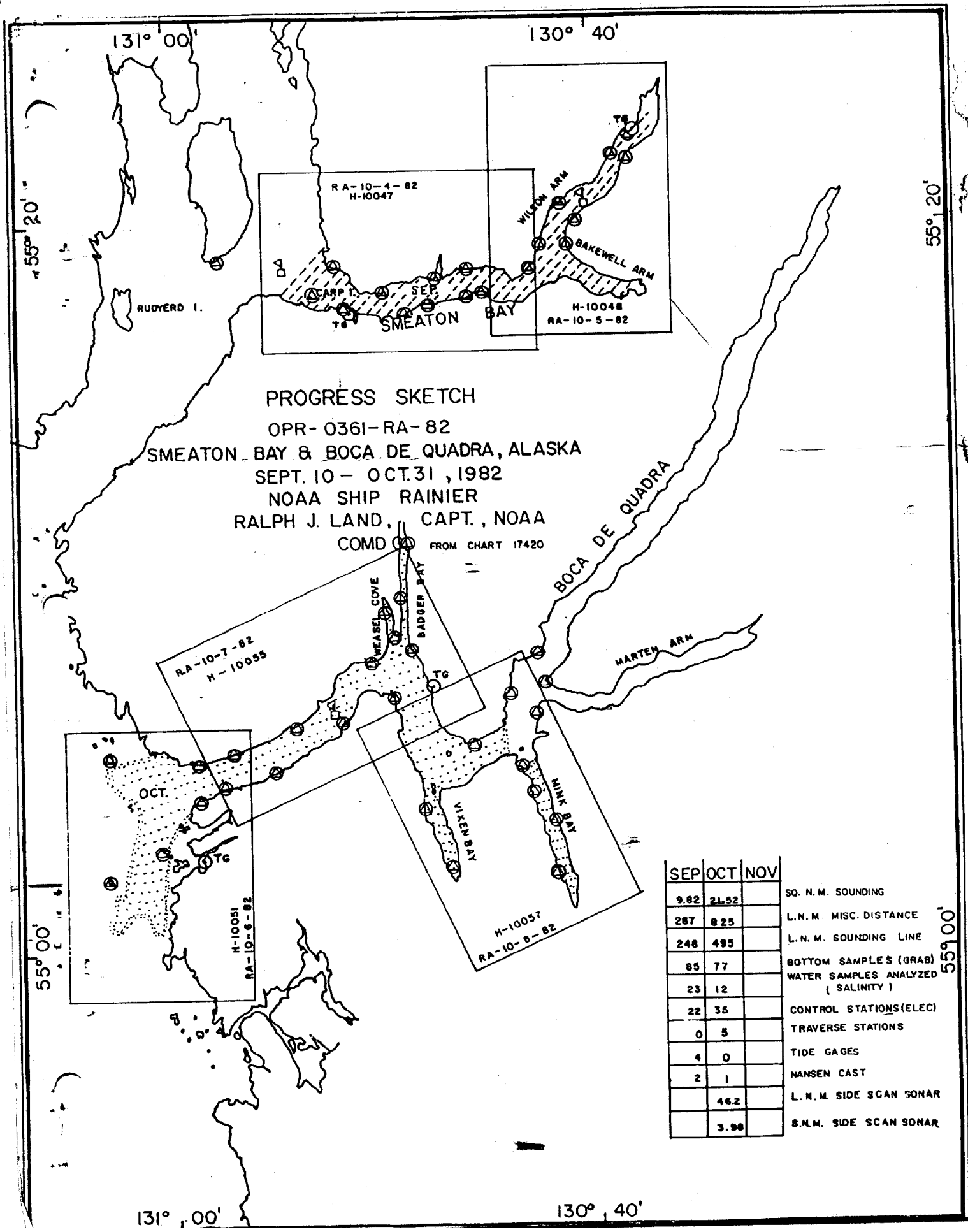
State AlaskaGeneral locality Smeaton BayLocality Wilson Arm and Bakewell ArmScale 1:10,000Date of survey September 14-25, 1982Instructions dated June 2, 1982Project No. OPR-0361-RA-82Vessel NOAA Ship RAINIER and Launches 2123, 2124, 2125, 2126Chief of party CAPT Ralph J. LandSurveyed by LT S. Ludwig, ENS M. Mathwig, ENS R. Koehler, ENS W. Logue, ENS J. JudsonSoundings taken by echo sounder, ~~beam lead, pole~~ Ross Fineline Fathometer SystemGraphic record scaled by Ship's PersonnelGraphic record checked by Ship's Personnel

Verification

~~Reviewed~~ by Thelma O. JonesAutomated plot by PMC Xynetics Plotter

Evaluation

~~Verification~~ by Gordon E. KaySoundings in fathoms ~~feet~~ at MLLWREMARKS: Notes in black ink were performed during evaluation and/or quality
control at the Pacific Marine Center, Seattle, WA.AN015 - 4/19/84 mgt
3-6-84 STANDARDS CK'D.
C. Kay



PROGRESS SKETCH

OPR- 0361-RA-82

SMEATON BAY & BOCA DE QUADRA, ALASKA

SEPT. 10 - OCT. 31, 1982

NOAA SHIP RAINIER

RALPH J. LAND, CAPT., NOAA

COMD FROM CHART 17420

SEP	OCT	NOV
9.82	21.52	
287	825	
248	495	
85	77	
23	12	
22	35	
0	5	
4	0	
2	1	
	46.2	
	3.98	

SQ. N.M. SOUNDING
 L.N.M. MISC. DISTANCE
 L.N.M. SOUNDING LINE
 BOTTOM SAMPLES (GRAB)
 WATER SAMPLES ANALYZED (SALINITY)
 CONTROL STATIONS (ELEC)
 TRAVERSE STATIONS
 TIDE GAGES
 HANSEN CAST
 L.N.M. SIDE SCAN SONAR
 S.N.M. SIDE SCAN SONAR

55° 00'

A. PROJECT

Survey H-10048 was conducted in accordance with Project Instructions OPR-0361-RA-82, Smeaton Bay and Boca de Quadra, Alaska, dated June 2, 1982, and Supplements to the Project Instructions, Change No. 1 dated July 28, 1982 and Change No. 2 dated August 23, 1982. ✓

B. AREA SURVEYED

Survey H-10048 was performed in Eastern Smeaton Bay, including Wilson Arm and Bakewell Arm.

The area included the navigable waters east of longitude $130^{\circ}43.7'W$ extending to the ends of Wilson and Bakewell arms.

The inshore limit was defined by the one fathom curve where possible. Because of the very steep inshore bottom gradient, the one fathom curve was not possible on several lines. However, the inshore lines were always less than 100 meters from shore, thus meeting the requirement stated in section 4.11.2.1 of the Hydrographic Manual. Inclusive dates of the survey were September 14-25, 1982. ✓

C. SOUNDING VESSEL

All soundings were obtained using the following hydrographic launches: RA-3 (2123), RA-4 (2124), RA-5 (2125), and RA-6 (2126). No unusual sounding vessel configurations or problems were encountered. ✓

D. SOUNDING EQUIPMENT

Introduction

All information contained in this section is applicable to survey H-10048. Sounding equipment is discussed as well as corrections, which include sound velocity, draft, settlement and squat, instrument corrections for blanking, and phase and initial drift errors. ✓

Sounding Equipment

Echo soundings obtained during survey H-10048 were taken by RAINIER launches RA-3, RA-4, and RA-6. RA-5 was used for bottom sampling only. Each launch was equipped with Ross Fineline Fathometer systems. These systems include the following Ross components: model 400 transceivers, model 5000 analog trace recorders, model 6000 digitizers, and 100 khz transducers. The serial numbers of these components are summarized in Table I. ✓

TABLE I
Echo Sounding Component Serial Numbers

<u>Launch</u>	<u>2123</u>	<u>2124</u>	<u>2125</u>	<u>2126</u>
Transceiver	1041	1080	1040	1042
Analog Recorder	1071	1046	1042	1070
Digitizer	1041	1080	1040	1042

Sound Velocity Corrections

Two Nansen casts were performed in order to determine sound velocity corrections. Table II summarizes the Nansen cast data.

TABLE II
Nansen Cast Data

<u>Date</u>	<u>Location</u>	<u>Velocity Table</u>
20 Sept 1982	55°18.7'N 130°54.4'W	7 <i>outside of H-10048 limits</i>
25 Sept 1982	55°20.5'N 130°40.2'W	7

Water samples obtained from the Nansen casts were analyzed for salinity using a Beckman model No. RS-713 salinometer (S/N 59265) and standard laboratory procedures (see H.O. 607, Instruction Manual for Obtaining Oceanographic Data, Third Edition, U.S. Naval Oceanographic Office, 1968). The salinometer was last calibrated in April, 1982 by the Northwest Regional Calibration Center, Bellevue, Washington. The calibration results are provided in the separates following the text.

Velocity correction tables were yielded by inputting the Nansen cast results into computer program RK 530: Velocity Correction Computations (May 10, 1976 version) which was run on RAINIER's PDP 8/e digital computer system.

The standard velocity correctors for this survey were obtained by graphing the actual depths minus velocity corrections versus velocity correction and picking off depths that corresponded to standard correction intervals (see Hydrographic Manual, 4th Edition). A list of computed correctors is provided in the separates following the text.

Launch Draft Corrections

Corrections for launch draft were determined from standard bar checks (see Hydrographic Manual, Fourth Edition, 1976). Bar checks were

performed daily, except when wind or rough seas prevented launch personnel from obtaining accurate bar checks.

Mean fathometer depth values were corrected for velocity and subtracted from the true bar depths. The resulting values agreed with the historic value of 0.3 fathoms for the survey launch's TRA's except for RA-3. The TRA for RA-3 was computed to be 0.45 fathoms which agrees with the prior TRA, computed since the installation of side scan sonar on this launch.

*See Helmut's
Report section
1.C.*

During the course of the survey an error was detected in the length of the bar used on launch RA-6. The error indicated a 0.2 fathom difference in the historical TRA value. The bar was remarked and the bar check data on the raw printouts were corrected.

All smooth field sheets were plotted using a launch TRA value of 0.3 fathoms except for soundings obtained by RA-3. These soundings were plotted using a launch TRA value of 0.5.

Launch Settlement and Squat Corrections

Settlement and squat tests were conducted at Shilshole Bay Marina in Puget Sound, Washington on April 2 and April 6, 1982 and at Port Chatham, Alaska on July 23, 1982. The second location was used to obtain new settlement and squat values for RA-3 only, after the side scan sonar equipment was installed. A leveling rod was located over the transducer on each launch. An observer on shore sighted through a level to the rod and recorded the readings at various speeds. These readings were taken at speeds increasing from 0 RPM to 2600 RPM (full ahead) for each launch except RA-4, which went to 2800 RPM. A second set of readings was taken at speeds decreasing from full ahead to 0 RPM. The two sets of readings were then averaged to yield the final settlement and squat correctors. A list of the final correctors is included in the separates following the text.

Settlement and squat correctors were not applied to the final smooth field sheets of this survey. All soundings were obtained at speeds for which the corrector equaled 0.0 fathoms.

Sounding Instrument Correctors

During survey operations the blanking depth was set to a value shoaler than the shoalest bottom expected and was adjusted as the depth changed. Corresponding analog trace depths were substituted for missing digital soundings as a part of standard scanning procedures.

The initial trace on the analog recorders was continuously monitored to prevent any error caused by a drifting initial. Phase calibrations

were also performed to prevent belt tension error and stylus/paper misalignment on launch fathometers in accordance with PMC OPORDER.

Manual Sounding Correctors

Manual soundings were obtained by use of hand-held lead lines where required. Depth markings on these lines were compared with a steel measuring tape prior to survey operations and were found to be accurate.

Special Analog Interpretation Problems

Fathograms were scanned on-line and again at the end of each work day for peaks and deeps. All fathograms were scanned at least one additional time. This procedure was found to be necessary due to the abundance of side echoes caused by the steepness of the bottom topography. The side echo problem was enhanced when sounding parallel to a steep bottom gradient. The fathometers were operated using the manual gain control rather than the automatic gain control (AGC) to help keep the occurrence of side echoes to a minimum. Digital depths were replaced by analog depths whenever they were found to represent side echoes rather than the true bottom. However, due to the difficulty of interpreting side echoes, some problems may still exist in areas where side echoes were prevalent.

E. HYDROGRAPHIC SHEETS

Field sheets RA-10-5S-82 and RA-10-5N-82 were prepared on board RAINIER using the PDP 8/e complot system. The sheets were based on modified transverse mercator projections. A list of parameters used to define the hydrographic sheets are attached on the separates following the text. All field records will be sent to the Pacific Marine Center, Seattle, Washington for verification. The smooth field sheet for this survey is plotted at a 1:10,000 scale.

The maximum line spacing required in the project instructions is 200 meters, however, due to the relative narrowness of the fjord, the maximum line spacing for this survey was 100 meters. There are extremely limited anchorage areas in Smeaton Bay. Areas indicating a possible anchorage site were developed to 50 meter, or less, line spacing.

F. CONTROL STATIONS

No new horizontal control stations were established. All visual and electronic control utilized recovered existing third order stations on the North American 1927 Datum.

The following stations were recovered for this survey:

HOPE 2	1931	ROUND 1931	STOP 1931
NEAP 2	1931	ASP 2 1931	ARM 2 1931
COY 2	1931	FINAL 1931	EVEN 1931
HELP	1931	QUAD 1931	BUOY 2 1931
NET 2	1931	CAB 2 1931	TREE 2 1931
TON	1931	WIG 1931	

G. HYDROGRAPHIC POSITION CONTROL

Electronic range/range and range/azimuth methods were utilized for hydrographic position control. Motorola Mini-Ranger III positioning systems and Wild Theodolites were used. The tables below summarize the location of all Mini-Ranger mobile and shore equipment.

Table I
Mini-Ranger Mobile Equipment

<u>Vessel</u>	<u>Console</u>	<u>R/T S/N</u>
2123	720	2710
2124	30269	1636
2125	715	1557
2126	711	1646

Table II
Mini-Ranger Shore Equipment

<u>Code</u>	<u>Transponder S/N</u>	<u>Station #</u>
B	4951	122
C	1628	116, 120, 121
D	1569	110
E	911721	112, 113, 114
F	911711	112, 114, 121, 125
2	B1106	114

Mini-Ranger Calibration and System Check

System checks were performed daily. These checks were completed by observing horizontal sextant angles to visible Third Order, Class I or better geodetic stations. On JD 268 survey launch RA-6 (2126) performed a static calibration. This was accomplished at high water when the launches came alongside a hydrographic signal. Several readings were compared to the inverse distance between the calibration station and the Mini-Ranger station. The launch R/T unit was less than one meter from the station. ✓

Mini-Ranger baseline calibrations for this survey were performed on August 30th, 31st, and September 1, 1982. These calibrations took place at Sand Point, Seattle, Washington. Only the initial correctors were used to plot the smooth field sheet. The initial baseline calibration for each R/T console pair and transponder combination also determine minimum signal strength cut off values for each system. The data for all baseline calibrations are included in the Electronic Control Report. ✓

Mini-Ranger Performance

All shore stations were positioned on Third Order, Class I or better geodetic control stations. Power was supplied by two or four 12-volt batteries connected in series and/or parallel. Overall, shore transponder units performed very well with few problems as did all mobile equipment. ✓

H. SHORELINE

The shoreline for this survey was transferred from enlargements of U.S. Geological Survey Quadrangle Maps at 1:63,360 scale. The enlargements initially provided were not at the correct scale and had to be enlarged a second time to 1:10,000 by an enlargement projector at Pacific Marine Center. This resulted in a large amount of distortion rendering the shoreline as inaccurate. Therefore, on the final smooth sheet it was necessary to adjust the shoreline to conform with plotted sounding positions. It is difficult to determine whether shoreline discrepancies are the result of the inaccuracies inherent in the enlargement process or misrepresentation of actual features. ✓ *see hydrographic Report section 2*

An excellent check on the accuracy of the shoreline is the fact that nearly all of the geodetic stations are located very near the tree line, which is also basically the mean high water line in this area. ✓

Another major error was noted on the U.S. Geological shoreline sheets. The bottom characteristic chart symbol "rky" was misinterpreted as a "rock awash" (*) symbol and was transferred as such to the shoreline ✓

manuscripts. These "rock awash" symbols were deleted from the smooth field sheets.

It is recommended that the shoreline be recompiled and updated with photogrammetry in the near future.

I. CROSSLINES

A total of 23.2 nautical miles of crosslines were run representing 21.8% of the mainscheme mileage. Agreement of the 93 comparisons between crossline and mainscheme sounding is as follows:

11 - 55 fathoms	7 comparisons within 0.2 fathoms 6 comparisons within 0.5 fathoms 3 comparisons within 1.5 fathoms 1 comparison greater than 1.5 fathoms
55 - 110 fathoms	17 comparisons within 0.5 fathoms 14 comparisons within 1.5 fathoms 0 comparisons within 3% of depth 2 comparisons greater than 3% of depth
Greater than 110 fathoms	13 comparisons within 1.5 fathoms 26 comparisons within 3% of depth 4 comparisons greater than 3% of depth

Crossline agreement is excellent since 92% of the comparisons meet the criteria as stated in Section 1.1.2, part B.II.1 of the Hydrographic Manual. Four of the observed discrepancies occur in a radial crossline between positions 4324-4330. Printout and fathogram records for both the mainscheme and the crossline have been checked and both appear to be correct. The discrepancies seem to be a result of a small position difference which in turn reflects a relatively large discrepancy in depth due to the very steep bottom. It is recommended that the mainscheme lines be accepted. Several other discrepancies occur randomly on the sheet. The amount of disagreement is not unusual considering the steepness of the bottom profile and the fact that many of the comparisons were not exactly coincident. Three launches (RA-3, RA-4, RA-6) ran crosslines in addition to the mainscheme lines. The same launch did not necessarily run both types in a given area.

J. JUNCTION

The junction of this survey was compared with present survey H-10047. The junction between the north and south sheets of this survey were also compared. Junction agreement was good since 85% of the comparisons meet the criteria as stated in section 1.1.2, part B.II.1 of the Hydrographic Manual. The largest discrepancies occur where bottom slopes are very steep. Hence, a small difference in positioning would yield a relatively large difference in depth.

*See Salustri's
Report section
5*

K. COMPARISON WITH PRIOR SURVEY

This survey was compared with the prior survey H-5205 (1931) 1:10,000 enlargement of a 1:20,000 survey. 80% of the comparisons meet the criteria as stated in section 1.1.2 part B.II.1 of the Hydrographic Manual. Soundings in or near shorelines showed the greatest discrepancy. Again, these discrepancies can be explained by a small difference in position yielding a relatively large difference in depth due to the steep gradient of the bottom. Another area of notable difference occurs where a fresh water stream drains into the end of Wilson Arm. The discrepancy here can be explained by the constant geomorphic processes (sedimentation and erosion) which occur in a drainage area. The amount of material transported and deposited in this area since the 1931 survey probably accounts for the shoaler depths at river outlets in this most recent survey. *See Exclusion Report section 6*

L. COMPARISON WITH THE CHART

This survey was compared with chart 17424, 5th Edition, August 6, 1977, 1:80,000 scale enlarged to 1:10,000. The results of the survey show excellent agreement with the published chart 17424. 92.5% of the comparisons meet the criteria as stated in Section 1.1.2 Part B.II.1 of the Hydrographic Manual.

Major discrepancies were noted at the following soundings on the chart:

<u>Chart Sounding (fm)</u>	<u>Position</u>		<u>Present Survey Sounding (fm)</u>
	<u>Latitude</u>	<u>Longitude</u>	
5	55°19.35'N	130°42.4'W	28
129	55°18.75'N	130°41.9'W	134
8	55°18.2' N	130°38.0'W	22
150	55°18.2' N	130°43.6'W	142
20	55°20.32'N	130°41.4'W	41

See Exclusion's Report section 7

There are several reasons for the discrepancies. The 5 fathom and 20 fathom chart soundings noted are present in areas near shore which have very steep sloping bottoms. Hence, a small difference in position reflects a relatively large difference in depth. The position discrepancy is caused by a decrease in accuracy when enlarging the 1:80,000 scale chart to 1:10,000. The noted chart soundings appear much further from the shoreline than they should be. The 8 fathom sounding is in an area where scouring and movement of material is prevalent. This could account for the shoaler sounding on the chart when compared with this most recent survey. Overall, the expansion of the 1:80,000 scale chart clearly distorts the published soundings. The enlarged soundings make comparisons with any one sounding on the survey impossible since no one sounding from the survey is coincident with the charted sounding. In all cases, the present surveyed soundings should be used.

M. ADEQUACY OF SURVEY

This survey is complete and sufficient to supersede all prior surveys for charting purposes. ✓

N. AIDS TO NAVIGATION

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

O. STATISTICS

<u>Survey Launch</u>	<u>Linear/Nautical Miles of Hydrography</u>	<u>Square Nautical Miles of Hydrography</u>	<u>Number of Positions</u>
RA-3 (2123)	41.2	---	4083
RA-4 (2124)	37.2	---	564 549
RA-5 (2125)		---	31
RA-6 (2126)	<u>24.0</u>	<u>---</u>	<u>295</u> 317
Total	102.4	5.07	1298 1299

Bottom Samples: 31

One tide station was maintained in Wilson Arm.

One Nansen cast was taken in the survey area.

P. MISCELLANEOUS

A floating pier is currently anchored in place at the end of Wilson Arm. The pier also has a barge connected to it. The floating pier and barge are being utilized by the Borax Corporation as a floating camp while developing an access to shore. A plan of the final project is included in separates after the text. It is recommended that the position of the floating pier be included in the next chart publication.

A red nun buoy is located at ^{04.03'} ~~55°22'1" N~~ ^{30.31'} ~~130°37'5" W~~. This buoy is privately maintained and is not in the Coast Guard Light List. The buoy is functional in that it indicates the anchorage cable and end of the floating pier. This buoy is not intended for navigation or moorage.

Two different mooring buoys exist in the survey area. One is located at ^{22.085'} ~~55°17'00" N~~ ^{32.52'} ~~130°37'55" W~~. The other is located at ^{54.77'} ~~55°17'00" N~~ ^{36.83'} ~~130°38'50" W~~. ^{Ref # 431}

Q. RECOMMENDATIONS

This survey is considered complete and adequate, and there are no recommendations except for the items previously mentioned in Sections I and P.

R. AUTOMATED DATA PROCESSING

Data acquisition and processing were accomplished per instructions in the Hydrographic Manual (4th Edition), Manual of Automated Hydrographic ✓

Surveys, the PMC OPORDER, Hydrographic Survey Guidelines and the Hydrographic Data Requirements for 1982.

Soundings and positions were taken by an ASI Logger and a Hydroplot system using range-range program RK 112 and range-azimuth program FA 181. There are daily master tapes and corresponding corrector tapes which include the TRA for the launches and electronic control baseline correctors for Mini-Ranger consoles and R/T units and all depth corrections. Velocity tapes were generated from Nansen cast data. The following is a list of all computed programs and version dates used for data acquisition or processing: ✓

	<u>PDP 8/e Programs</u>	<u>Version Date</u>	
FA181	Range-Azimuth Hydrolog	02/23/78	
RK112	Hyperbolic, R/R Hydroplot	08/04/81	
RK201	Grid, Signal and Lattice Plot	04/18/75	
RK211	Range-Range Non-Real Time Plot	02/02/81	
RK212	Visual Station Table Load	04/01/74	
RK216	Range-Azimuth Non-Real Time Plot	02/09/81	
RK300	Utility Computations	10/21/80	
RK330	Reformat and Data Check	05/04/76	
PM360	Electronic Corrector Abstract	02/02/76	
RK407	Geodetic Inverse/Direct Computation	09/25/78	
AM500	Predicted Tide Generator	11/10/72	
RK530	Layer Corrections for Velocity	05/10/76	
RK561	H/R Geodetic Calibration	02/19/75	
AM602	Elinore-Line Oriented Editor	05/20/75	✓
AM603	Tape Consolidator	10/10/72	
RK606	Tape Duplicator	08/22/74	
	Focal	1969	
	Nansen Cast Calculations	08/15/79	

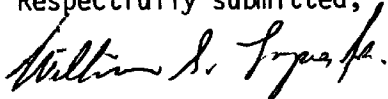
The HP97 and HP9815A programmable calculators were used to compute geographic positions of electronic control stations and visual signals for calibrations.

S. REFERRAL TO REPORTS

The following reports contain information related to this survey:

Echo Sounding Report	OPR-0361-RA-82
Electronic Control Report	OPR-0361-RA-82
Horizontal Control Report	OPR-0361-RA-82
Coast Pilot Report	OPR-0361-RA-82

Respectfully submitted,



William G. Logue
ENS, NOAA

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- / Hydrographic Sheet Projection Parameters
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- Abstracts of TC/TI Corrector Computation Forms
- / TC/TI Tape Listing
- / Abstracts of Positions
- / Oceanographic Log Sheet - M
- Final Baseline Correctors
- / Electronic Corrector Abstracts
- Abstracts of Times of Hydrography
- / Geographic Names
- Marine Facilities Blossom River Access
- / Approval Sheet

PARAMETER TAPE LISTING
RA-10-5-82 (H-10048)

RA-10-5V-82
SKEW: 52,12,40
SCALE: 1:10,000

FEST=30000
CLAT=6036000
CMER=130/50/0
GRID=30
PLSCL=10000
PLAT=55/13/57
PLON=130/40/42
VESNO=2123
YR=82
ANDIST=0.0

PARAMETER TAPE LISTING
RA-10-S-82 (H-10048)

RA-10-S-82
SKEW: 0.18.32
SCALE: 1:10,000

FEST=30000
CLAT=6086000
CMER=130/50/0
GRID=30
PLSCL=10000
PLAT=55/17/36
PLJN=130/44/30
VESN=2123
YR=82
ANDIST=0.0

FIELD TIDE NOTE

Field tide correction of soundings for H-10048 was based on predicted tides from Ketchikan, Alaska. Corrections were obtained from Preliminary Tidal Zoning OPR-0361-RA-82. The predicted tides were derived using program AM500. The reference station, Ketchikan, Alaska (945-0460, Lat. $55^{\circ}19.95'N$, Long. $131^{\circ}37.5'W$), was leveled on October 2, 1982. The levels agreed with the historical record.

One subordinate tide station provided data for survey H-10048. The Wilson Arm gage (945-0475, lat. $55^{\circ}22.5'N$, long. $130^{\circ}37.7'W$) was installed on September 13, 1982. Initial and final levels for this gage were run on September 13, 1982 and September 25, 1982, covering the period of hydrography. The staff value of the zero line on the tide record was -7.2 feet and the time meridian for record annotation was 0° (UTC).

RAINIER hired a tide observer for this gage since the ship left the Smeaton Bay working area before the thirty-day time period elapsed. A gage malfunction occurred which the tide observer was unable to fix. Due to poor communications, the tide observer was unable to contact RAINIER regarding the malfunction. The Wilson Arm gage was intended to be a thirty day gage, however, only twenty-two days of data were recoverable from the gage.

GEOGRAPHIC NAMES

H-10048

Name on Survey	A	B	C	D	E	F	G	H	K
	ON CHART NO. 17424	ON PREVIOUS SURVEY NO.	ON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	RAND McNALLY ATLAS	U.S. LIGHT LIST	
ALASKA (Title)									1
BAKEWELL ARM	X								2
SMEATON BAY									3
WILSON ARM	X								4
									5
									6
									7
									8
									9
									10
									11
									12
									13
									14
									15
									16
									17
						Approved:			18
									19
						<i>Charles E. Harrington</i>			20
						Chief Geographer	- N/CG2x5		21
						29 July 1983			22
									23
									24
									25

MASTER STATION LIST
OPR-0361-RA-82
SMEATON BAY AND BOCA DE QUADRA, ALASKA

FINAL VERSION

100	3	55	18	59399	130	57	33653	250	0000	000000	/URN 1891	NGS COMPUTER LISTING
101	6	55	18	01097	130	53	07831	250	0000	000000	/CARP 1931	NGS COMPUTER LISTING
102	2	55	18	47447	130	52	06313	250	0000	000000	/TROL 1931	NGS COMPUTER LISTING
103	6	55	17	44489	130	51	34500	250	0000	000000	/SERAG 2,1931	NGS COMPUTER LISTING
104	3	55	18	05329	130	49	46919	250	0000	000000	/HOOP 2,1931	NGS COMPUTER LISTING
105	6	55	17	33019	130	48	50499	250	0000	000000	/REAP 2,1931	NGS COMPUTER LISTING
106	1	55	18	25978	130	47	20910	250	0000	000000	/CLUMP 2,1931	NGS COMPUTER LISTING
107	6	55	17	48729	130	47	36352	250	0000	000000	/CHANG 1931	NGS COMPUTER LISTING
108	6	55	17	50411	130	46	47888	250	0000	000000	/SHORT 1931	NGS COMPUTER LISTING
109	1	55	18	44690	130	45	47292	250	0000	000000	/NAVA 2,1931	NGS COMPUTER LISTING
110	6	55	18	09530	130	45	05415	250	0000	000000	/TEAM 2,1931	NGS COMPUTER LISTING
111	1	55	18	21427	130	44	12540	130	0000	000000	/HOPE 2,1931	NGS COMPUTER LISTING
112	6	55	18	08913	130	42	27621	250	0000	000000	/BOUY 2,1931	NGS COMPUTER LISTING

113 3 55 18 44399 130 42 45931 250 0000 000000
/NEAP 2,1931 NGS COMPUTER LISTING

114 3 55 19 22545 130 42 17910 250 0000 000000
/COY 2,1931 NGS COMPUTER LISTING

115 3 55 20 06103 130 41 48990 139 0000 000000
/HELP 1931 NGS COMPUTER LISTING

116 3 55 20 28610 130 41 21010 250 0000 000000
/NET 2,1931 NGS COMPUTER LISTING

~~117 1 55 21 02811 130 42 02410 250 0000 000000~~
~~/TON 1931 NGS COMPUTER LISTING~~

118 3 55 21 11236 130 39 24345 139 0000 000000
/ROUND 1931 NGS COMPUTER LISTING

~~119 2 55 18 11876 130 50 56017 250 0000 000000~~
~~/SME RM 1~~

120 3 55 21 48623 130 38 48603 250 0000 000000
/ASP 2,1931 NGS COMPUTER LISTING

121 1 55 22 19602 130 37 56940 250 0000 000000
/FINAL 1931 NGS COMPUTER LISTING

122 4 55 19 20993 130 41 06881 250 0001 000000
/EVEN 1931 NGS COMPUTER LISTING

123 7 55 20 27512 130 39 43215 250 0000 000000
/STOP 1931 NGS COMPUTER LISTING

124 4 55 21 42914 130 38 05866 250 0000 000000
/QUAD 1931 NGS COMPUTER LISTING

125 7 55 19 56757 130 40 42143 250 0000 000000
/ARM 2 1931 NGS COMPUTER LISTING

200 6 55 17 54315 130 43 02270 139 0000 000000
/TREE 2 1931 NGS COMPUTER LISTING

	00570POT 1991	55174496500130563318500	2SC	021
#118	00885ROUND 1931	55211128000130392434500	1SC	021
	01750ROUND 1933	55032207700130471849400	2SC	021
	00609SAGE 1915	55023015700131121902000	2SC	021
	00609SAW 1914	55150259600131182168100	2SC	021
	01750SEEUM 1933	55075001800130482056500	3SC	021
#103	00885SERAG 2 1931	55174448900130513450000	1SC	021
129	00469SHAK 1915	55024750700131003816800	1SC	021
	00885SHARP 1931	55204203600131011575900	4SC	021
	01750SHINE 1933	55042047400130475543400	1SC	021
#100	00885SHORT 1931	55175041100130464788800	1SC	021
	01294SHORT 1932	55064388200131025754000	2SC	021
	13793SHOT 1966	55231015544131171566013	2SC	021
	00404SLATE 1895	55052306800131030853800	5SC	021
	01750SLIME 1933	55068133000130425166600	1SC	021
	00885SME 1931	55181150400130505597200	0SC	021
	00885SMEATON 1931	55204360700130583570000	1SC	021
	01750SNAG	55052888000130565526200		021
130	00404SNAIL 1895	55015857000131030308300	6SC	021
	01750SOAP 1933	55035421600130425236200	1SC	021
	00570SON 1891	55172205800130570196600	3SC	021
	01750SON 1933	55045392700130454567200	2SC	021
	13793SOUR 1966	55241462457131140703952	1SC	021
	00609SOUTH TWIN 1895	55081994600131124396100	5SC	021
	01750SPIES 1933	55023950400130413636700	0SC	021
	01750SPLIT 1933	55072004200130422615300	1SC	021
#127	01750START 1933	55051005400130584984800	1SC	021
	01750STLP 1933	55063977400130530472900	1SC	021
#123	00885STOP 1931	55282751200130394321500	1SC	021
	01750STUMP 1933	55053943300130430744100	2SC	021
	00570STY 2 1929	55200016400130555800100	21	021
	00609SUN 1915	550000731900131152938700	2SC	021
	00609TACK 1915	55001541400131175721400	2SC	021
#110	00885TEAM 2 1931	55180953000130450541500	3SC	021
	00609THORN 1914	55153503800131210933800	1SC	021
	00609TIP 1914	55032208000131210510000	1SC	021
	00609TOM 1915	55002981000131154878300	3SC	021
#117	00885TON 1931	55210281100130400241000	2SC	021
	00570TOP TREES WINSTANLEY IS	55260865000130535886000		021
	00609TOT 1915	55010259600131164993200	1SC	021
	00469TREE	55051825300131030354500		021
	00885TREE 2 1931	55175481500130430227000	1SC	021
#102	00885TROL 1931	55184744700130520631300	2SC	021
	00570TRY 2 1929	55150793200131042511800	30	021
	01750TUFY 1933	55054823600130552487200	2SC	021
	00609TURN 1914	55021176400131213323100	2SC	021
	01750TURN 1933	55065858900130493206000	1SC	021
#100	00570URN 1891	55185939900130573365300	29	021
	01750VEIL 1933	55064521100130475344800	1SC	021
	00570VEX 2 1929	55275375900130585287600	21	021
	00609VIS 1915	55004414600131171451300	1SC	021
	01750VIXEN 1933	55032177400130474803900	1SC	021
	00570VIZ 2 1929	55203461600130554309400	23	021
	00885WASP 1931	55224612400130592209900	1SC	021
	01750WEAS 1933	55083755100130493086400	1SC	021
	00609WEED 1915	55034127700131141227800	1SC	021
	01750WET 1933	55071093000130503735700	1SC	021
	00609WHALE 1915	55005949100131110956300	6SC	021
	00469WHITE 1915	55040578500131020817500	2SC	021
	01750WHITE 1933	55065964000130511909300	1SC	021

00885NARROWS 1931	551701002001310320130000	2SC	021
#109 00885NAYA 2 1931	55184462000130454725200	1SC	021
#113 00885NEAP 2 1931	55184462000130424593100	2SC	021
00609NELS	55020541000131212247000		021
00570NELSON 1929	55174442400130563257400	4C	021
#116 00885NET 2 1931	55202861600130412101000	1SC	021
00570NEW 1929	55095324000131051056100	27	021
01750NO 1933	55081690500130484248600	2SC	021
00570NOD 2 1929	55195239000130523274500	15	021
01750NOON 1933	55052677900130571100000	1SC	021
00609NORTH TWIN 1914	55082994900131130760900	2SC	021
01750NOSS 1933	55072057600130523260400	2SC	021
00609NOTCH 1914	55163525100131151778900	2SC	021
00570ODD 1891	55115944100131090993100	6SC	021
00570ODD 2 1929	55115966400131091053400	60	021
01750ORCA POINT LIGHTHOUSE	55070899100130510755600		021
01750ORCA 1933	55071220300130505460300	1SC	021
01750ORDER 1933	55045634800130425549600	2SC	021
00609OUR	55170416000131171372000		021
00570PALL 1891	55292580600130585350800	3SC	021
00570PAN 1891	55211680800130524790300	20	021
01294PEAK 1	55041319000130550549200		021
01294PEAK 10	55095289000131002236000		021
00570PEAK 11	55135358400130474657500		021
01294PEAK 11	55101638000130591304000		021
01294PEAK 12	55103448000130572043000		021
01294PEAK 14	55064243900130565145200		021
00570PEAK 2	55152455700131122106200		021
01294PEAK 2	55041558800130544483800		021
01294PEAK 3	55035570900130522318300		021
01294PEAK 4	55033908000130521504000		021
00570PEAK 4-BELM CANAL	55242070800130454092300		021
00570PEAK 5	55270448700130485974300		021
01294PEAK 8	55114419000131003045000		021
00570PEAK 9	55260692400131043148000		021
01294PEAK 9	55112939000131001708000		021
01750PILL	55011595000130411498100		021
00609PIN 1914	55071043800131210103700	1SC	021
00609PINK	55001170000131182221000		021
00570PIX 2 1929	55132346300131022555900	30	021
00570POD 2 1929	55171138100131013949900	51	021
00469POINT 1915	55050813500130593514100	3SC	021
01750PONT 1933	55030548300130414292200	1SC	021
00570POP 1891	55294690200130524732500	18	021
13301POP 1963	55232929730131124385920	1SC	021
01750PULL 1933	55042352700130481325500	3SC	021
00609PURR 1915	55004041900131145537500	3SC	021
00609Q	55033716000131210416000		021
#124 00885QUAD 1931	55214291400130380586600	1SC	021
00609RA	55045904900131212031400		021
01750RAIN 1933	55055718900130471360400	2SC	021
01750RAVEN 1933	55025928100130470427800	1SC	021
#125 00885REAP 2 1931	55173301900130485049900	2SC	021
00570RED 2 1929	55115404500131045969100	2SC	021
131 01750REEF 1933	55040227200131015726400	2SC	021
00570RIGHT PEAK SLEATON IS	55200290300130564068900		021
00609ROCK	55222172000131113642000		021
01750ROCK 1933	55072762500130521854500	2SC	021
00570ROE POINT CANNERY	55143892900130594509400		021
01294ROSLN 1932	55044129700131104787500	8SC	021

00505FLEET 1931	55174530500130481493500	1SC	021
00570FOX 2 1929	55241727900130541634500	39	021
00609FRIP 1915	55013392400131133141400	2SC	021
13301FROG 1963	55220558790131145303300	2SC	021
01750GANN 1933	55042576100130475555000	1SC	021
00609GIANT 1915	55064716000131122576000	2SC	021
00609GILL 1915	55003032700131165248200	5SC	021
01750GRASSY 1933	55050410400130433312600	3SC	021
00609GRAVE 1915	55001182000131143385300	2SC	021
00609GRAY 1915	55042096000131143564000	1SC	021
01750GUS 1933	55060924500130541244500	1SC	021
00609HAM 1895	55095809400131193669800	2SC	021
01750HAM 1933	55035457500130421794100	1SC	021
01750HANG 1933	55024778700130472859900	1SC	021
00469HED	55033289800130554783500		021
#115 00885HELP 1931	55200610300130414899000	2SC	021
00570HIC 2 1929	55132962800131065360600	84	021
00570HIGH SNOW CAPPED PEAK 6	55214074000130423295300		021
00570HIGHEST TREE STAG ISLAND	55191991000130565236100		021
00609HOG ROCKS LIGHTHOUSE	55104186800131165310900		021
#104 00885HOOF 2 1931	55180582500130494691900	1SC	021
#104 00885HOPE 2 1931	55182143700130433356000	1SC	021
01750HOW 1933	55080300800130500741800	2SC	021
01750IDEAL 1933	55054589800130525535900	1SC	021
00609INDIAN	55004267600131164688900		021
00404ISLE 1895	55075734000131044680800	5SC	021
01750JAGGED 1933	55055646700130445098500	1SC	021
00570JAW 1891	55254422300130551974500	37	021
01750JOHN 1933	55050578800130451100100	0SC	021
00469KAR 1915	55040455700130591519100	3SC	021
01750KEST 1933	55062682200130475471800	2SC	021
00609KHWAIN 1914	55042042200131205767400	2SC	021
01750KITE	55052032700130465920000		021
01750KITE POINT LIGHTHOUSE	55052243700130470078100		021
00609KO	55063867000131213160800		021
00609LANE 1915	55021323600131125363400	3SC	021
00609LEAN 1914	55013417000131221514000	1SC	021
00609LIM 1914	55072471300131210147300	2SC	021
00609LITTLE 1915	55001141500131111686800	2SC	021
01750LONE 1933	55035405500130480954000	1SC	021
00885LOP 1931	55173284800130501166200	1SC	021
01750LORD 1933	55021832200130465576300	2SC	021
01750LOW 1933	55054743100130451964400	1SC	021
00609LUCK 1914	55122870300131155915200	2SC	021
01750LUM 1933	55062693900130491625500	1SC	021
00404MARY IS N BASE 1882	55055364700131115085300	58SC	021
00404MARY ISLAND ASTRO STA 1895	55053768000131131935000	3SC	021
00570MARY ISLAND LIGHT	55055759400131105101600		021
00404MARY ISLAND MAG STA	55053656000131131935000		021
00404MARY ISLAND N BASE 1895	55051171200131111944000	57SC	021
00404MARY ISLAND S BASE 1895	55031843100131122172300	58SC	021
01294MAST 1932	55083624300131125562800	2SC	021
01750MAY 1933	55061787600130520100800	2SC	021
00609MEN 1915	55021258500131145489300	1SC	021
00885MID 1931	55175071800130435868300	1SC	021
00404MILL 1895	55070645200131210727900	1SC	021
13301MINE 1963	55214993380131112782840	1SC	021
01750MINK 1933	55052161800130434846500	1SC	021
00570MOUNTAIN BACK OF ROE CANNERY	55132437200130564968300		021
01750MOUTH 1933	550414894001305844950000	2SC	021

	01750ABLE 1933	55045617300130511181200	1SC	021
	01750ALDER 1933	55070235200130440206400	3SC	021
	01750AND 1933	55042071100130430171900	1SC	021
	00609ANT 1915	55060002000131130576000	1SC	021
#125	00885ARM 2 1931	55195675700130404214300	2SC	021
#120	00885ASE 2 1931	55214628800130384860300	2SC	021
	01750BAGO 1933	55044217100130481947700	2SC	021
	00609BARE	55134174200131172508000		021
	00570BAY 1929	55260060300130584645300	37	021
	01750BEACH 1933	55044431900130432072800	1SC	021
	00609BEAVER 1914	55051573100131143093000	1SC	021
	00570BEHM MOUNTAIN	55114527000131002952000		021
	00570BIG 1891	55273806100130543683900	16	021
	01750BIG 1933	55043250600130430814100	1SC	021
	00469BLACK ROCK	55012663000131032939000		021
	00570BLACK ROCK LIGHT	55012658800131032934200		021
	01750BLACK 1933	55035377800130473442000	1SC	021
	01750BOOM	55033262600130423368200		021
	01750BOULDER 1933	55062338600130441575600	1SC	021
	01750BREAK 1933	55020725300130415666800	1SC	021
	01750BRICK 1933	55051857100130442702800	1SC	021
#112	00885BUOY 2 1931	55180291300130422762100	1SC	021
	00885CAB 2 1931	55212011300130382566300	1SC	021
	01750CAL 1933	55053880700130454887800	2SC	021
#101	00885CARE 1931	55180109700130530783100	1SC	021
	00609CAT 1914	55013051000131163321300	1SC	021
	01294CAT 1932	55112440800131120969900	3SC	021
	01750CEDAR 1933	55053552500130462001600	1SC	021
#100	00885CHANG 1931	55174872900130473635200	2SC	021
	01750CHOP 1933	55054199200130554857200	1SC	021
	13301CLAM 1963	55171412020131141836190	0SC	021
	01294CLAY 1932	55024992500131110299500	2SC	021
	01750CLIFF 1933	55075571600130503888300	2SC	021
#106	00885CLUMP 2 1931	55182597800130472091000	2SC	021
	01750CONE 1933	55043872800130564733600	2SC	021
	00609CONE 1914	55143289200131192599700	1SC	021
	01750CORKY 1933	55051899900130540892100	1SC	021
#104	00885COY 2 1931	55192254500130421791000	1SC	021
	13301CRAB 1963	55163428540131180219470	2SC	021
#126	01750CUSH 1933	55051812400131030349900	3SC	021
	00404CUSTOM 1895	55053789800131131934600	3SC	021
	01750CYGNET ISLAND LIGHTHOUSE	55052528300130433809700		021
	00609DAN 1915	55025289400131134447800	1SC	021
	00609DAY 1915	55002401900131173292000	3SC	021
	00609DEAD	55160402000131192165000		021
	01750DOME 1933	55043258900130573705300	4SC	021
	01750DRILL 1933	55030611800130422435300	1SC	021
	01750DU 1933	55025204200130421585200	1SC	021
	00609DY	55164168000131174311000		021
	01750EASY 1933	55070738000130494992300	2SC	021
	00570EAT 1891	55142880400131003179100	16	021
	01750EGG 1933	55033440600130420162200	1SC	021
	13301ELF 1963	55152253300131125697760	1SC	021
	13301EVE 1963	55184490070131161111070	1SC	021
#122	00885EVER 1931	55192099300130410688100	1SC	021
#121	01750FACE 1933	55081001800130424562800	1SC	021
	00885FINAL 1931	55221960200130375694000	2SC	021
	00609FISH 1914	55003138000131190090900	1SC	021
	00570FLAT PEAK IN SNEATON BAY	55201828200130481929800		021
	00570FLAT TOPPED MOUNTAIN	55282994500131022335400		021

ASCII SIGNAL TAPE LISTING

OPR-0361-RA-82

SMEATON BAY, ALASKA

FINAL VERSION

100	3	55	18	59399	130	57	33653	250	0029	000000
101	6	55	18	01097	130	53	07831	250	0000	000000
102	2	55	18	47447	130	52	06313	250	0000	000000
103	6	55	17	44489	130	51	34500	250	0000	000000
104	0	55	18	05829	130	49	46919	250	0000	000000
105	6	55	17	33019	130	48	50499	250	0000	000000
106	1	55	18	25978	130	47	20910	250	0000	000000
107	6	55	17	48729	130	47	36352	250	0000	000000
108	6	55	17	50411	130	46	47888	250	0000	000000
109	1	55	18	44690	130	45	47292	250	0000	000000
110	6	55	18	09530	130	45	05415	250	0000	000000
111	1	55	18	21437	130	43	33580	139	0000	000000
112	6	55	18	08913	130	42	27621	250	0000	000000
113	3	55	18	44899	130	42	45931	250	0000	000000
114	3	55	19	22545	130	42	17910	250	0000	000000
115	3	55	20	06103	130	41	48990	139	0000	000000
116	3	55	20	28616	130	41	21010	250	0000	000000
117	1	55	21	02811	130	40	02410	250	0000	000000
118	3	55	21	11286	130	39	24345	139	0000	000000
119	2	55	18	11876	130	50	56017	250	0000	000000
120	3	55	21	43628	130	38	48603	250	0000	000000
121	1	55	22	19602	130	37	56940	250	0000	000000
122	4	55	19	20993	130	41	06381	250	0001	000000
123	7	55	20	27512	130	39	43215	250	0000	000000
124	4	55	21	42914	130	38	05866	250	0000	000000
125	7	55	19	56757	130	40	42143	250	0000	000000
200	6	55	17	54815	130	43	02270	139	0000	000000

VELOCITY CORRECTOR TAPE LISTING
RA-10-4-82(H-10047)
RA-10-5-82(H-10048)

TABLE NO.7

UNIT - FATHOMS

000040	0	0000	0007	001	000000	000000
000125	0	0001				
000215	0	0002				
000310	0	0003				
000410	0	0004				
000515	0	0005				
000625	0	0006				
000740	0	0007				
000860	0	0008				
000970	0	0009				
001080	0	0010				
001400	0	0012				
001600	0	0014				
001785	0	0016				
001985	0	0018				
002160	0	0020				
999999	0	0022				

CORRECTIONS IN FATHOMS

OPR-0361-RA-82
SMEDEN BAY, AK.

VELOCITY CORRECTIONS

DEPTH RANGE CORRECTING
(FM) (FM)

1.0	0.0
12.5	0.1
25.0	0.2
37.5	0.3
50.0	0.4
62.5	0.5
75.0	0.6
87.5	0.7
100.0	0.8
112.5	0.9
125.0	1.0
137.5	1.1
150.0	1.2
162.5	1.3
175.0	1.4
187.5	1.5
200.0	1.6
212.5	1.7
225.0	1.8
237.5	1.9
250.0	2.0
DEEPER	2.2

DEPTH IN FATHOMS

1000

SEE M/M

RA-10-5-82
(H-10048)

TESTS

RA-2

104-10-5-8
(H-10048)

THE S/N

1070

82

PAGE 1 OF 1

3-32

BOTTOM

FATHOMETER S/N SAMPLES YR 82 PAGE 1 OF 1

YR 82

PAGE / OF

[illegible]

FATHOMETER S/N 1042 YR 82 PAGE 1 OF 1

YR 82

PAGE / OF /

[illegible]

FATHOMETER S/N 1046 YR 82 PAGE 1 OF 1

yr 82

PAGE 7 OF 7

[illegible]

TC/TI TAPE LISTING
RA-10-5-82(H-10047)

VESSEL - 2123(RA-3)

FATHOMETER S/N - 1046

171121	0	0005	0007	265	212300	000000
194159	0	0000	0000	265	000000	000000
200207	0	0005	0007	265	000000	000000
181911	0	0000	0000	267	000000	000000
182831	0	0005	0007	267	000000	000000
225000	0	0005	0007	268	000000	000000

VESSEL - 2124(RA-4)

FATHOMETER S/N - 1042

193158	0	0003	0007	264	212400	000000
230000	0	0003	0007	269	000000	000000

VESSEL - 2125(RA-5)

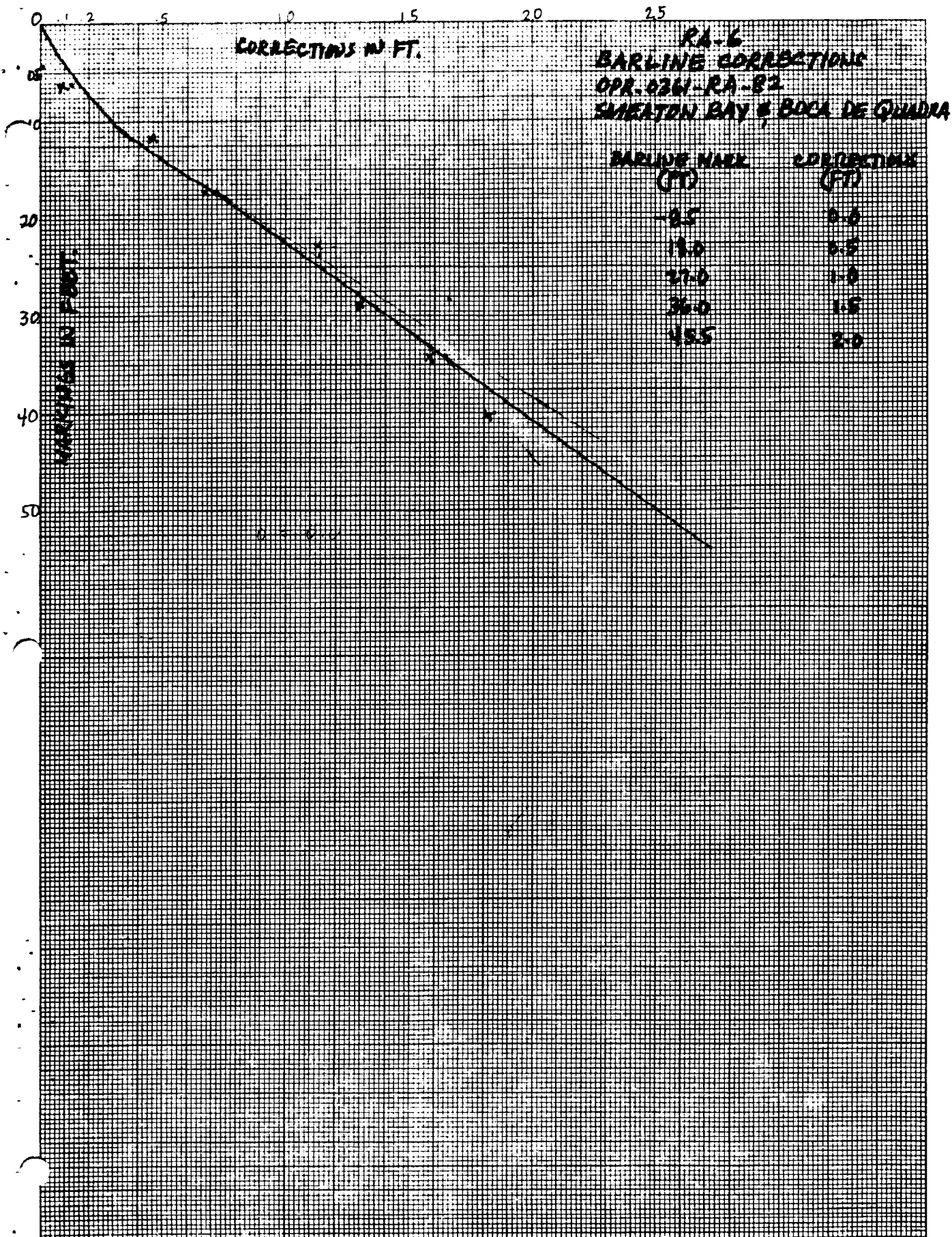
BOTTOM SAMPLES ONLY

161600	0	0000	0000	258	212500	000000
183000	0	0000	0000	265	000000	000000

VESSEL - 2126(RA-6)

FATHOMETER S/N - 1070

211900	0	0003	0007	257	212600	000000
204453	0	0000	0000	258	000000	000000
204748	0	0003	0007	258	000000	000000
172000	0	0000	0000	259	000000	000000
173114	0	0003	0007	259	000000	000000
213600	0	0003	0007	268	000000	000000



NOAA Ship RAINIER
Settlement and Squat
April 1982

Settlement and squat tests were conducted at Shilshole Marina in Puget Sound on April 2 and April 6.

Tests were conducted as follows: One man on shore sighted through a level to the leveling rod located over the transducer on the launch. The readings started at 0 RPM and were read at RPM's listed below. A second set of readings were taken from full speed back down to 0 RPM. These two runs were averaged to arrive at the final readings.

RPM	RA-3 (1007)		RA-4 (1016)		RA-5 (1003)		RA-6 (1013)	
	Ft	Fm	Ft	Fm	Ft	Fm	Ft	Fm
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	+0.2	0.0	0.0	0.0	+0.1	0.0	+0.1	0.0
1200	+0.2	0.0	+0.2	0.0	+0.1	0.0	+0.2	0.0
1500	+0.2	0.0	+0.2	0.0	+0.2	0.0	+0.2	0.0
1800	+0.2	0.0	+0.2	0.0	+0.2	0.0	+0.2	0.0
2000	+0.2	0.0	+0.1	0.0	+0.1	0.0	+0.2	0.0
2200	+0.2	0.0	-0.2	0.0	-0.1	0.0	-0.2	0.0
2400	-0.2	0.0	-0.4	-0.1	-0.3	0.0	-0.3	0.0
2600	-0.5	-0.1	-0.5	-0.1	-0.5	-0.1	-0.5	-0.1
2800	----	----	-0.6	-0.1	----	----	----	----

NOAA SHIP RAINIER
Settlement and Squat
July 1982

Settlement and squat test conducted at Port Chatham, Alaska on
July 23, 1982, for Launch RA-3 with Side Scan Sonar system installed,
follows:

RA-3 (1007)		
RPM	Ft.	Fm.
0	0.0	0.0
800	+0.1	0.0
1000	+0.2	0.0
1200	+0.3	0.0
1500	+0.3	0.0
1800	+0.2	0.0
2000	+0.1	0.0
2200	0.0	0.0
2400	-0.3	0.0
2600	-0.6	-0.1

ABSTRACT OF POSITIONS

RA-10-5-82 (H-10048)

Vessel: 2123 (RA-3) Andist: 0.0

<u>Day</u>	<u>Positions</u>	<u>CTRL</u>	<u>S1 M S2</u>	<u>Remarks</u>
265	3218-3263	11	121 - R/AZ	Mainscheme hydro
265	3264-3267	11	121 - R/AZ	Detached positions
265	3268-3323	11	121 - R/AZ	Mainscheme hydro
266	3326-3342	11	121 - R/AZ	Mainscheme hydro
266	3343-3395	11	116 - R/AZ	Mainscheme hydro
267	3396-3414	11	120 - R/AZ	Mainscheme hydro
267	3415	11	120 - R/AZ	Detached position on Red Nun Buoy
267	3416-3419	11	120 - R/AZ	Crosslines
267	3420-3442	11	121 - R/AZ	Crosslines
267	3443-3448	11	116 - R/AZ	Mainscheme hydro
267	3449-3456	11	116 - R/AZ	Shoreline
267	3458-3500	11	116 - R/AZ	Mainscheme hydro
268	3501-3564	11	116 - R/AZ	Mainscheme hydro
268	3565-3625	11	116 - R/AZ	Crosslines

Rejected Positions: 3000-3217 (not used); 3324-3325; 3332; 3457; 3618

ABSTRACT OF POSITIONS

RA-10-5-82 (H-10048)

Vessel: 2124 (RA-4) Andist: 0.0

Day	Positions	CTRL	S1 M S2	Remarks
264	4004-4040	04	122 - 114	Mainscheme hydro
264	4041-4045	04	122 - 114	Crossline
264	4046-4052	04	122 - 114	Mainscheme hydro
264	4055-4063	04	114 - 122	Crossline
265	4064-4166	04	114 - 122	Mainscheme hydro
265	4167-4173	04	122 - 112	Mainscheme hydro
265	4174-4193	04	112 - 114	Mainscheme hydro
265	4194-4198	04	112 - 114	Shoreline
265	4199-4210	04	114 - 122	Mainscheme hydro
265	4211-4214	04	122 - 112	Mainscheme hydro
266	4215-4330	11	112 - R/AZ	Mainscheme hydro
266	4331-4352	11	114 - R/AZ	Mainscheme hydro
267	4353-4368	11	114 - R/AZ	Mainscheme hydro
267	4369-4411	11	114 - R/AZ	Development lines. Pos. 4383-4387 not plotted on smooth field sheet
267	4412-4424	11	112 - R/AZ	Mainscheme hydro
267	4425-4466	04	122 - 112	Mainscheme hydro
267	4467-4475	04	122 - 112	Crossline
267	4476-4489	04	112 - 114	Crossline
267	4490-4508	04	112 - 114	Mainscheme hydro
268	4534-4546	11	125 - R/AZ	Mainscheme hydro
268	4547-4551	11	125 - R/AZ	Crossline
268	4552-4565	11	125 - R/AZ	Mainscheme hydro
268	4566-4578	11	121 - R/AZ	Hydro along pier face
269	4650-4654	11	113 - R/AZ	Mainscheme hydro
269	4655-4659	11	114 - R/AZ	Mainscheme hydro
<u>Rejected Positions:</u> 4000-4003, 4012, 4023, 4050, 4053-4054, 4059, 4111, 4150, 4157-4158, 4218, 4286, 4296, 4302, 4314, 4454, 4509-4533 (not used), 4579-4649 (not used)				

ABSTRACT OF POSITIONS
RA-10-5-82 (H-10048)

Vessel: 2125 (RA-5) And st~~ts~~: 0.0

<u>Day</u>	<u>Positions</u>	<u>CTRL</u>	<u>S1 M S2</u>	<u>Remarks</u>
258	5000	04	112 - 110	Bottom sample
258	5001	04	110 - 112	Bottom sample
258	5002-5006	04	112 - 114	Bottom sample
258	5007	04	122 - 112	Bottom sample
258	5008	04	112 - 114	Bottom sample
258	5009-5011	04	122 - 112	Bottom sample
259	5012	04	112 - 114	Bottom sample
259	5013-5019	11	114 - R/AZ	Bottom sample
264	5020-5021	04	122 - 114	Bottom sample
264/ 265	5022-5026	04	122 - 116	Bottom sample
265	5027-5028	04	120 - 124	Bottom sample
265	5029-5030	04	124 - 120	Bottom sample

ABSTRACT OF POSITIONS

RA-10-5-82 (H-10048)

Vessel: 2126 (RA-6) Andist: 0.0

<u>Day</u>	<u>Positions</u>	<u>CTRL</u>	<u>S1 M S2</u>	<u>Remarks</u>
257	6000-6076	11	114 - R/AZ	Mainscheme hydro. Position 6027 is a duplicate position.
258	6077-6130	11	114 - R/AZ	Mainscheme hydro
258	6131	11	114 - R/AZ	D.P. on mooring buoy
258	6132-6151	11	114 - R/AZ	Crossline
258	6152-6200	11	113 - R/AZ	Mainscheme hydro
258	6201-6228	11	113 - R/AZ	Crossline
259	6229-6230	11	114 - R/AZ	Mainscheme hydro
259	6230-6231	11	114 - R/AZ	D.P. on rocks. Duplicate positions.
259	6231-6263	11	114 - R/AZ	Mainscheme hydro
268	6264-6294	11	112 - R/AZ	Crosslines
268	6664-6683	11	112 - R/AZ	Crosslines

Rejected Positions: 6295-6663 (not used)

1012

NOAA FORM 75-44 (11-72)		OCEANOGRAPHIC LOG SHEET - M BOTTOM SEDIMENT DATA				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION					
VESSEL		PROJ. NO.		YEAR		CHECKED BY		DATE CHECKED			
RA-5		09A-P0361-AA-82		1982		RA-10-5-82					
SERIAL NO.	DATE	SAMPLE POSITION		DEPTH (Fathoms)	WEIGHT OF SAMPLE	AP. PROX. PENE- TRA- TION	LENGTH OF CORE	COLOR OF SED- IMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, detrital cutter, etc., type of bottom relief, etc.)	OBS INIT
		LATITUDE	LONGITUDE								
5000	9/15/82	18/14.14	42/33.83	56.2	4516s			gn	fine S, med P	Fragments - decayed organic material	JS
5001	"	17/58.37	43/01.81	57.4	"			gn	M, fine S, crs P	small sample	"
5002	"	18/30.75	41/29.46	65.8	"			br	fine S	some M packed into hard clumps	"
5003	"	19/05.94	41/17.18	43.2	"			gn, bk	M		"
5004	"	18/46.60	40/37.17	101.9	"				med P, crs S, G, M		"
5005	"	19/27.29	41/27.38	85.4	"			gn	M		"
5006	"	19/46.25	41/06.28	52.4	"			gn	M, P	Fragments - decayed organic material	"
5007	"	19/47.12	41/52.52	26.9	"			gn	fine S, crs G	med organic material, hard clumps, possibly med.	"
5008	"	19/22.60	42/06.74	41.5	"			gn	M		"
5009	"	18/51.61	42/27.60	27.9	"			gn	S, St, Sh	med organic material	"
5010	"	18/32.72	42/50.71	74.2	"			gn	fine S, M, crs P	Fragments decaying organic matter	"
5011	"	18/16.21	43/23.72	26.0	"				med P, St, spk fine S		"
5012	9/16/82	18/28.78	41/36.02	55.7	"				St, P, S		"
5013	"	18/27.44	40/41.49	57.4	"			gn	M, St, P, S		"
5014	"	18/17.18	40/11.65	43.6	"			gn	M, P		"
5015	"	17/58.73	39/25.44	51.4	"			gn	M, fine S, St		"
5016	"	18/09.13	38/26.88	60.8	"			gn	M		"

Use more than one line per sample if necessary.

* U.S. GOVERNMENT PRINTING OFFICE: 1979-088-016, 1179

NOAA FORM 75-44 (11-72)										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION							
OCEANOGRAPHIC LOG SHEET - M BOTTOM SEDIMENT DATA										CHECKED BY		DATE CHECKED					
VESSEL		PROJ. NO.		YEAR		AP. PROX. PEN. TRA- TION		LENGTH OF CORE		COLOR OF SEDIMENT		FIELD DESCRIPTION		REMARKS (Unusual conditions, observations, depth of cutter, etc., type of bottom relief, etc.)		OBS. INIT.	
2125 (AA-5)		OPR-P0361-AA-82		82		AA-10-5-82											
SERIAL NO.	DATE	SAMPLE POSITION		DEPTH (Fathoms)	WEIGHT SAMPLER	AP. PROX. PEN. TRA- TION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, observations, depth of cutter, etc., type of bottom relief, etc.)	OBS. INIT.						
		LATITUDE	LONGITUDE														
5017	9/16/82	18/18.36	39/05.42	54.9	45.16			gn	M, fine P, S		JS						
5018	"	18/16.16	39/40.95	86.8	"			gn	M, fine S		"						
5019	"	18/34.31	40/01.17	83.6	"			gn	M		"						
5020	9/21/82	20/13.26	41/34.97	49.1	"	2"		gn	spk fine S, M								
5021	"	20/15.72	40/57.86	82.9	"	2"		gn, bk	fine S, M								
5022	"	20/18.93	40/15.18	37.9	"	2"		gn	St. P, fine S, M								
5023	"	20/37.05	39/42.17	40.5	"	2"		gn	St. G, fine S, M								
5024	"	20/52.36	39/51.04	77.9	"	2"		gn	M								
5025	9/22/82	20/38.87	40/42.98	75.6	"	2"		gn, bk	spk fine S, M, Oz								
5026	"	20/53.73	39/18.23	74.9	"	2"		bk, gn	Oz, M								
5027	"	21/31.02	38/59.20	52.8	"	2"		bk	Oz, M								
5028	"	21/28.19	38/24.90	42.7	"	2"		gn, bk	M, Oz								
5029	"	21/52.40	38/31.31	61.7	"	2"		gn, bk	M, Oz								
5030	"	22/09.88	37/49.85	45.1	"	2"		gn, bk	M, Oz								

OPR-0361-RA-82
Smeaton Bay
Final Baseline Correctors
RA-10-5-82 (H-10048)

Vessel: 2123 (RA-3)
Range-Console S/N: 720
R/T Unit S/N: 2710

<u>Code</u>	<u>First Cal.</u> <u>8/31/82</u>	<u>Second Cal.</u> <u>10/29/82</u>	<u>Final</u>	<u>Remarks</u>
A	1	-7	1, -7	No second calibration. Changed magnetron.
B	0	-1	0	
C	0	-1	0 -1	
D	3	2	2	
E	0	1	0	No ending calibration.
F	0	-1	0	
0	0	-1	0	
1	1	-	1	
2	-1	-4	-2	

Vessel: 2124 (RA-4)

Range-Console S/N: 30269

R/T Unit S/N: 1636

<u>Code</u>	<u>First Cal.</u> <u>8/31/82</u>	<u>Second Cal.</u> <u>10/29/82</u>	<u>Final</u>	<u>Remarks</u>
A	2	-	2, 5	No second calibration. Changed magnetron.
B	2	1	2	
C	0	3	2	
D	2	2	2	
E	1	2	2	
F	3	1	2	
0	1	1	1	
1	1	1	1	
2	0	2	1	

Vessel: 2125 (RA-5)

Range-Console S/N: 715

R/T Unit S/N: 1557

<u>Code</u>	<u>First Cal.</u> <u>8/31/82</u>	<u>Second Cal.</u> <u>10/30/82</u>	<u>Final</u>	<u>Remarks</u>
A	0	-7	0 , -7	
B	-1	2	0	
C	0	-1	0	
D	2	2	2	
E	0	-1	0	
F	1	1	1	
0	1	-	1	No ending cal. Unit dead.
1	1	-	1	No ending calibration.
2	0	2	2	

Vessel: 2126 (RA-6)
Range-Console S/N: 711
R/T Unit S/N: 1646

<u>Code</u>	<u>First Cal.</u> <u>8/31/82</u>	<u>Second Cal.</u> <u>10/29/82</u>	<u>Final</u>	<u>Remarks</u>
A	-1	-6	-1, -6	No second cal. Changed magnetron.
B	1	0	0	
C	-4	-2	-3	
D	0	-2	-1	
E	-3	-5	-4	
F	1	0	0	
0	-3	-5	-4	No ending calibration.
1	-1	-	-1	
2	-2	-2	-2	

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 2123

SHEET : RA-10-5N-32

TIME	DAY	PATTERN 1	PATTERN 2
171121	265	-00001 +00000	-64457
194159		+00000	+94512
200207		+00000	-44227
223000		+00000	+00000
170326	266	+00000	-73384
212022		+00000	-00381
231000		+00000	+00000
162130	267	+00000	-81581
171911		+00000	-07254
172831		+00000	-01005
182550		+00000	-14293
210627		+00000	-43520
230500		+00000	+00000
160819	268	+00000	-75053
225000		+00000 -00601	+00000

FOR RANGE AZIMUTH HYDRO DISREGARD PATTERN 2 CORRECTORS.

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 2124

SHEET : RA-10-5N-82

TIME	DAY	PATTERN 1	PATTERN 2
171415	268	+00002	-13300
200000		+00000	+00000

FOR RANGE AZIMUTH HYDRO DISREGARD PATTERN 2 CORRECTORS.

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 2124

SHEET : RA-10-55-32

TIME	DAY	PATTERN 1	PATTERN 2
193158	264	+00002	+00001
215818		+00001	+00002
170156	265	+00002	+00002
163248	266	+00002	-66219
211459		+00002	-70000
214300		+00000	+00000
161825	267	+00002	+53120
193543		+00002	-12298
201000		+00000	+00000
204815	267	+00002	+00002
221239	269	+00002	-22294
224911		+00002	-39449
230000		+00000	+00000

FOR RANGE AZIMUTH HYDRO DISREGARD PATTERN 2 CORRECTORS.

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 2125

SHEET : RA-10-5-82

TIME	DAY	PATTERN 1	PATTERN 2
161600	258	+00001	+00002
163708		+00002	+00001
180420		+00001	+00000
203052		+00000	+00000
204135		+00001	+00000
205956		+00000	+00001
160456	259	+00001	+00000
194943	264	-00001	+00000
204626		+00000	+00000
165125	265	+00000	+00000
162241	259	+00000	-20457
173000		+00000	+00000

ABOVE CORRECTORS ARE FOR BOTTOM SAMPLES ONLY. FOR R/AZ CONTROL
DISREGARD PATTERN 2 CORRECTORS.

AA

ELECTRONIC CORRECTOR ABSTRACT

VESSEL : 2126

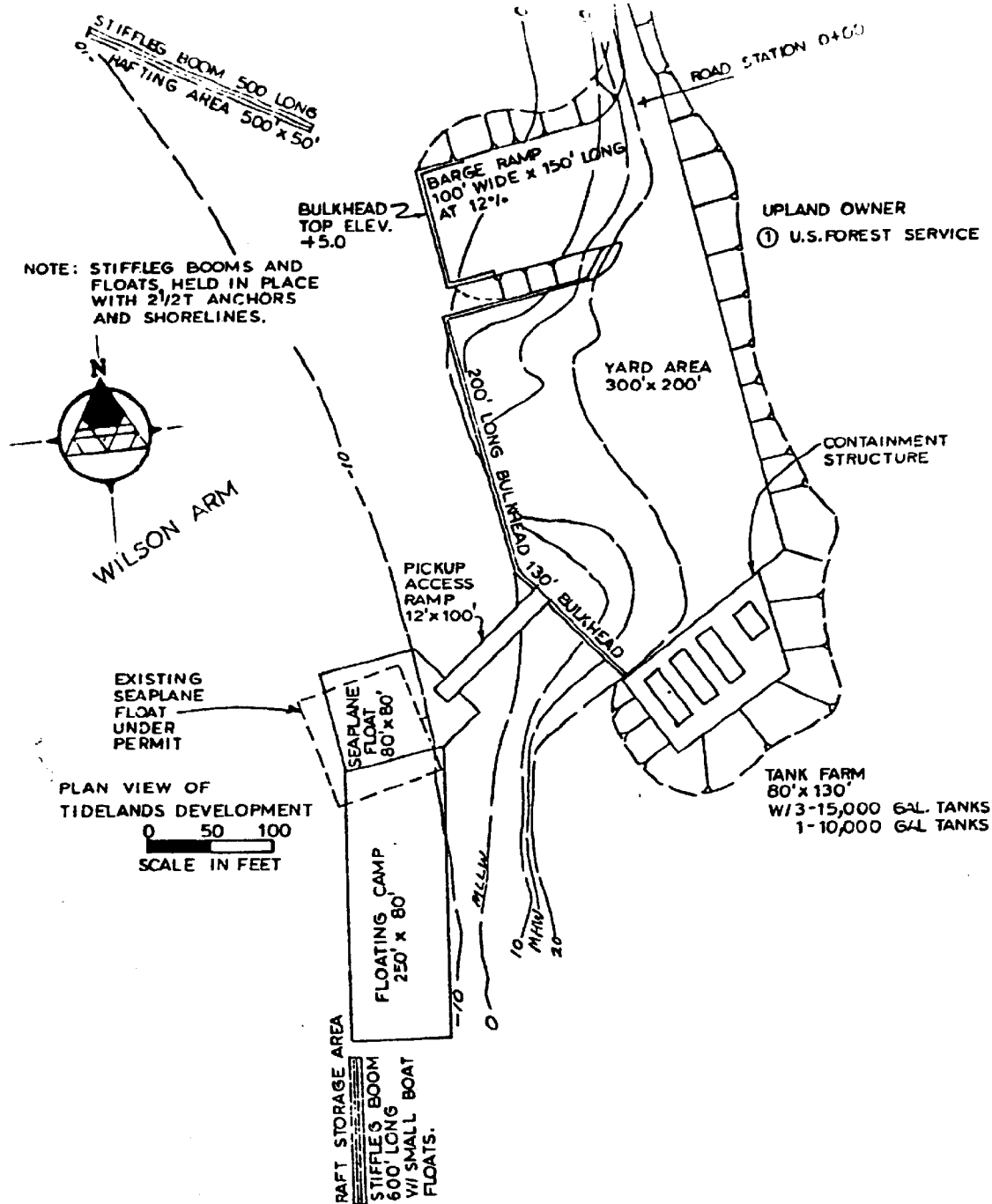
SHEET : RA-10-55-82

TIME	DAY	PATTERN 1	PATTERN 2
211900	257	-00004	-28560
233000		+00000	+00000
180356	258	-00004	-05000
204453		-00004	-10304
204748		-00004	-11239
235959		+00000	+00000
170952	259	-00004	-32437
172000		-00004	-89101
173114		-00004	-90051
182000		+00000	+00000
210933 220505	268	-00004	-87554
222200		+00000	+00000
210933	268	-00004	-75497
213600		+00000	+00000

ABSTRACT OF TIME OF HYDROGRAPHY
~~AND/OR FIELD EDIT~~

Field Sheet is Complete/~~Incomplete~~

CHANGE NO. 3-75
20 FEB 1975



QUARTZ HILL PROJECT
ROAD ACCESS AND BULK SAMPLING EIS

MARINE FACILITIES BLOSSOM RIVER ACCESS

Source: Charles Pool & Assoc., Inc.

Figure 2-7

APPROVAL SHEET

DESCRIPTIVE REPORT TO ACCOMPANY

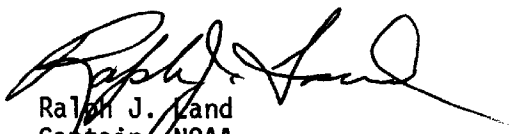
HYDROGRAPHIC SURVEY

H-10048

RA-10-5-82

In producing this sheet, standard procedures were observed in accordance with the Hydrographic Manual, PMC OPORDER, Hydrographic Survey Guidelines, 1982 Data Requirements Letter, and the Instruction Manual for Automated Hydrographic Surveys. The data was examined daily during the execution of the survey.

The boatsheet and the accompanying records have been examined by me, are considered complete and adequate for charting purposes, and are approved.



Ralph J. Land
Captain, NOAA
Commanding Officer

NOAA FORM 77-27 (5-77)		U. S. DEPARTMENT OF COMMERCE NOAA		HYDROGRAPHIC SURVEY NUMBER H-10048	
HYDROGRAPHIC SURVEY STATISTICS					
RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.					
RECORD DESCRIPTION		AMOUNT		RECORD DESCRIPTION	
SMOOTH SHEET		1		BOAT SHEETS & PRELIMINARY OVERLAYS	
DESCRIPTIVE REPORT		1		SMOOTH OVERLAYS: POS. ARC, EXCESS	
DESCRIP- TION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS
ENVELOPES			1		
CAHIERS			2		
VOLUMES					
BOXES					
T-SHEET PRINTS (List) N/A					
SPECIAL REPORTS (List) N/A					
OFFICE PROCESSING ACTIVITIES					
The following statistics will be submitted with the cartographer's report on the survey					
PROCESSING ACTIVITY			AMOUNTS		
			PRE- VERIFICATION	VERIFICATION	TOTALS
POSITIONS ON SHEET					1299
POSITIONS CHECKED				1299	1299
POSITIONS REVISED				1838	1838
SOUNDINGS REVISED				27	27
SOUNDINGS ERRONEOUSLY SPACED				00	00
SIGNALS (CONTROL) ERRONEOUSLY PLOTTED				00	00
			TIME - HOURS		
CRITIQUE OF FIELD DATA PACKAGE (PRE-VERIFICATION)			5	*(VER)/(EVAL)	5
VERIFICATION OF CONTROL				05/07	12
VERIFICATION OF POSITIONS				36/05	41
VERIFICATION OF SOUNDINGS				100/16	116
COMPILATION OF SMOOTH SHEET				29/10	39
APPLICATION OF TOPOGRAPHY				00/00	00
APPLICATION OF PHOTOBATHYMETRY				00/00	00
JUNCTIONS				12/01	13
COMPARISON WITH PRIOR SURVEYS & CHARTS				00/30	30
VERIFIER'S REPORT				10/16	26
OTHER				00/24	
* Digitization = 14					
TOTALS			5	192/109	306
Pre-Verification by James S. Green			Beginning Date 11/26/82		Ending Date 11/26/82
Verification by Thelma O. Jones			Beginning Date 3/11/83		Ending Date 8/22/83
Evaluation by Gordon E. Kay			10/28/83		11/28/83
Verification Check by James L. Stringham, James S. Green			Time (Hours) 23		Date 11/30/83
Marine Center Inspection by			Time (Hours)		Date
Quality Control Inspection by			Time (Hours)		Date
Requirements Evaluation by			Time (Hours)		Date

* Time in this column is for Verification (VER) and Evaluation (EVAL)

PACIFIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO: H-10048

FIELD NO: RA-10-5-82

Alaska, Smeaton Bay, Wilson Arm and Bakewell Arm

SURVEYED: September 14-25, 1982

SCALE: 1:10,000

PROJECT NO: OPR-0361-RA-82

SOUNDINGS: Ross Fineline 5000

CONTROL: Mini-Ranger
Range/Range

Chief of Party.....CAPT R. J. Land

Surveyed By.....LT S. Ludwig
ENS M. Mathwig
ENS W. Logue
ENS J. Judson

Automated Plot By.....PMC Xynetics Plotter

Verified By.....Thelma O. Jones

Evaluated By.....Gordon E. Kay

1. INTRODUCTION

H-10048 (1982) is a Navigable Area Survey (N.A.S.) conducted by the NOAA Ship RAINIER (S-221) in accordance with the following:

Project Instructions OPR-0361-RA-82, Smeaton Bay and Boca de Quadra, Alaska, dated June 2, 1982.

Change No. 1 dated July 28, 1982.

Change No. 2 dated August 23, 1982.

H-10048 is situated in Wilson and Bakewell Arms, a submerged, formerly glaciated valley (U-shaped), located at the extreme eastern end of Smeaton Bay on Revillagigedo Island, Alaska. Wilson and Bakewell Arms are situated along a heavily wooded, extremely steep mountainside which extends downward almost vertically past the shoreline into the water to depths of over 100 fathoms.

During verification, evaluation/quality control, the following data was changed:

a. Projection parameters were changed to center the hydrography on the smooth sheet and to change the projection to polyconic.

b. Tide level values used on H-10048 are from observed tides (see 77-12 on the following separate).

c. The TC/TI correctors for RA-3 were changed to reflect a corrected TRA of 0.4 fathoms.

2. CONTROL AND SHORELINE

Horizontal control and hydrographic positioning are discussed in paragraphs F and G of the Ship's Descriptive Report and in the Electronic and Horizontal Control Report for OPR-0361-RA-82.

The smooth sheet was plotted using geographic positions from the published geodetic control station listing of N.G.S., on the North American Datum of 1927.

Shoreline is not shown on H-10048 because of conflict with the supplied USGS Quad enlargements (in accordance with Hydrographic Guideline #17, section 6).

3. HYDROGRAPHY

Soundings at crosslines are in good agreement. The hydrography contained in this survey, H-10048, is adequate to determine the bottom configuration and least depths.

Standard depth contours were adequately drawn and developed with the exception of the 0-fathom, 1-fathom, 2-fathom, 3-fathom and 5-fathom depth contour, where hydrography was terminated at the limits required by N.A.S. project instructions, and because of the extremely steep shoreline.

4. CONDITION OF SURVEY

The hydrographic records and final reports adequately conform to the requirements of the Hydrographic Manual, July 4, 1976 edition, but with the following exceptions:

a. UTC time was not recorded for two detached positions (#6230, 6231). The field during post data acquisition interpolated the time and assigned it to the D.P.'s. This interpolated time, although the best estimate, does allow a potential error of ± 1 foot to the final plotted elevation because of the tides (reference Hydrographic Manual 4.8.3.8 paragraph 3).

b. Comparisons with prior survey and chart was not adequately performed. It is the "responsibility of the hydrographer to state the quality of general agreement...and give conclusions..." (Hydrographic Manual 5.3.4.K, 5.3.4.L). A mere tabulation of data points does not accomplish the purpose intended.

c. Bottom samples listed in the Descriptive Report on Log sheet-M (NOAA form 75-44) were listed as OZ (ooze). These bottom samples did not meet the definition of ooze listed in the Hydrographic Manual 4.7.2, paragraph 7. During verification these samples were changed to M (mud).

5. JUNCTIONS

H-10048 junctions H-10047 along the entire southwestern mutually common area in Smeaton Bay. No problems were encountered in making a junction. Depth contours are in coincidence and marginal notes have been inked in red.

6. COMPARISON WITH PRIOR SURVEY

H-10048 was compared with H-5205, 1:20,000 (1931). This prior survey compares well to H-10048. Differences range from 1-2 fathoms generally in depths greater than 25 fathoms to less than a fathom in depths less than 25 fathoms. These slight differences are attributed to data acquisition techniques on the prior.

The prior survey does not extend inshore much further than the present survey and does not contain much more information than the present N.A.S. Seventy soundings and five rocks (one rock was not charted at latitude 55°19'09"N, longitude 130°41'01"W) were transferred in brown from H-5205 onto H-10048. This allows H-10048 to supersede H-5205 entirely from longitude 130°43'39"W eastward to the end of Wilson and Bakewell Arms at 130°37'00"W.

Note: The shoreline on H-5205 is more consistent with the hydrography on this survey than the charted shoreline or the USGS quads.

There are no Presurvey Review Items or Items for Investigation contained within the limits of H-10048.

7. COMPARISON WITH CHART

H-10048 was compared with chart 17424, 5th edition, dated August 6, 1977 at a scale of 1:80,000.

a. Hydrography - soundings compared well and come from the before mentioned prior survey (see section 6 of the report for a comparison). There are four charted rocks located within the limits of this survey, of which only one was located during this survey. Three rocks have been carried forward from their source (see above referenced section). A floating pier located at the end of Wilson Arm, approximate latitude 55°22'03"N, longitude 130°37'30"W was added to the smooth sheet (in red) from the field sheet and should be charted.

b. Controlling depths - There are no controlling depths contained within the limits of H-10048.

c. Aids to Navigation - There are no fixed aids or floating aids to navigation located within the limits of H-10048. (Refer to section P of the Ship's Descriptive Report.)

H-10048 supersedes the entire charted data over their common areas.

8. COMPLIANCE WITH INSTRUCTIONS

H-10048 complies with the project instructions and changes listed in section 1 of this report.

9. ADDITIONAL FIELD WORK

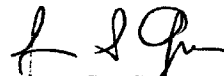
H-10048 is a good navigable area survey. Additional field work is not recommended or required at this time.

Submitted by:



Gordon E. Kay
Cartographer - Evaluator

This survey, H-10048, has been verified and evaluated under my guidance. I have examined this survey and it meets all Charting and Geodetic Services standards and requirements for use in nautical charting. This survey, H-10048, is therefore recommended for final approval.



James S. Green
Quality Control Supervisor

DATE: December 20, 1982

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 945-0435 Short Point, Smeaton Bay, Alaska
945-0475 Smeaton Bay, Wilson Arm, Alaska

Period: September 14-26, 1982

HYDROGRAPHIC SHEET: H-10048

OPR: 0361

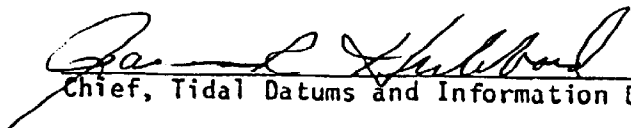
Locality: Smeaton Bay, Alaska

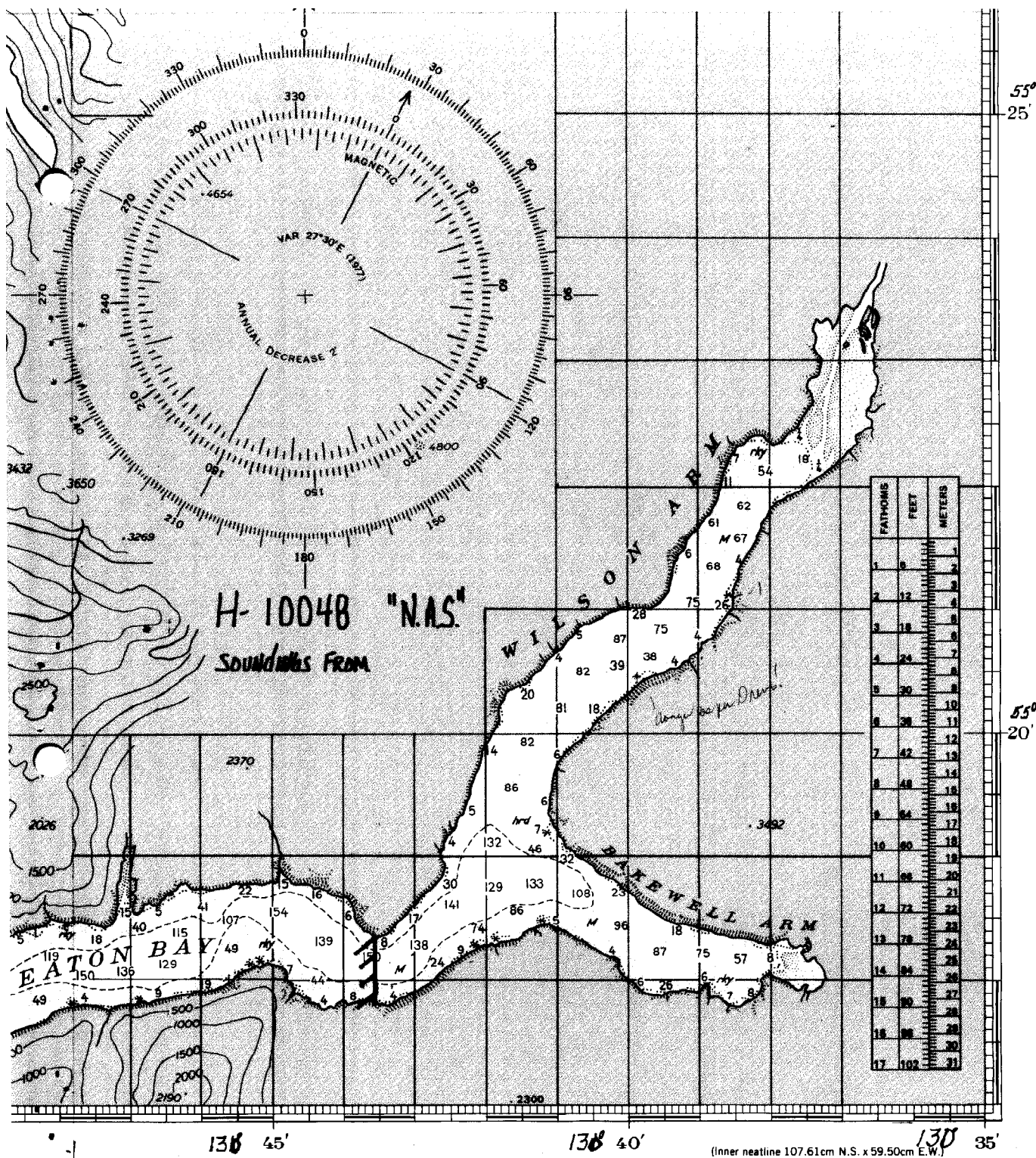
Plane of reference (mean lower low water): 945-0435 = -4.05 ft.
945-0475 = 0.96 ft.

Height of Mean High Water above Plane of Reference is 945-0435 = 14.4 ft.
945-0475 = 14.2 ft.

REMARKS: Recommended Zoning:

1. North of latitude 55°19' zone direct on 945-0475, Smeaton Bay, Wilson Arm, Alaska.
2. South of 55°19' zone direct on 945-0435, Short Point, Smeaton Bay, Alaska.


Chief, Tidal Datums and Information Branch



FATHOMS	FEET	METERS
1	6	1
2	12	2
3	18	3
4	24	4
5	30	5
6	36	6
7	42	7
8	48	8
9	54	9
10	60	10
11	66	11
12	72	12
13	78	13
14	84	14
15	90	15
16	96	16
17	102	17

(Eastern Part of Behm Canal)

SOUNDINGS IN FATHOMS - SCALE 1:80,000

17424

(formerly C&GS 8078)

DMA STOCK NO. 17BC017424

ATTACHMENT TO DESCRIPTIVE REPORT FOR H-10048

I have reviewed the smooth sheet, accompanying data, and reports of this hydrographic survey. Except as noted in the Evaluation Report, the hydrographic survey meets or exceeds Charting and Geodetic Services (C&GS) standards, complies with instructions, and is accurately and completely represented by the smooth sheet and digital data file for use in nautical charting.

W. C. Austin 1/20/84
Chief, Nautical Chart Branch (Date)

CLEARANCE:

N/MOP2:LWMordock

SIGNATURE AND DATE:

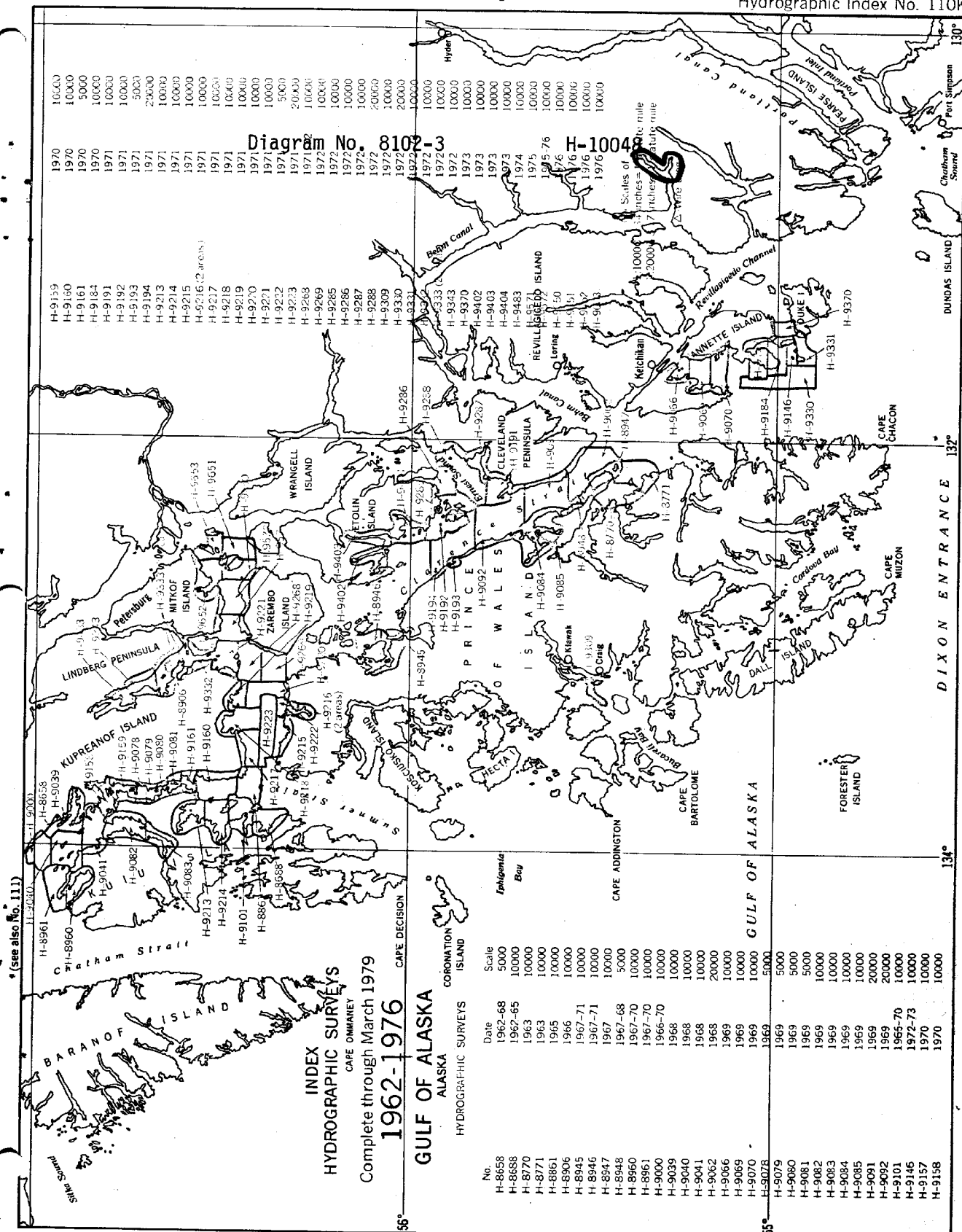
L. W. Mordock 1/24/84

After review of the smooth sheet and accompanying reports, I hereby certify this survey is accurate, complete, and meets appropriate standards with only the exceptions as noted above. The above recommendations are forwarded with my concurrence.

Robert K. Townsend 2/2/84
Director, Pacific Marine Center (Date)

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Survey
Washington, D.C.

Hydrographic Index No. 110K



FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10048

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.

SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10048

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.

[illegible]