10203

Diagram No. 8252-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey ..... Hydrographic

Field No. FA-10-6-85

Registery No. H-10203

LOCALITY

State ..... Alaska

General Locality ..... Kelp Bay

Sublocality ..... Portage and Middle Arms

1985

CHIEF OF PARTY
CAPT J.W. Carpenter

LIBRARY & ARCHIVES

DATE ..... November 19, 1986

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

Area 5
Chr
17337
17320
TO SIGN OFF SEE "RECORD OF APPLICATION"

NOAA FORM 77-28 (11-72)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

H-10203

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.

FA 10-6-85

State: Alaska

General locality: Kelp Bay

Locality: Portage and Middle Arms

Scale: 1:10,000 Date of survey: 10/10/85 thru 11/10/85

Instructions dated: 29 August 1985 Project No.: OPR-0183-FA-85

Vessel: FAIRWEATHER (2020), FA-3 (2023), FA-4 (2024), FA-5 (2025), FA-6 (2026), Boston Whaler (2030)

Chief of party: Captain John W. Carpenter

Surveyed by: LT. Kenny, Lt. Moen, Lt (jg) Timmons, Lt (jg) Hurst, Ens. Brezinski, Ens. Crozer, Ens, Abbott, Ens. Cone, CST Krick

Soundings taken by echo sounder, ~~hand lead, pole~~ XXXXXXXXXXXX Raytheon DSF-6000N, Leadline, Pneumatic Gage

Graphic record scaled by: FAIRWEATHER Personnel

Graphic record checked by: FAIRWEATHER Personnel

Verification ~~Protracted~~ by: P. Niland Automated plot by: PMC Xynetics Plotter

Evaluation ~~Verification~~ by: A. Luceno

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

REMARKS: Marginal notes in black by Evaluator. Separates are filed with the hydrographic data.

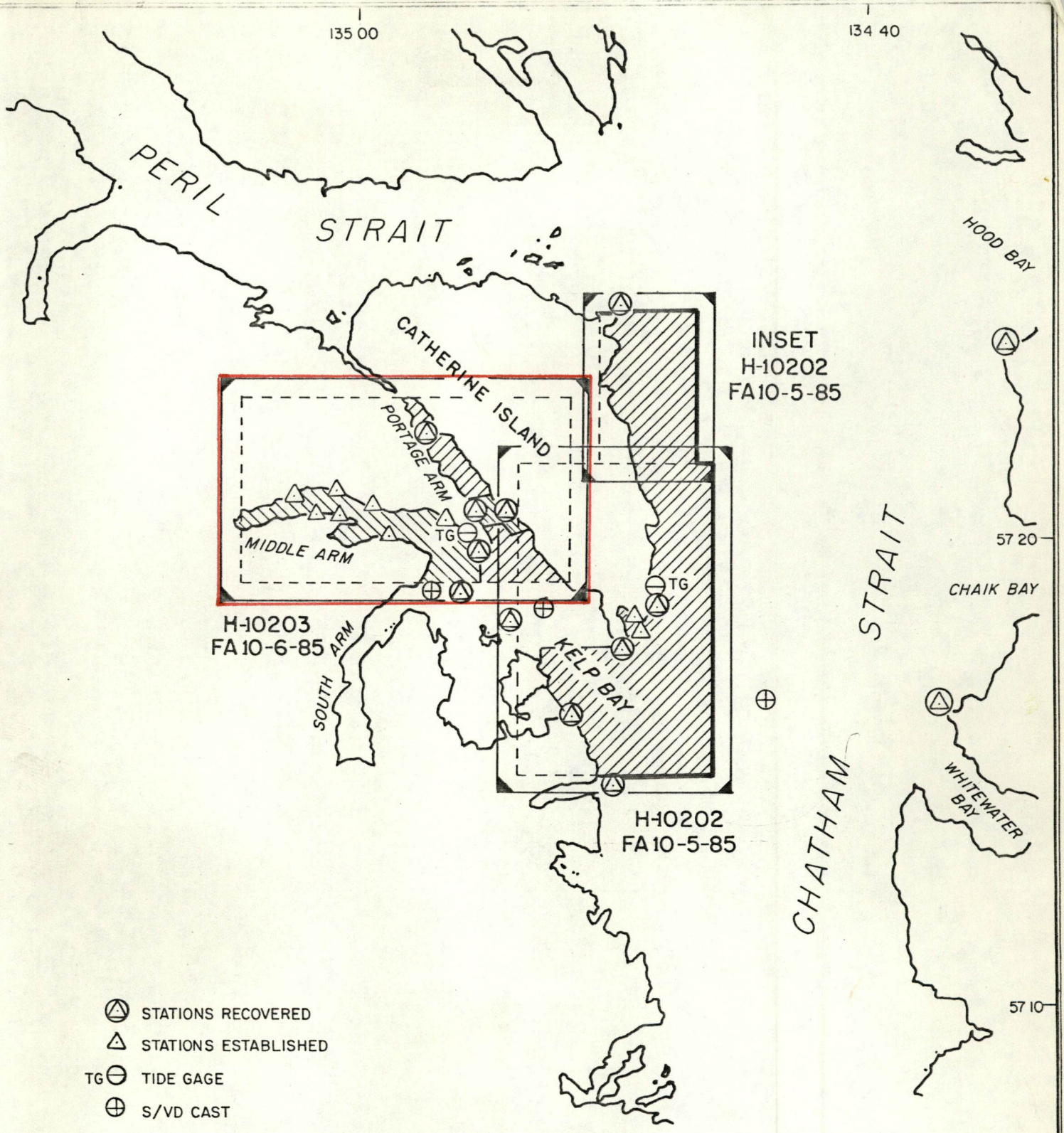
AWOIS and SURF ✓ 1/87 RWD

Notes in red in Descriptive Report made during examination

SOL 1-31-97

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978-665-010-1174



	OCT	NOV
SQ NM SOUNDING LINE	24.6	3.8
LNM SOUNDING LINE	495	145
BOTTOM SAMPLES	67	60
HYDRO CONTROL STATIONS	14	8
SV/D CAST	3	3
TIDE GAGE INSTALLATION	2	0
LNM SL VERIFICATION	24.5	12.6
HYDROGRAPHY		

MONTHLY PROGRESS SKETCH

OPR-0183-FA-85

—KELP BAY, ALASKA—

NOAA SHIP FAIRWEATHER S-220

CAPT JOHN W. CARPENTER, CMDG

SCALE OF NOS CHART 17320

October November 1985

Descriptive Report
to Accompany Hydrographic Survey
H-10203 (FA-10-6-85)
NOAA Ship FAIRWEATHER S-220
Captain John W. Carpenter, Commanding

A. PROJECT

Hydrographic survey H-10203 was conducted in accordance with Project Instructions OPR-0183-FA-85 dated August 29, 1985, and Change No. 1 dated September 11, 1985. PMC OPORDER, the Hydrographic Manual (fourth edition), and the Hydrographic Survey Guidelines are also applicable.

This sheet is designated as "C" in the project instructions.

B. AREA SURVEYED

This survey covers the area within Kelp Bay north of latitude 57/19/00N including both Portage and Middle Arms.

The field work for this survey commenced on October 10, 1985 (DN 283) and was completed November 10, 1985 (DN 314).

C. SOUNDING VESSEL

Hydrographic data for this survey was collected with Jensen launches FA-3 (2023), FA-4 (2024), FA-5 (2025) and FA-6 (2026). Shoreline verification was completed using a 17-foot Boston Whaler FA-10, which was designated vessel number 2030. The NOAA ship FAIRWEATHER (2020) was used for all sound velocity casts. Bottom samples were collected by FA-5 (2025).

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

FAIRWEATHER's four survey launches were equipped with dual-beam Raytheon DSF-6000N echo sounders to obtain soundings during this survey. See Table I for a list of equipment used by vessel and date. Several skiffs were used for shoreline verification and were equiped with a sounding pole.

Table I
Sounding Equipment

Vessel	Date	Instrument/Model	Recorder
FA-3 (2023)	DN 306 to DN 312	Raytheon DSF-6000N	A 121 N
FA-4 (2024)	DN 295 to DN 313	Raytheon DSF-6000N	B 049 N
FA-5 (2025)	DN 283 to DN 313	Raytheon DSF-6000N	A 113 N
FA-6 (2026)	DN 296 to DN 312	Raytheon DSF-6000N	B 039 N
Skiff (2030)	DN 290 to DN 303	Sounding Pole	-------

Echo-sounding equipment was monitored continuously while on line. All hydrographic data were scanned at least twice to insert peaks and deeps between soundings and to ensure proper depth digitization. The effects of excess wave and swell action were adjusted at this time.

Diver's least depths were obtained using a Lietz Fiberglass tape measure or pneumatic depth gauge manufactured by 3-D Instruments, Inc. (s/n 8302079 N). Data acquisition using this gauge consisted of the following procedure: the orifice of the gauge was attached to a 150-foot air hose which was held in place at the least depth position by divers. A surface tender, using air from a scuba tank, pressurized the system three times and then recorded the averaged gauge value. System calibration data can be found in the separate Corrections to Echo Soundings Report, OPR-0183-FA-85, H-10202 and H-10203.

FAIRWEATHER's four survey launches were tested for settlement and squat on March 12, 1985 (DN 71) in Shilshole Bay, Seattle, Washington. Measurements were conducted in accordance with Section 4.9.4.2 of the Hydrographic Manual. It was determined that there were no applicable settlement and squat corrections for any launch when performing surveys in fathoms. Refer to the Corrections To Echo Soundings Report for details concerning methods used for settlement and squat.

One bar check was performed daily, wind and seas permitting. Bar checks were normally done at three fathoms, though in calm seas, a six- or seven-fathom check was done for the DSF-6000N.

Bar checks combined with the velocity correctors determined launch TRA values. For this survey, all launches were determined to have a TRA of 0.3 fathoms. All launch soundings on the final field sheet were plotted using this TRA value.

Sounding correctors for the DSF-6000N apply to both the narrow- and wide-beam depth soundings. Narrow beam data was digitized for H-10203.

Wind and sea conditions occasionally made it necessary to visually average the depth profile to correct for heave action. When heave averaging was required, soundings were corrected in accordance with Section 4.9.3.2 of the Hydrographic Manual, and Hydrographic Survey Guideline #31.

Velocity correctors were determined from six SV/D casts. Table II contains the dates and locations of all casts. Two velocity tables were determined for these surveys from the six casts (see Table III). No velocity corrections were applied to echo sounder depths plotted on the final field sheets.

Table II
Velocity Casts

Cast No.	Date (DN)	Latitude	Longitude
1	279	57/16.6 N	134/44.3 W
2	294	57/18.5 N	134/57.2 W
3	294	57/16.6 N	134/44.0 W
4	308	57/16.9 N	134/50.8 W
5	314	57/18.8 N	134/56.9 W
6	314	57/18.6 N	134/52.0 W

Table III
Velocity Tables

Table No.	Based on Casts	Dates (DN)
1	1,2,3,4	DN 283-310
2	5,6	DN 311-314

The SV/D casts were performed using a Plessy Model 9040 Environmental Profiling System (s/n 5647). This instrument was calibrated at the Northwest Regional Calibration Center (NRCC) in February 1985. An onboard PDP8/e FOCAL computer program was used to convert the frequency readings of the SV/D system to engineering units for determination of sound velocity profiles. Two Nansen bottles (one at the surface and one at depth) and/or surface temperatures were also taken during SV/D casts as a check on the Plessy system; these were not used in the determination of the velocity tables. Calibration data for the reversing thermometers and salinometer can be found in the Corrections to Echo Soundings Report.

TC/TI tapes were made in accordance with PMC OPORDER, Appendix Q, dated April 16, 1985. Printouts of TC/TI tapes are included in Appendix D of this report.

Predicted tide correctors were applied to the soundings plotted on the field sheets for this survey. The tide correctors used were from the 1985 West Coast of North and South America Tide Tables. H-10203 tide correctors are from Juneau, Alaska and are corrected to Kelp Bay per section 5.9 of the project instructions. The height correction range ratio is "x 0.84"; time correction equals minus 0 hours 15 minutes at high water and minus 0 hours 10 minutes at low water. For further information refer to Appendix B, "Field Tide Note".

E. HYDROGRAPHIC SHEETS

The final field sheets were plotted aboard the FAIRWEATHER using a PDP/8e computer and complot plotter. This survey consists of three final field sheets; both the North and South sheets are plotted on mylar, while the development is on paper. The dimensions, scale, and skew of each are as follows:

Sheet	Scale	Skew	Dimensions
FA-10-6N-85	1:10,000	0	21x57 in
FA-10-6S-85	1:10,000	0	21x57 in
Dev. A	1:5,000	0	15x18 in

All the hydrographic data for this survey will be forwarded to the Pacific Marine Center in Seattle, Washington for verification and smooth plotting.

F. CONTROL STATIONS

All horizontal control stations used on this survey were recovered and/or established by FAIRWEATHER personnel. All geodetic positions were based on the North American 1927 Datum. Conventional traverse and triangulation methods were used throughout this survey. No anomalies in control, adjustment or in closures were encountered. All positions meet or exceed Third Order, Class I specifications.

Stations used in support of the survey are shown on Table IV.

Table IV
Hydrographic Control Stations

Station Name	Signal Number	
COXSN m,d	143	
GENE r,d	123	
KRICK m,d	135	
MARM m,d	133	
MOSS m,d	141	
NARD r,d	127	
*NORTH PT. r,d	109	
PARM r,d	125	
PLOVER r,d	119	
PORTAGE r,d	121	
RO m,d	139	
STONE PT. m,d	137	
~~*SOUTH PT. r,d~~	~~107~~	not used
*YELLOW r,d	117	

r=recovered, m=monumented, d=described
*=Stations located outside limits of survey sheet

For additional information refer to the Horizontal Control Report, OPR-0183-FA-85.

G. Hydrographic Position Control

Hydrographic positioning control was accomplished using the Motorola Mini-Ranger III System. The control configurations consisted of range-range and range-azimuth for all positioning control including detached positions.

The following table (Table V) is a listing of console and R/T units for each sounding vessel.

Table V
Mini-Ranger Equipment by Vessel

Vessel Number	DN	Console Number	R/T Number
2023	283-313	B0323	B1398
2024	283-313	716	C1875
2025	283-313	703	E2716
2026	283-313	506042	B1108

Mini-Ranger electronic correctors were determined from baseline calibrations (BLC). The initial BLC was performed on DN's 266 and 268 from the Coast Guard Pier to the Union 76 Fuel Depot in Juneau, AK. The final BLC was performed on DNs 324, 330 and 336 from Lake Union Pier B to Lake Union Naval Reserve Pier in Seattle, WA. Final correctors were determined by using beginning BLC data only, as all ending BLC correctors agree within 4 meters of the beginning correctors. For more detailed information see Electronic Control Report OPR-0183-FA-85; H-10202, H-10203.

On DN 304 transponder code 9 had a modulator short; field repairs were not possible and the transponder was returned to PMC. Therefore, no ending baseline calibration was possible for this code.

Hydrographic positioning equipment was critically system checked at least once per week using either theodolite cuts or direct baseline measurement between two geodetic stations. All hydrographic positioning equipment was found to be accurate within the limits set forth by the PMC OPORDER.

No hydrography was performed with weak or less than minimum required control geometry. In all cases, the launch R/T units were located directly over the transducers thus eliminating the need for ANDIST correctors.

H. SHORELINE

Shoreline details for this survey are from a 1:10,000 scale mylar enlargement of TP-01167, a 1:20,000 scale, Class III, registered shoreline manuscript. All verified features are in black ink on the final field sheet with changes recorded in red ink. New features are displayed in black ink. ✓

There are no conflicts between hydrography and the manuscript high water line. As both Portage and Middle Arms are characterized by steeply sloping areas at the inshore limit, it was possible to collect soundings within three meters of the high water line in many areas. ✓

In a few instances the ledges as depicted on the manuscript were found to be inaccurate. These changes, minor in nature, are shown in red on the final field sheet. One new area of ledge was found in the vicinity of latitude 57/20/56N and longitude 135/02/27W; it is drawn in black on the final sheet. ✓ changes shown in black on smooth sheet

All manuscript rocks within the survey limits were searched for. In two cases in Middle Arm, rocks that plotted adjacent to the shoreline were found to be part of ledges (see Sounding Volume reference numbers 958 and 959). Also, in Middle Arm three rocks to the south of the peninsula in the vicinity of latitude 57/20/00N, longitude 135/00/05W, were not found; these are reference numbers 960, 961, and 962. These rocks were searched for on two separate occasions at low tide; the area was either dry or the bottom was visible. In this same area two rocks at latitude 57/20/08N, longitude 135/00/39W, were found to be the two most prominent and seaward peaks of an area foul with rocks. (reference numbers 943 & 944) ✓

Limits of two foul areas (the first at latitude 57/22/17N, longitude 134/57/21W, and the second at latitude 57/21/21N, longitude 134/56/36W) were obtained in Portage Arm. The position numbers delineating the foul areas are 909-910 and 914-915, respectively. ✓

Some new rocks adjacent to the shoreline were found in the survey area; they are displayed in black on the final field sheet. ✓

The ramp and ruins at latitude 57/20/11N, longitude 135/00/48W were searched for on three separate occasions at low water (the area was dry), and were not found (reference number 963). It is recommended that the ramp be removed from the chart. concur ✓ ruins

Two control stations are seaward of the shoreline of Catherine and Baranof Islands. Plover (1983) is on a small islet and Yellow (1983) is southeast of this, on a small island, outside the survey limits. ✓
Also Nard (1983) at lat. 57°22'14"N, long 134° 57'31"W on an islet.

I. CROSSLINES

All crosslines were run at a minimum of 45 degrees with respect to the main scheme lines and they account for 10% of the total coverage. Agreement between crossline and main scheme hydrographic sounding lines is good. In a few cases differences greater than one fathom were found. These are attributable to irregular and rapidly changing bottom contours. ✓

J. JUNCTIONS

No surveys junction with H-10203. ✓

K. COMPARISONS WITH PRIOR SURVEYS

The survey area is covered by the following prior survey:

H-2240	1:20,000	1895

Per project instructions comparisons were also made with the reconnaisance surveys done by the DAVIDSON:

124987	1:20,000	1983
124988	1:10,000	1983

✓

Comparison with the 1895 survey was difficult; this is most likely attributable to the fact that the survey was done on one datum and subsequently shifted to the 1927 North American datum. Overlaying the old survey with the contemporary survey and correlating the latitudes and longitudes exactly seemed impractical as neither the shorelines nor the soundings matched well. Therefore, a 100-meter easterly shift of the overlying contemporary survey was used to make the comparison (i.e., shorelines were overlaid). ✓ see sect. 6 of Eval. Report

In general comparison between the two surveys is fair, with general trends of deepening or shoaling consistent between them. Slopes are generally steeper than the prior survey depicts; therefore, agreement between the three- and ten-fathom curves is poor. ✓ ✓

An uncharted shoal has been located extending from latitude 57/20/14.4N, longitude 134/56/42.9W, (depth of 4.7 fathoms) to latitude 57/20/15.8N, longitude 134/56/51.2W (depth of 6.1 fathoms). This shoal was reported to the Coast Guard as a danger. (Pos. 9010 & 9009) ✓ should be discussed in sect. L, Comparison with Chart.

These two shoal depths are rocks

In the vicinity of latitude 57/20/11N, longitude 135/00/30W, south of the small peninsula in Middle Arm, shoaling has occurred considerably since the 1895 survey. As this is a stream fed area at the base of a steep slope, rapid sedimentation is the obvious explanation of the shoaler depths. Also, the shoals fringing the peninsula (latitude 57/20/23N, longitude 135/59/50W) are more extensive than on the prior survey. ✓ ✓

A

At the mouth of both Portage and Middle Arm, north of latitude 57/19/00N, the surveys compare well. However, two uncharted shoals were found. One is covered by 8.~~0~~3 fathoms of water at latitude 57/19/09.~~5~~4N, longitude 134/56/35.~~9~~7W. Slightly northwest of this position a ~~0.7~~1.0.9 fathom shoal was developed at latitude 57/19/11.7N, longitude 134/56/44.0W. These shoals were reported as dangers to navigation.

Two new rocks were found at the head of Portage Arm at latitude 57/22/31.~~8~~9N, longitude 134/57/18.~~3~~16W, and latitude 57/22/11.~~8~~1N, longitude 134/57/13.~~7~~2W, covered by 0.~~8~~8 and 2.~~9~~7 fathoms, respectively (position numbers 9016 and 9017). These were reported to the Coast Guard as dangers.

"Rk" added

A submerged rock found on the prior survey, but not on the shoreline manuscript, was confirmed; it is at latitude 57/19/2~~4~~1.64N, longitude 134/52/3~~1~~3.29W, with a diver verified least depth of ~~2.9~~3.3 fathoms. In this same area it was also found that the bottom dropped off more rapidly than previously charted or shown on the prior survey. (POS. 9020)

The submerged, dangerous rock at latitude 57/19/27N, longitude 134/54/46W, was not found at the prior survey (and charted) location. Line spacing was reduced to 15 meters (see development A, 1:5,000 scale sheet) and numerous rocks and shoals were found within this 10-fathom curve south from Portage Point (this was reported as a danger to navigation). Specifically, a shoal covered by 2.8~~9~~ fathoms (position number 7647+2), was found ~~50~~25 meters ~~north~~west, and a rock covered by ~~0.9~~1.0.87 fathoms (position number 5389), was found 120 meters northwest of the prior survey rock position. It is recommended that the shoal depths and rocks in this area from H-10203 be charted as they supersede the prior survey submerged rock position.

Foul area limits transferred from field sheet.

concur

Comparison with the reconnaissance survey work done by the DAVIDSON (with exact correlation of latitude and longitude) was good with overall agreement within 2 fathoms. Areas with ~~dis~~agreement greater than 2 fathoms occurred only on steep slopes. Comparable or slightly shoaler depths were found by the FAIRWEATHER in all cases in the area within the 10-fathom curve south from Portage Point.

L. COMPARISON WITH THE CHART

Comparisons were made between H-10203 and a 1:10,000 scale enlargement of Chart 17337 (1977, 7th edition). The soundings on the chart for this area were derived from the prior survey discussed in section K of this report. All discrepancies noted that are identical to those of the prior survey will not be repeated here.

No evidence was found of the ~~a~~two mooring buoys charted at latitude 57/20/10N, longitude 134/59/21W. This confirms chart letter 955/83 noted on the chart mark-up of this area. Nor was there any evidence of a floating dock, log boom (AWOIS item number 50979 discussed below), ramp or ruins (see section K), in the vicinity of latitude 57/20/15N, longitude 135/00/38W, referred to in chart letter 276/77 by the Corps of Engineers.

The slide previously charted at latitude 57/21/20N, longitude 134/55/00W, was not found; heavy growth covers the area. It is recommended that these features be removed from the chart. concur Does not effect navigation.

The position of a charted rock, latitude 57/22/04N, longitude 134/56/21W, noted on the chart mark-up as coming from T-2225 (1895) was confirmed; it is covered by 1.5[6] fathoms. (Pos. 7806+01) ✓

~~Eight~~ Ten dangers to navigation within the sheet's limits were noted on this survey. They were reported to the Seventeenth Coast Guard District, Juneau, Alaska, and DMAHTC. A copy of the Danger To Navigation Report, with position numbers noted, dated December 2, 1985, is included in Separate IX. six uncharted rocks outside the limits of the sheet were included in the Danger to Navigation report. ✓

Diver's least depths over areas discovered during the course of the survey were determined using a pneumatic guage or tape measure. Additionally, lead line soundings were obtained over other shoal areas that did not have diver least depth determination. ✓

The following AWOIS item is within the survey limits:

AWOIS ITEM NO.	Description
50979	Log boom Latitude 57/20/16N Longitude 135/00/15W

✓

The log boom was searched for on three separate occasions at low water, and was not found. It is recommended that it be removed from the chart. ✓ concur

M. ADEQUACY

This survey is complete and fully adequate to supersede all prior surveys in their common areas. No additional field work is necessary. ✓

N. AIDS TO NAVIGATION

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

O. STATISTICS

Vessel	2020	2023	2024	2025	2026	2027	2028	Total
Number of Positions	0	340	479	396	1249	0	0	2464 57
Linear Nautical Miles	0	29	36	22	88	0	0	175
Square Miles								8.4
Detached Positions	0	9	9	18	14	0	0	~~50~~ 207
Bottom Samples	0	0	0	50	0	0	0	50
Velocity Casts	6	-	-	-	-	-	-	6
Tide Stations								1

P. MISCELLANEOUS

Bottom samples were collected and forwarded to the Smithsonian Institution, Washington D.C..

Currents of up to approximately two knots were observed throughout the survey area.

Q. RECOMMENDATIONS

None

R. AUTOMATED DATA PROCESSING

All range-range and range-azimuth hydrography was processed in accordance with the PMC OPORDER, Appendix Q, dated April 16, 1985. All peaks and deeps and sounding corrections for range-range hydrography were placed on the corrector tape. In most cases for range-azimuth control, inserts were placed on the master tapes. In all cases inserts were positioned by time and course.

The following is a list of the hydroplot programs used for processing and data acquisition during this field examination.

Number	Program Name	Version Date
RK 112	R/R Real Time Plot	4/23/84
RK 116	R/Az Real Time Plot	10/01/84
RK 201	Grid, Signal and Lattice Plot	4/18/75
RK 211	R/R Non Real Time Plot	2/13/84
RK 212	R/Az Non Real Time Plot	2/12/84
RK 300	Utility Computations	10/21/80
RK 330	Reformat and Data Check	5/04/76
PM 360	Electronic Corrector Abstract	2/02/76
RK 407	Geodetic Inverse/Direct Computation	9/25/78
AM 500	Predicted Tide Generator	11/10/72
RK 530	Layer Corrections for Velocity	5/10/76
RK 562	Theodolite Calibration	9/05/84
AM 602	ELINORE - Line Oriented Editor	12/08/82
Falogh	R/R + R/Az Hydrologger	8/04/83

S. REFERRAL TO REPORTS

The reports listed below are to be submitted separately from the descriptive report and the hydrographic records for H-10203.

Report	To Be Submitted
Horizontal Control Report	January 1986
Electronic Control Report	January 1986
Correction to Echo Soundings Report	January 1986
Coast Pilot Report	January 1986

SIGNAL LISTING
OPR-0183-FA-85
KELP BAY, ALASKA
FA-10-6-85
H-10203

~~HOME 2 1925~~
~~101 0 57 16 26401 134 37 14122 250 0014 000000~~

~~DISTANT 2 1925~~
~~103 0 57 24 04048 134 34 39281 250 0011 000000~~

~~KELP 1925~~
~~105 0 57 14 40530 134 50 05284 250 0006 000000~~

~~SOUTH PT 1983~~
~~107 0 57 16 17939 134 51 42464 250 0003 000000~~

NORTH PT ~~1983~~
109 0 57 17 35920 134 49 48665 250 0009 000000

~~PT. LULL LIGHT 17~~
~~110 0 57 18 34950 134 48 17578 250 0013 000000~~

~~COVE 2 1925~~
~~111 0 57 18 34618 134 48 17453 250 0007 000000~~

~~THATCHER 2 1925~~
~~115 0 57 25 00582 134 49 49458 250 0006 000000~~

YELLOW ~~1983~~
117 0 57 18 15792 134 54 01704 250 0006 000000

PLOVER ~~1983~~
119 0 57 18 56704 134 56 01017 250 0003 000000

PORTAGE ~~1983~~
121 0 57 19 42748 134 55 09249 250 0003 000000

GENE ~~1983~~
123 0 57 20 32314 134 54 18844 250 0002 000000

Note: cancelled stations not used in the survey.

PARM ~~1963~~
125 0 57 20 37136 134 55 15047 250 0002 000000

NARO ~~1963~~
127 0 57 22 13630 134 57 31287 250 0004 000000

~~ECHO 1965~~
~~129 0 57 17 57220 134 48 58657 250 0003 000000~~

~~ECHO AZ. 1965~~
~~131 0 57 16 27961 134 49 28194 250 0001 000000~~

MARM ~~1965~~
133 1 57 20 21104 134 56 24854 250 0006 000000

KRICK ~~1965~~
135 6 57 20 07205 134 58 49740 250 0002 000000

STONE PT. ~~1965~~
137 2 57 20 39559 134 59 29729 250 0002 000000

RO ~~1965~~
139 2 57 20 59249 135 00 44767 250 0002 000000

MOSS ~~1965~~
141 5 57 20 35930 135 01 31767 250 0002 000000

JCKSN ~~1965~~
143 0 57 20 55843 135 02 28037 250 0002 000000

Note: cancelled stations not used in the survey.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
NOAA Ship FAIRWEATHER
1801 Fairview Ave. East
Seattle, Washington 98102

December 2, 1985 1703-01.05:MRK

Commander (OAN)
Seventeenth Coast Guard District
P.O. Box 3-5000
Juneau, Alaska 99802

Dear Sir:

This letter confirms my radio messages, P 191749Z NOV 85 and P 261548Z NOV 85.

The following items were noted by the NOAA Ship FAIRWEATHER during survey operations in the vicinity of Catherine Island, Chatham Strait, Alaska (survey H-10202) and in Portage and Middle Arms, Kelp Bay, Alaska (survey H-10203) and are considered dangers to navigation. Questions concerning this survey may be directed to Chief, Nautical Chart Branch, telephone (206) 526-6835.

The following statements are recommended for inclusion in the Local Notice to Mariners: Position Number

1. "An uncharted rock covered by 0.~~8~~ 8 fathoms ~~(MLLW based on predicted tides)~~ is at latitude 57/22/31.~~8~~9N, longitude 134/57/18.~~3~~2W (Charts 17337 and 17320)." 9016

2. "An uncharted rock covered by 2.~~1~~9 fathoms ~~(MLLW based on predicted tides)~~ is at latitude 57/22/11.8N, longitude 134/57/13.7W (Charts 17337 and 17320)." 9017

3. "An uncharted shoal has been located extending from latitude 57/20/14.4N, longitude 134/56/42.9W, (depth of 4.~~3~~4 fathoms) to latitude 57/20/15.8N, longitude 134/56/51.2W, (depth of 6.~~1~~3 fathoms) (Charts 17337 and 17320)." 9010 9009
Submerged rocks located at positions.

4. "An uncharted shoal covered by 8.~~3~~3 fathoms ~~(MLLW based on predicted tides)~~ is at latitude 57/19/09.~~5~~4N, longitude 134/56/35.9W (Charts 17337 and 17320)." 1289+2

5. "An uncharted shoal covered by ~~9.7~~ 10.0 fathoms ~~(MLLW based on predicted tides)~~ is at latitude 57/19/11.7N, longitude 134/56/44.~~0~~1W (Charts 17337 and 17320)." 1295+2

6. "An uncharted ~~shoal~~ rock covered by 3.~~1~~9 fathoms ~~(MLLW based on predicted tides)~~ is at latitude 57/20/14.3N, longitude 134/53/53.6W (Charts 17337 and 17320)." 9018

Position Number

* 7. "An uncharted rock baring 4 feet (MLLW based on predicted tides) is at latitude 57/18/40N, longitude 134/55/59W (Charts 17337 and 17320)." — (sheet "B")

* 8. "An uncharted rock baring 3 feet (MLLW based on predicted tides) is at latitude 57/18/44N, longitude 134/55/51W (Charts 17337 and 17320)." — (sheet "B")

* 9. "An uncharted rock baring 2 feet (MLLW based on predicted tides) is at latitude 57/18/47N, longitude 134/55/52W (Charts 17337 and 17320)." — (sheet "B")

10. "Within the charted 10-fathom curve extending south from Portage Point in Kelp Bay in the vicinity of latitude 57/19/30N, longitude 134/54/45W, numerous rocks and shoals exist. Shoal depths range from 0.7 fathoms to 4.1[7] fathoms thoughout the area ~~(MLLW based on predicted tides)~~. Extreme caution should be exercised when transiting this area (Charts 17337 and 17320)."

11. "An uncharted rock ~~baring 3 feet~~ awash ~~(MLLW based on predicted tides)~~ is at latitude 57/19/36.[6]N, longitude 134/55/05.[3]W (Charts 17337 and 17320)." ✓ 9019

* 12. "An uncharted rock covered 2.6 fathoms (MLLW based on predicted tides) is at latitude 57/16/31.3N, longitude 134/51/55.8W (Charts 17337 and 17320)." 9047

* 13. "An uncharted rock covered 0.1 fathoms (MLLW based on predicted tides) is at latitude 57/17/52.2N, longitude 134/50/08.3W (Charts 17337 and 17320)." 9025

* 14. "An uncharted rock covered 0.8 fathoms (MLLW based on predicted tides) is at latitude 57/17/53.3N, longitude 134/50/14.4W (Charts 17337 and 17320)." 9026

Sincerely,

John W. Carpenter
Captain, NOAA
Commanding Officer

cc: N/CG222 - Chart Information Section
N/MOP21 - Nautical Chart Branch

* outside limits of sheet

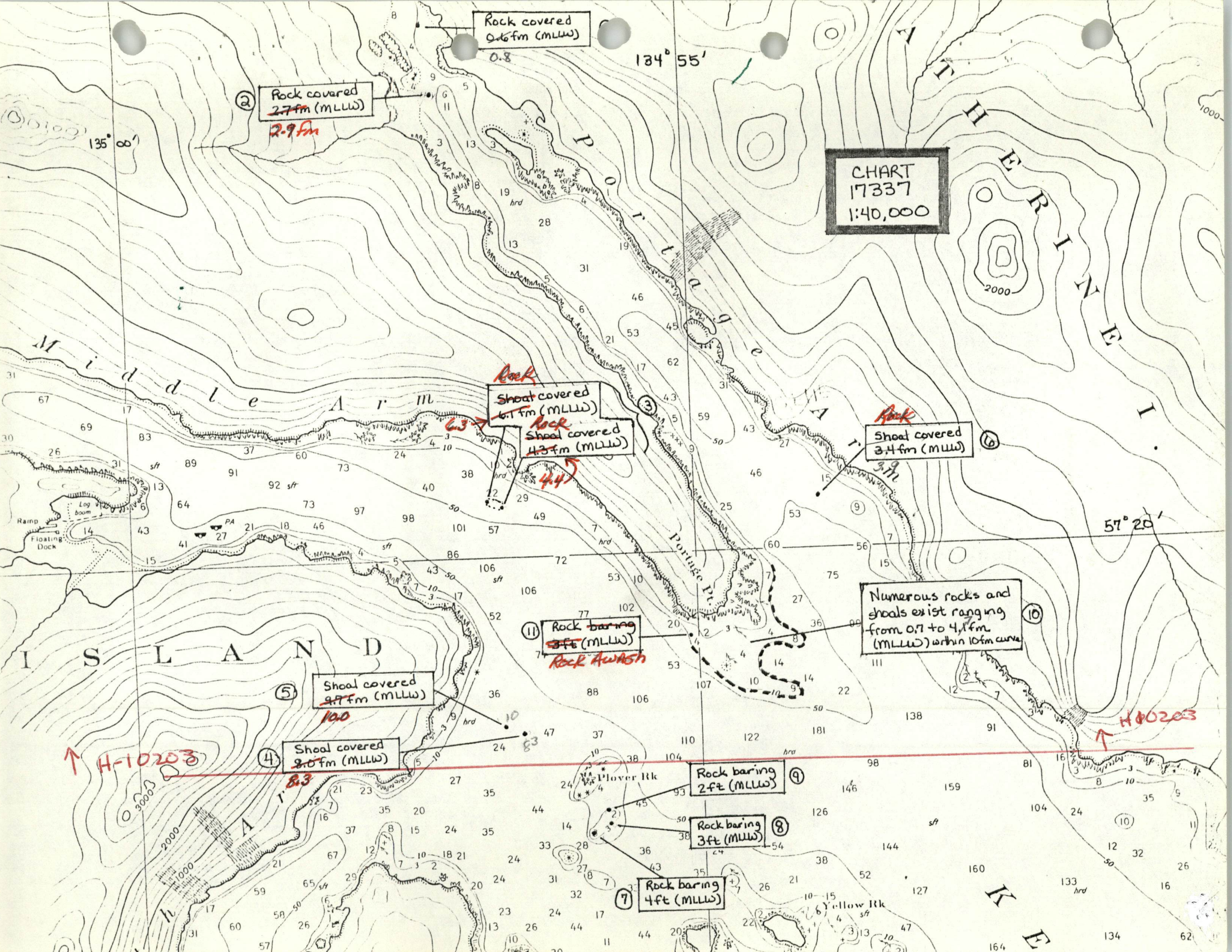
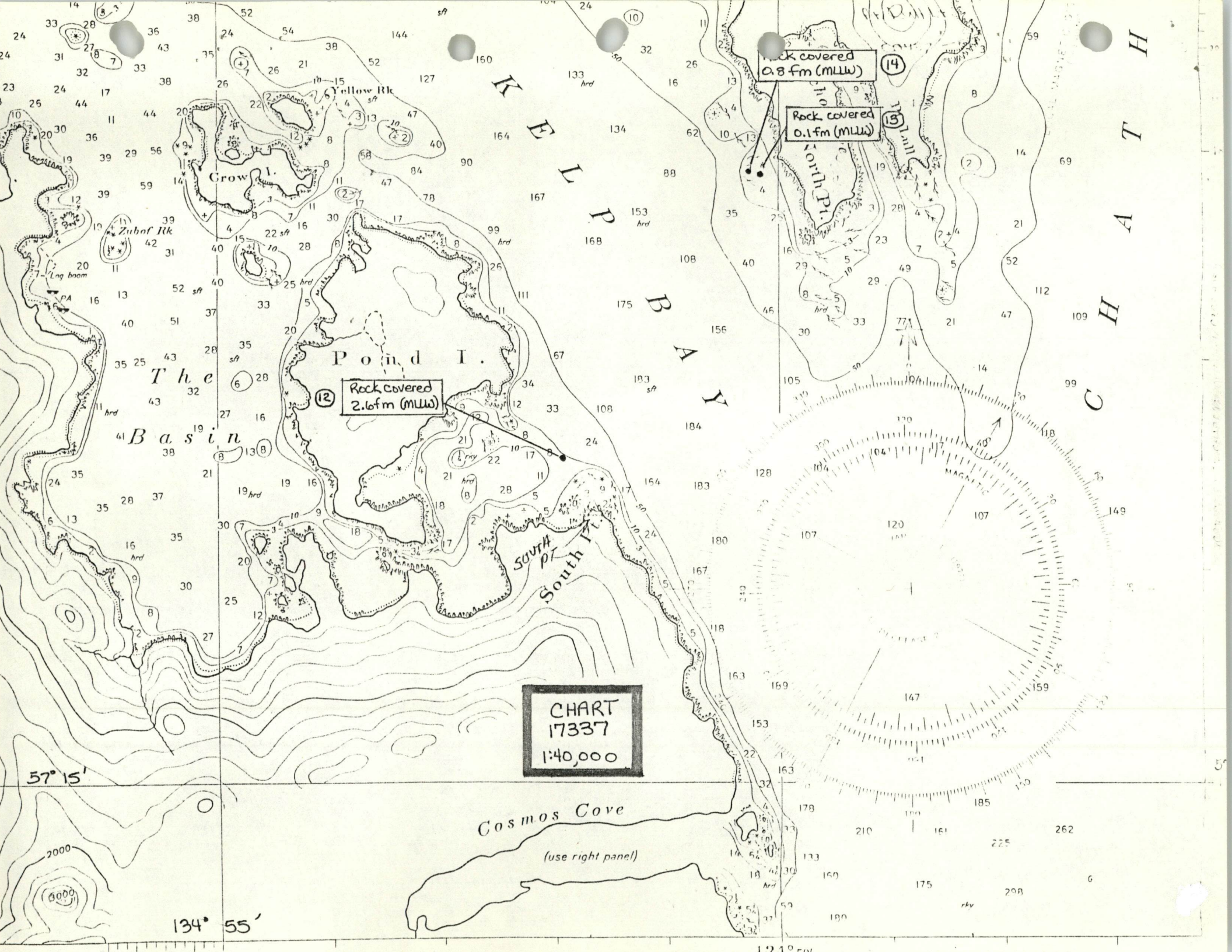


CHART
17337
1:40,000
CATHERINE I.
Portage Arm
Middle Arm
ISLAND
Portage Pt.
Plover Rk
Yellow Rk
Log boom
Ramp
Floating Dock
134° 55'
135° 00'
57° 20'
2000
1000
3000
(2) Rock covered 2.7fm (MLLW) 2.9fm
Rock covered 0.6fm (MLLW) 0.8
(3) Rock Shoal covered 6.1 fm (MLLW) 6.3
Rock Shoal covered 4.3fm (MLLW) 4.4
(6) Rock Shoal covered 3.4fm (MLLW) 3.9
(10) Numerous rocks and shoals exist ranging from 0.7 to 4.1fm (MLLW) within 10fm curve
(11) Rock baring 3ft (MLLW) Rock Awash
(5) Shoal covered 9.7fm (MLLW) 10.0
(4) Shoal covered 8.0fm (MLLW) 8.3
(9) Rock baring 2ft (MLLW)
(8) Rock baring 3ft (MLLW)
(7) Rock baring 4ft (MLLW)
H-10203
H10203


KELP BAY
CHATH
Grow I.
Yellow Rk
Zuhof Rk
Log boom
Pond I.
The Basin
Rock covered
2.6fm (MLLW)
Rock covered
0.8 fm (MLLW)
Rock covered
0.1fm (MLLW)
North Pt.
South Pt.
South Pt.
CHART
17337
1:40,000
57° 15'
134° 55'
Cosmos Cove
(use right panel)
MAGNETIC

HHHHSSC
SS DE OA
ISN-OA/64
RIXT
P 191749Z NOV 85
FM NOAAS FAIRWEATHER
TO CCGDSEVENTEEN JUNEAU AK
INFO NOAAMOP SEATTLE WA
DMAHTC WASHINGTON DC//NVS//
ACCT CM-VCAA
BT
UNCLAS
DANGERS TO NAVIGATION

1. THE FOLLOWING DANGERS WERE NOTED BY THE NOAA SHIP FAIRWEATHER DURING SURVEY OPERATIONS IN THE VICINITY OF CATHERINE ISLAND, CHATHAM STRAIT, ALASKA (SURVEY H-10202) AND PORTAGE AND MIDDLE ARMS, KELP BAY, ALASKA (SURVEY H-10203). ALL ITEMS PERTAIN TO CHARTS 17337 AND 17320. DEPTHS ARE REFERENCED TO MLLW BASED ON PREDICTED TIDES.

A. AN UNCHARTED ROCK COVERED BY 0.3 FM IS AT LATITUDE 57/22/31.9N, LONGITUDE 134/57/18.3W.

B. AN UNCHARTED ROCK COVERED BY 2.7 FM IS AT LATITUDE 57/22/11.8N, LONGITUDE 134/57/13.7W.

C. AN UNCHARTED SHOAL HAS BEEN LOCATED EXTENDING FROM LATITUDE 57/20/14.4N, LONGITUDE 134/56/42.9W, (DEPTH OF 4.3 FM) TO LATITUDE 57/20/15.8N, LONGITUDE 134/56/51.2W, (DEPTH OF 6.1 FM). Rocks at positions of depths.

D. AN UNCHARTED SHOAL COVERED BY 8.0 FM IS AT LATITUDE 57/19/09.4N, LONGITUDE 134/56/35.9W.

E. AN UNCHARTED SHOAL COVERED BY ~~9.7~~ 10.0 FM IS AT LATITUDE 57/19/11.7N, LONGITUDE 134/56/44.0W.

F. AN UNCHARTED ~~SHOAL~~ ROCK COVERED BY 3.4 FM IS AT LATITUDE 57/20/14.3N, LONGITUDE 134/53/53.6W.

ACTION.....REPLY BY:(LTR/MSG).....ADD'L FOLLOW-UP.....

CC: MOP/X2/1/2/.../.../.../...IN DATE..11/19/85..MSG RELEASE

G AN UNCHARTED ROCK BARING 4 FT IS AT LATITUDE 57/18/40N, * LONGITUDE 134/55/59W.

H. AN UNCHARTED ROCK BARING 3 FT IS AT LATITUDE 57/18/44N, * LONGITUDE 134/55/51W.

I. AN UNCHARTED ROCK BARING 2 FT IS AT LATITUDE 57/18/47N, * LONGITUDE 134/55/52W.

J. WITHIN THE CHARTED 10-FM CURVE EXTENDING SOUTH FROM PORTAGE POINT IN KELP BAY IN THE VICINITY OF LATITUDE, 57/19/30N, LONGITUDE 134/54/45W, NUMEROUS ROCKS AND EXIST. SHOAL DEPTHS RANGE FROM 0.7 FMS THROUGHOUT THE AREA. EXTREME CAUTION SHOULD BE EXERCISED WHEN TRANSITING THIS AREA.

SEE CORRECTION NEXT PAGE

K. AN UNCHARTED ROCK ~~BARING 3 FT~~ ALWSN IS AT LATITUDE 57/19/36.7N * LONGITUDE 134/55/05.2W.

L. AN UNCHARTED ROCK COVERED 2.6 FM IS AT LATITUDE * 57/16/31.3N, LONGTITUDE 134/51/55.8W.

M. AN UNCHARTED ROCK COVERED 0.1 FM IS AT LATITUDE * 57/17/52.2N, LONGITUDE 134/50/08.3W.

N. AN UNCHARTED ROCK COVERED 0.8 FM IS AT LATITUDE * 57/17/53.3N, LONGITUDE 134/50/14.4W.

2. CONFIRMATION LETTER CONTAINING SAME INFORMATION WILL BE SENT.
BT
TOD-11:19:18:15

* outside survey limits.

HHHHSSC
SS DE OA
ISN-OA/67
RIXT
P 261548Z NOV 85
FM NOAAS FAIRWEATHER
TO CCGDSEVENTEEN JUNEAU AK
INFO NOAAMOP SEATTLE WA
DMAHTC WASHINGTON DC//NVS//
ACCT CM-VCAA
BT
UNCLAS
CORRECTION TO DANGER TO NAVIGATION
A. MY 191749Z NOV 85
1. PARA 1. J. OF REF A HAS AN ERROR. THE CORRECT DANGER TO NAVIGATION ITEM IN ITS ENTIRETY IS LISTED BELOW
2. PARA 1. J. SHOULD READ AS FOLLOWS:
   WITHIN THE CHARTED 10-FM CURVE EXTENDING SOUTH FROM PORTAGE POINT IN KELP BAY IN THE VICINITY OF LATITUDE 57/19/30N, LONGITUDE 134/54/45W, NUMEROUS ROCKS AND SHOALS EXIST. SHOAL DEPTHS RANGE FROM 0.7 FMS TO 4.7 FMS THROUGHOUT THE AREA. EXTREME CAUTION SHOULD BE EXERCISED WHEN TRANSITING THIS AREA.
BT
TOD-11:26:15:58 RA
NNNN

Approval Sheet

The final field sheets and the accompanying records have been reviewed for accuracy, completeness, compliance with project instructions, and adherence to required standards and procedures. The Commanding Officer monitored field work and inspected selected portions of the data on a daily basis. This survey is complete and requires no additional field work. The data is forwarded for final review and processing.

Submitted by:

Lillian J. Cone
Ensign, NOAA

Reviewed by:

Maureen R. Kenny
Lieutenant, NOAA
Field Operations Officer

Approved by:

John W. Carpenter
Captain, NOAA
Commanding Officer

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

DATE: March 5, 1986

Marine Center: Pacific

OPR: 0183

Hydrographic Sheet: H-10203

Locality: Portage and Middle Arms, Kelp Bay, AK

Time Period: October 10 - November 9, 1985

Tide Station Used: 945 1796 Portage Bay, AK

Plane of Reference (Mean Lower Low Water): -1.18 ft.

Height of Mean High Water Above Plane of Reference: 12.9 ft.

Remarks: Recommended Zoning:

Zone Direct

for Bruce K. Gunn

Chief, Tidal Datum Quality Assurance Section

NOAA FORM 76-155
(11-72)

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

SURVEY NUMBER

H-10203

GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO. 17337	B ON PREVIOUS SURVEY NO. 2240	C ON U.S. QUADRANGLE MAPS	D Manuscript # TP-01667	E U.S. QUAD Sitka B-4	F U.S. QUAD Sitka B-3	G RAND MCNALLY ATLAS	H	K U.S. LIGHT LIST	
Kelp Bay FA-10-6-85										
Baranof Island	X			X	X					1
Catherine Island	X			X		X				2
Kelp Bay	X	X		X		X				3
Middle Arm	X	X		X	X	X				4
Plover Rock	X	X		X		X				5
Portage Arm	X	X		X	X	X				6
Portage Point	X	X		X		X				7
										8
Alaska (title)										9
										10
										11
										12
										13
										14
										15
										16
										17
				Approved:						18
				Charles E. Harrington						19
				Chief Geographer - N/CG2x5						20
				OCT 27 1987						21
										22
										23
										24
										25

☆ U.S. G.P.O. 1972-769-565/516 REG.#6

NOAA FORM 77-27(H)
(9-83)

U.S. DEPARTMENT OF COMMERCE

HYDROGRAPHIC SURVEY STATISTICS

REGISTRY NUMBER: H-10203

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	SMOOTH OVERLAYS: POS., ARC, EXCESS	6
DESCRIPTIVE REPORT	1	FIELD SHEETS AND OTHER OVERLAYS	3

DESCRIPTION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS	
ACCORDION FILES	2					
ENVELOPES						
VOLUMES	3					
CAHIERS						
BOXES						

SHORELINE DATA

SHORELINE MAPS (List):

PHOTOBATHYMETRIC MAPS (List):

NOTES TO THE HYDROGRAPHER (List):

SPECIAL REPORTS (List):

NAUTICAL CHARTS (List):

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS		
	VERIFICATION	*EVALUATION*	*TOTALS*
POSITIONS ON SHEET			2457
POSITIONS REVISED			
SOUNDINGS REVISED			37
CONTROL STATIONS REVISED			
	TIME-HOURS		
	VERIFICATION	*EVALUATION*	*TOTALS*
PRE-PROCESSING EXAMINATION			
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	44.5		44.5
VERIFICATION OF SOUNDINGS	98.0		98.0
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	127.5		127.5
COMPARISON WITH PRIOR SURVEYS AND CHARTS		23.0	23.0
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		23.0	23.0
GEOGRAPHIC NAMES			
OTHER* Digitizing	18.0		18.0
*USE OTHER SIDE OF FORM FOR REMARKS — TOTALS	288.0	46.0	334.0

Pre-processing Examination by J. Wilder	*Beginning Date*	*Ending Date* 3/12/86
Verification of Field Data by P. Niland, S. Otsubo	*Time (Hours)* 127.5	*Ending Date* 8/22/86
Verification Check by A. Luceno, S. Otsubo, B. Olmstead, D. Hill	*Time (Hours)* 50.0	*Ending Date* 8/26/86
Evaluation and Analysis by A. Luceno	*Time (Hours)* 46.0	*Ending Date* 8/26/86
Inspection by D. Hill	*Time (Hours)* 2	*Ending Date* 9/12/86

☆ U.S. GOVT. PRINTING OFFICE 1983: 764-006/6061

PACIFIC MARINE CENTER
EVALUATION REPORT
H-10203

1. INTRODUCTION

H-10203 was accomplished by the NOAA ship FAIRWEATHER in accordance with the following project instructions:

OPR-0183-FA-85, dated August 29, 1985
Change Number 1, dated September 11, 1985

This is a basic hydrographic survey of the Portage Arm and Middle Arm areas within, Kelp Bay, Alaska. Portage Arm and Middle Arm are two of three divisions of Kelp Bay at its extension to the north. Between the entrances to the two arms, a foul area with numerous submerged rocks stretches about .6 mile SE from Portage Point.

Middle Arm extends in a west direction where an anchorage in 22 to 24 fathoms, with sandy bottom is available about a mile from its head. Midway at the entrance, Plover Rock lies between Portage Point and the shore of Baranof Island. A shoal area with a least depth of 8.3 fathoms in surrounding depths of 21 to 40 fathoms is located about .4 mile NW of Plover Rock. About 1.1 NW of Portage Point and .2 mile offshore from the northern shore of Middle Arm, lies a submerged rock with a least depth of 4.4 fathoms. Other detached rocks are also located close to the shore. Depths decrease from 120 fathoms at the entrance to zero at its head.

Portage Arm extends in a northwest direction where temporary anchorage for small vessels is available in 10 fathoms, with sandy bottom about 2.7 miles above the entrance. This anchorage has a limited swinging room and is exposed to the SE winds. Submerged rocks are located between the mid channel and the northern shore of the arm, the most significant rock with a least depth of 3.9 fathoms in general depths of 13 to 40 fathoms being located about .7 mile NW of Portage Point. Other isolated rocks are located from .1 to .2 mile from the shore.

Predicted tides for Juneau, Alaska gage was used during field processing. Tide correctors used for the reduction of final soundings reflect approved hourly heights zoned from Portage Bay, Alaska.

The field sheet parameters have been revised to center the hydrography on the smooth sheet and to change the projection to polyconic. The revised data is listed in the smooth position/sounding printout.

Line weights for some of the drafted portions of the smooth sheet including high water line, ledges and reefs exceeds accepted standards. The polyester drafting media for this smooth sheet apparently has been coated with a non-uniform matte finish which responds inconsistently to the application of drafting inks. In no way has this deviation from specification compromised the quality of the data conveyed via the smooth sheet.

Soundings appear more toward grey than black
Not as dark as desireable

A digital file for this survey has been generated and includes categories of information required to comply with N/CG2 Hydrographic Survey Guideline No. 23, Completion of Digital Hydrographic Surveys, September 7, 1983. Certain descriptive information, however, may not be included in the digital record due to the restrictions of the presently available cartographic codes. The user should refer to the smooth sheet for complete information. No way to cross reference

2. CONTROL AND SHORELINE

Hydrographic control and hydrographic positioning are adequately discussed in sections F and G of the hydrographer's report and in the Horizontal and Electronic Control Reports for OPR-0183-FA-85.

Horizontal control station positions used during hydrography are either published or field positions based on North American datum of 1927.

The applicable shoreline manuscript is TP-01167. This is a registered Class III map. See Descriptive Report Section H.

3. HYDROGRAPHY

Soundings at line crossings are in good agreement. Hydrography within the limits of the sheet is adequate to:

a. Delineate the bottom configuration, determine least depths and to draw the standard depth curves.

b. Reveal that there are no significant discrepancies or anomalies requiring further investigation.

c. Show that the survey had been properly controlled and soundings are plotted correctly.

4. CONDITION OF SURVEY

The hydrographic records and reports are adequate and conform to the requirements of the Hydrographic Manual, 4th Edition, revised through Change three, except as noted in the Preprocessing Examination Report, dated March 18, 1986.

5. JUNCTIONS

There is no survey that junctions with H-10203. However, a comparison with charted depths reveals good agreement with the present survey.

6. COMPARISON WITH PRIOR SURVEYS

H-2240(1895) 1:20,000

Soundings in the western portion of Middle Arm are presently 1 to 2 fathoms deeper. Elsewhere, soundings generally are in good agreement.

Comparison was accomplished by identifying the charted soundings originating from H-2240. H-2240 was consistently shifted based on the relative positions of the identified soundings on the sheets. A 200 to 250 meters sudden easterly displacement of soundings and features west of 135°01' in Middle Arms and a gradual southeasterly displacement of 50 to 250 meters north of 57°21' in Portage Bay were noted on the H-2240 smooth sheet.

H-10203 is adequate to supersede the prior survey, within its common area.

7. COMPARISON WITH CHART

Chart 17337, 7th Edition, dated February 26, 1977: scale 1:40,000

a. Hydrography - Most charted information originates with the prior survey discussed in Section 6 of this report. For more detail see section L of the hydrographer's report.

AWOIS 50979, floating dock, log boom, originating from CL276/77--COE is adequately discussed in section L of the hydrographer's report.

Geographic names appearing on the smooth sheet originate with and are plotted in accordance with this chart.

H-10203 is adequate to supersede charted hydrography within the common area.

The following Dangers to Navigation Reports (copies appended) have been submitted.

Originator	Date	Coast Guard District
NOAA ship FAIRWEATHER	Nov. 19, 1985	Seventeen (Juneau, Alaska)

No additional dangers were identified during office processing.

b. Controlling Depths - There are no controlling depths within the limits of this survey.

c. Aids to Navigation - There are no fixed or floating aids within the limits of this survey.

8. COMPLIANCE WITH INSTRUCTIONS

H-10203 adequately complies with the project instructions noted in Section 1 of this report.

9. ADDITIONAL FIELD WORK

This is a good basic survey. No additional field work is recommended.

Respectfully submitted,

Arsenio Luceno
Cartographer

This survey has been examined and it meets Charting and Geodetic Services standards and requirements for use in nautical charting. The survey is recommended for approval.

Dennis Hill
Chief, Hydrographic Section

ATTACHMENT TO DESCRIPTIVE REPORT FOR H-10203

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.

Dennis Hill 9-12-86
FOR Chief, Nautical Chart Branch (Date)

CLEARANCE: SIGNATURE AND DATE:

N/MOP2:LWMordock Larry W. Mordock 9/12/86

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 L. Faught 9-12-86
Director, Pacific Marine Center (Date)

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF CHARTING AND GEODETIC SERVICES
ROCKVILLE, MARYLAND 20852

N/CG242:LQ

October 29, 1987

TO: N/CG24 - Russell C. Arnold RCA

FROM: N/CG242 - George K. Myers, Jr. George K. Myers, Jr.

SUBJECT: Examination of Hydrographic Survey H-10203 (1985), Alaska, Kelp Bay, Portage and Middle Arms

Chief of Party ..... J. W. Carpenter
Field Unit ..... NOAA Ship FAIRWEATHER
Processed by ..... Pacific Marine Center
Examined by ..... L. Quinlan

An examination of hydrographic survey H-10203 (1985) was accomplished to monitor the survey for adequacy with respect to data acquisition, conformance with applicable project instructions, delineation of the bottom, determination of least depths, navigational hazards, sounding line crossings, smooth plotting, shoreline transfer, digital data standards, decisions made and actions taken by the evaluator, and the cartographic presentation of data.

Cartographic deficiencies and constructive comments are noted on a ½-scale copy of the survey smooth sheet which will be forwarded to the marine center. A digital plot from the magnetic tape was not available during the examination of this survey. Therefore, an inspection of a plot from the certified tape was not performed.

In general, the survey was found to conform to National Ocean Service standards and requirements except as stated in the Evaluation Report and as follows:

1. Two submerged rocks with acquired least depths of 2.9 fathoms and 3.3 fathoms at latitude 57°22'12"N, longitude 134°57'14"W (Position No. 9017) and latitude 57°19'21"N, longitude 134°52'33"W (Position No. 9020), respectively, were not identified as rocks ("Rk" appended to sounding) on the smooth sheet. The correct cartographic code (262) for these features is noted in the final sounding listing.

2. Three islets located at latitude 57°18'57"N, longitude 134°56'01"W; latitude 57°22'14"N, longitude 134°57'31"W; and latitude 57°20'08"N, longitude 134°53'14"W from registered shoreline map TP-01167 (1981) were verified as

shown in black ink on the field sheet. However, these features are omitted or mistakenly annotated in slanted lettering on the smooth sheet. Two of the islets are collocated with control stations, NARD and PLOVER, seaward of the shoreline.

3. A minor oversight concerning smooth plotting of two bottom characteristics from descriptions in the sounding volumes is noted.

The color of the bottom characteristic "mud" in latitude 57°20'50"N, longitude 135°01'08"W (Position No. 5362) should be "gy," instead of "gn." "St" in latitude 57°20'12"N, longitude 134°58'58"W (Position No. 5373) is omitted on the smooth sheet. Locations of both bottom characteristics fall in about 50 fathoms of water.

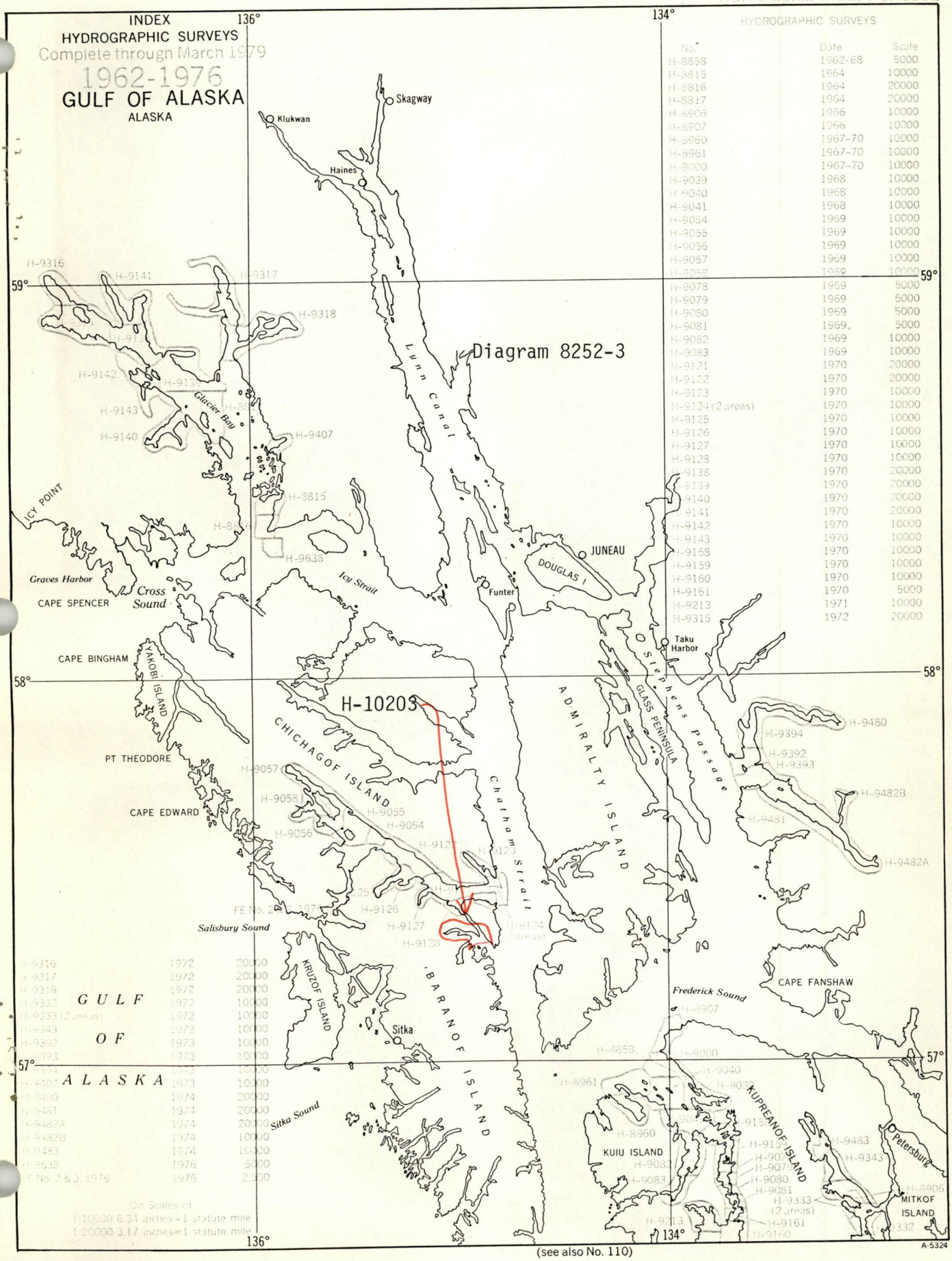
4. Occasionally, low water line dots from TP-01163 were omitted from the smooth sheet where the absence of a hydrographically determined 0-fathom depth curve necessitated the use of the dots on the hydrographic survey.

5. During processing, some soundings were placed in excess unnecessarily. In one instance, the delineation of the 10-fathom depth curve in the vicinity of latitude 57°19'12"N, longitude 134°52'12"W is slightly affected.

6. All the stations plotted on the smooth sheet with triangulation symbols are not identified by the year of establishment. Although formal documentation of acceptance of these stations by NGS is not as yet available to the examiner, it is assumed that specifications for triangulation stations have been complied with and that the necessary records and computations will be forwarded and the stations accepted by NGS.

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

Hydrographic Index No. 111E



HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-8658	1962-68	5000
H-8815	1964	10000
H-8816	1964	20000
H-8817	1964	20000
H-8906	1966	10000
H-8907	1966	10000
H-8960	1967-70	10000
H-8961	1967-70	10000
H-9000	1967-70	10000
H-9039	1968	10000
H-9040	1968	10000
H-9041	1968	10000
H-9054	1969	10000
H-9055	1969	10000
H-9056	1969	10000
H-9057	1969	10000
H-9058	1969	10000
H-9078	1969	5000
H-9079	1969	5000
H-9080	1969	5000
H-9081	1969,	5000
H-9082	1969	10000
H-9083	1969	10000
H-9121	1970	20000
H-9122	1970	20000
H-9123	1970	10000
H-9124 (2 areas)	1970	10000
H-9125	1970	10000
H-9126	1970	10000
H-9127	1970	10000
H-9128	1970	10000
H-9138	1970	20000
H-9139	1970	20000
H-9140	1970	20000
H-9141	1970	20000
H-9142	1970	10000
H-9143	1970	10000
H-9158	1970	10000
H-9159	1970	10000
H-9160	1970	10000
H-9161	1970	5000
H-9213	1971	10000
H-9315	1972	20000
H-9316	1972	20000
H-9317	1972	20000
H-9318	1972	20000
H-9332	1972	10000
H-9333 (2 areas)	1972	10000
H-9343	1972	10000
H-9392	1973	10000
H-9393	1973	10000
H-9394	1973	10000
H-9407	1973	10000
H-9480	1974	20000
H-9481	1974	20000
H-9482A	1974	20000
H-9482B	1974	10000
H-9483	1974	10000
H-9638	1976	5000
F No. 2 & 3, 1976	1976	2500

(see also No. 110)

NOAA FORM 75-96
(10-83)

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

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10203

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
17337	11-1-88	Russell P Kennedy	Full ~~Part~~ ~~Before~~ ~~After~~ AFTER Marine Center Approval Signed Via
			Drawing No. 9
17320	2-22-91	K.R. Forster	Full ~~Part~~ ~~Before~~ ~~After~~ AFTER Marine Center Approval Signed Via
			Drawing No. 24 thru 17337
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
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			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.

SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED.

apod to Std 11-19-86