10268

10268

Diagram No. 8202-3

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-10-1-88

Registery No. H-10268

LOCALITY

State .... Alaska

General Locality .... Icy Strait

Sublocality .... Icy Passage

....

1988

CHIEF OF PARTY
CAPT G.R. Schaefer

LIBRARY & ARCHIVES

DATE .... March 13, 1989

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

17302
17316
17300

Int 810
300

531

NOAA FORM 77-28 (11-72)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO.

H-10268

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-10-1-88

State ALASKA

General locality ICY STRAIT

Locality ICY PASSAGE

Scale 1:10,000 Date of survey April 26,1988-May 16, 1988

Instructions dated March 8, 1988 Project No. OPR-0186-FA-88

Vessel FAIRWEATHER, 2020, 2023, 2024, 2025, 2026, 2028, 2029

Chief of party Captain G.R. Schaefer

Surveyed by LCDR Mason, LT Ruiz, ENS Bernard, ENS Neander, ENS Niichel, CST Krick ENS Nodine, ENS Lemon, ENS Birk

Soundings taken by echo sounder, ~~hand lead, pole~~ DSF 6000 N

~~G~~raphic record scaled by FAIRWEATHER Personnel

Graphic record checked by FAIRWEATHER Personnel

Verification ~~Protracted~~ by R.N. Mihailov Automated plot by PMC Xynetics Plotter

Evaluation ~~Inspection~~ by C.R. Davies

Soundings in fathoms ~~feet~~ at ~~MLW~~ MLLW and tenths of fathoms

REMARKS: All times are UTC. Marginal notes in black generated during office processing. All separates are filed with the hydrographic data, as a result page numbering may be interrupted or nonsequential.

AWOIS/SURF MSM 3/29/89

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

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

MONTHLY PROGRESS SKETCH

OPR-0186-FA-88

ICY STRAIT, ALASKA

NOAA SHIP FAIRWEATHER S-220

CAPT. GLEN R. SCHAEFER, CMDG

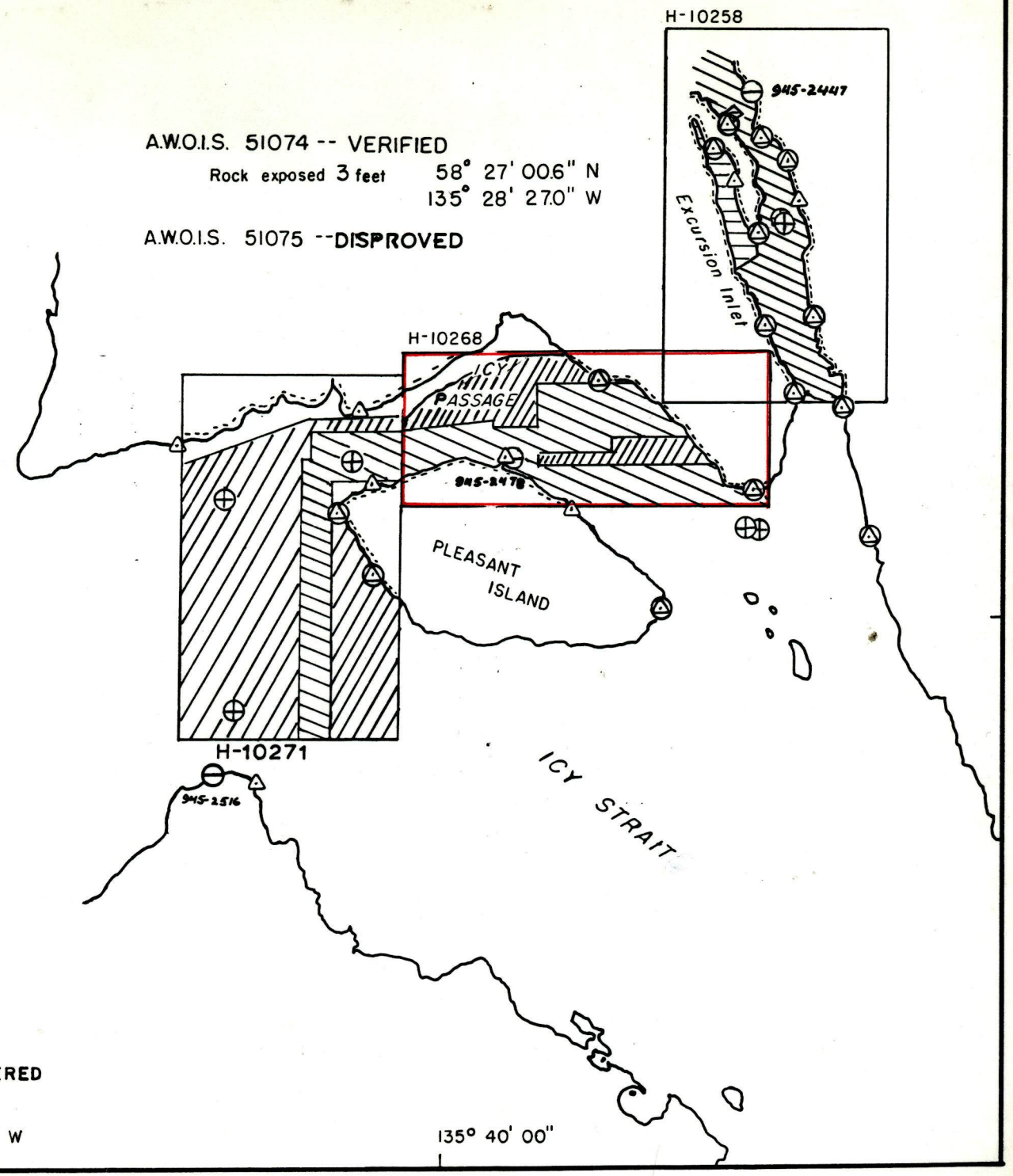
SCALE FROM NOS CHART 17300

APRIL TO MAY 1988

A.W.O.I.S. 51074 -- VERIFIED

Rock exposed 3 feet 58° 27' 00.6" N 135° 28' 27.0" W

A.W.O.I.S. 51075 --DISPROVED



	APRIL	MAY
SQ NM SOUNDING LINE	15	24
LNM SOUNDING LINE	314	373
BOTTOM SAMPLES	38	272
HYDRO CONTROL STATIONS	20	—
SV/D NANSEN CAST	4	3
TIDE GAUGE INSTALLATION	3	—
HYDROGRAPHY		

1987

⊕ SV/D NANSEN CAST

⊖ TIDE GUAGE

S/L VERIFICATION

△ STA. ESTABLISHED

◬ STA. RECOVERED

◎ PHOTO STA. RECOVERED

Descriptive Report
to Accompany Hydrographic Survey H-10268
Field No. FA-10-1-88, Scale 1:10,000
NOAA Ship FAIRWEATHER S-220
Captain Glen R. Schaefer, Commanding
1988

A. PROJECT ✓

Hydrographic survey H-10268 was conducted in accordance with Project Instructions OPR-0186-FA-88 dated March 8, 1988; Change No. 1 dated March 11, 1988; Change No. 2 dated April 22, 1988; Change No. 3 dated May 3, 1988, the PMC OPORDER, the Hydrographic Manual (fourth edition) through Change No. 3; and the Hydrographic Survey Guidelines.

This is a basic survey for the purpose of providing contemporary hydrographic data for the existing charts, and for the planned larger scale charts to be published in the future.

This survey is designated as sheet "I" in the project instructions.

B. AREA SURVEYED ✓

This survey covers all of Icy Passage, Icy Strait, Alaska, between longitudes 135°41'36"W and 135°29'15"W north of latitude 58°22'00"N.

The field work for this survey began April 26, 1988 (DN 117) and ended May 16, 1988 (DN 137).

C. SOUNDING VESSELS ✓

Hydrographic data for this survey were aquired using four vessel types. Jensen survey launches FA-3, FA-4, FA-5, and FA-6 were designated vessel numbers 2023, 2024, 2025, and 2026, respectively. Shoreline verification was completed using two 17-foot MonArks, (FA-8) and (FA-9) , which were designated as vessel numbers 2028 and 2029, respectively. NOAA Ship FAIRWEATHER (vessel number 2020) was used for all sound velocity casts.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

Four of FAIRWEATHER's survey launches, equipped with dual-beam Raytheon DSF-6000N echo sounders, were used to obtain soundings for this survey. See Table I for a list of equipment by vessel and day number.

Table I
Sounding Equipment

RAYTHEON DSF-6000N SERIAL NUMBERS BY VESSEL

Day	2023	2024	2025	2026
117-137	B049N	A113N	A104N	A121N

Echo-sounding equipment was monitored continuously while on line. All hydrographic data were scanned to insert peaks and deeps between soundings and to ensure proper depth digitization.

No mechanical problems that degraded data quality were encountered with the DSF-6000N echo sounders during this investigation. Bar checks at 3 fathoms were done daily to ensure that the Raytheon DSF-6000N echo sounders were operating properly. Sounding corrections determined for this survey apply to both the high- and low-frequency sounding data.

The high-frequency beam data were digitized except in a limited number of cases. The low frequency was used when the high-frequency trace was lost due to the steepness of the bottom or suspended particles in the water column. Also, if side echoes were obtained over peaks and reduced line spacing was not needed, the low-frequency side-echo depth was recorded. This is noted on the raw computer printout with the annotation "low-frequency trace" or "LFT."

Diver's least depths were obtained using a pneumatic depth gauge manufactured by 3-D Instrument, Inc. (s/n 8302079 N). System calibration data can be found in the separate Corrections to Echo Soundings Data package.

All of FAIRWEATHER's survey launches were tested for settlement and squat on April 20, 1988, (DN 111) in Excursion Inlet, Alaska. The test results were used to plot settlement and squat curves for each launch. Measurements were conducted in accordance with Section 4.9.4.2 of the Hydrographic Manual. Settlement and squat corrections were determined to be zero for all launches at speeds run during this survey. Refer to the Corrections to Echo Soundings

Data package for details concerning settlement and squat determinations.

Accurate determinations of launch transducer depths were obtained through physical measurement. An oversized carpenter's square was constructed of angle iron, with foot and tenth markings noted on the rise. Divers held the foot of the carpenter's square flush against the transducer while the rise was plumbed by personnel on the pier using a circular bubble level. The measurement was made in Excursion Inlet, Alaska, on April 20, 1988. A correction of 0.3 fathoms was determined for all launches. All launch soundings on the final field sheet were plotted using this TRA value.

Velocity correctors were determined from five SV/D casts in accordance with section 4.9.5.2 of the Hydrographic Manual. Table II show the dates and locations of the casts. Program VELTAB was used to compute correctors from cast data. In addition graphic extrapolation was necessary to cover the range of hydrography.* See Appendix IV for applicable table numbers and dates of velocity correctors. The final field sheet was plotted using Velocity table 1 (Appendix IV); as plotting of hydrography on days 131 and 132, was completed prior to casts 5,6 and 7. Both tables were used during office processing.

* See Eval. Report, sect. I

Table II
Velocity Casts

Cast No.	Day (DN)	Latitude	Longitude
3	118	58°21.8'N	135°29.1'W
4	118	58°22.9'N	135°43.6'W
5	134	58°21.8'N	135°29.3'W
6	134	58°18.6'N	135°47.5'W
7	134	58°21.1'N	135°47.5'W

Velocity Table 1 was based on casts 3 and 4. Velocity table 2 was based on casts 5, 6, and 7.

SV/D cast numbers 3, 4, 5, 6, and 7 were performed using a Plessy Model 9040 Environmental Profiling System (EPS) (s/n 5653). Correctors for the above casts are based on NRCC April 4, 1988, calibrations.

Surface temperatures were taken during all SV/D casts as a check on the Plessy Systems.

TC/TI tapes were made in accordance with PMC OPORDER, Section 3.5.1. Printouts of TC/TI tapes are included in appendix IV of this report.

Predicted tide correctors were applied to the soundings plotted on the final field sheets for this survey. The tide correctors used were from the Tide Tables 1988, West Coast of North and South America. Tide correctors use Juneau, Alaska, as the reference station using a height correction range ratio of "x0.90" and no time correction. For further information, refer to Appendix II, Field Tide Note.

E. HYDROGRAPHIC SHEETS ✓

The final field sheets were plotted aboard FAIRWEATHER using a Digital Equipment Corporation PDP-8/E computer and a Houston Instruments COMPLOT DP-3 plotter. This survey consists of one final field sheet plotted on mylar. The dimensions, scale, and skew of the sheet are as follows:

SHEET	SCALE	SKEW	DIMENSIONS
FA-10-1-87	1:10,000	000°	21 in. X 54 in.

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

F. **CONTROL STATIONS** ✓

All existing horizontal control stations (Table III, Control Stations) used in this survey were recovered or established by FAIRWEATHER personnel. All geodetic positions are based on the North American Datum of 1983. All stations meet or exceed Third-order, Class I specifications. See the Horizontal Control Reports for OPR-0186-FA-88, Icy Passage, Icy Strait, Alaska, and OPR-0186-FA-88 Project Instructions, for details concerning these stations.

G. **HYDROGRAPHIC POSITION CONTROL** ✓

Hydrographic position control was accomplished using the Motorola Mini-Ranger III system, except as noted ~~under Section C, Sounding Vessels~~ below. The control configuration consisted of range/range for all positioning. Table IV contains a list of console and R/T units for each sounding vessel. The NOAA Ship FAIRWEATHER, vessel number 2020 was not used for hydrographic positioning on survey H-10268. Mini-Ranger base-line calibrations (BLCs) were conducted in accordance with PMC OPORDER, Section 3.3.1.1.

(See next page)

Table IV

Mini-Ranger Equipment by Vessel

Vessel Number	Console/RT Number
2023	703/B1108
2024	506042/E2716
2025	716/C1875
2026	B0323/B1398

Beginning BLC data were aquired during March 1988 on DN's 70 to 74, along a distance of 990.5 meters between two recoverable marks (Naval Reserve Pier to PMC Pier A) across Lake Union in Seattle, Washington. Ending BLCs were performed on DNs 139 and 141 in Juneau, Alaska, along a distance of 1259.9 meters between two recoverable marks (USCG Pier to Taku Union 76 Terminal) across Gastineau Channel. All combinations of codes and consoles were calibrated before commencing and after completing survey H-10268.

Differences between beginning and ending BLCs were 4 meters or less for all codes, except code 8. The ending BLC corrector for code 8 (console 716) differed by more that 4 meters from the beginning BLC correcter, this code for (console 716) should be* adjusted by the marine center during smooth processing in accordance with Section 3.3.1.3, Application of Correctors, of the PMC OPORDER. For all remaining codes the beginning correctors should be used for the final correctors. Final BLC correctors and minimum signal strengths can be found in the Electronic Control Data package submitted for project OPR-0186-FA-88: April to May 1988. Begin. and end. BLC averaged for a 2meter correction ... applied to Dys 117-125.

Hydrographic positioning equipment was critically system checked at least once per every two weeks (one leg). Noncritical system checks were conducted once per day, unless equipment malfunction prohibited it. All hydrographic positioning equipment was found to be accurate within the limits set forth by PMC OPORDER, Section 3.1.1.2. Critical system checks were accomplished using the theodolite cut method or by EDMI. Theodolites onboard the FAIRWEATHER are as follows: Wild T-1 theodolites with serial numbers 13008, 12932; Wild T-2 theodolites with serial numbers 26336, 85652, 257219, 276503; and Lietz TM1A theodolite with serial number 2151. The EDMI used was a Hewlett-Packard HP 3808A with serial number 1723A00172.

In all cases, the launch R/T units were located directly over the transducers, eliminating the need for ANDIST correctors.

Certain shoreline features in the vicinity of station LUNCH were positioned by a range-azimuth method involving a person holding EDMI prisms in a skiff, or walking from point to point; see Section H, Shoreline.

H. SHORELINE

See Final Report, section 2

Shoreline details for this survey are from a 1:10,000-scale mylar enlargement of shoreline maps TP-01309 and TP-01318 (1:20,000-scale, Class III, registered shoreline maps). All verified features from the shoreline map are in black ink on the final field sheet with changes recorded in red ink. New features are displayed in black ink. See the final field sheet and Section L, Comparison with Chart, for the above changes and additions.

Shoreline features to the west of Icy Passage Light 2, were located by a person in a skiff, or on foot holding a set of EDMI prisms for a theodolite angle and distance from a horizontal control station (in effect, a range/azimuth

position). These features are shown on a 1:10,000-scale Final Field sheet.

All items were either verified or disproved with the exception of an Obstruction PA, located approximately 0.8 nm to the north northwest of Icy Passage Light 2. The obstruction was observed to be a large, diesel engine attached to a mounting bracket, however no detached position was taken for this item. See Evac Report, section 4,7,9

The shoreline map indicates a rock located at latitude 58°23'18"N, longitude 135°30'58"W, (NAD 83). This rock was not verified as it lies within a foul area defined by DP's 2360 and 2361 as shown on the final field sheet.
Pos# 2360 and 2361 are shown as rocks on the smooth sheet.

A discrepancy was noted during shoreline verification concerning the junction of shoreline maps TP-01318 and TP-01309 on the northern shoreline. Shoreline photography was apparently flown at different tidal stages resulting in a poor match between the two shoreline maps. Hydrography at the 0-fathom curve has resolved the discrepancy for the purposes of the survey. The true position of the MHW line though is still in question and should be noted at the Nautical Chart Branch. See Evac Report, Section 2

I. CROSSLINES ✓

Crosslines were run at 90 degrees with respect to the main-scheme hydrography and were for 8.1% of the total main-scheme mileage.

In areas with depths less than 20-fathoms, crossline agreement is generally within 0.2-fathoms. In those areas where the difference exceeded 0.2-fathoms, this discrepancy can be attributed to minute irregularities in the submarine topography. There are no systematic problem that would account for differences in these areas.

In areas where depths exceed 20 fathoms, crossline agreement is excellent. Main-scheme lines and crosslines never vary by more than the allowable 3% as given in Section 4.6.1 of the Hydrographic Manual.

In some cases, the vessel used for main-scheme lines did not run the crossline in that area. Agreement between main-scheme lines and crosslines is still good, as stated above.

J. JUNCTIONS ✓

Survey H-10268 junctions to the east with contemporary survey H-10257 (1987), scale 1:10,000. To the west Survey H-10268 junctions with contemporary survey H-10271 (1988),

scale 1:10,000. At the junction the soundings agree within 1 fathom or less. Dive position No. 9000 falls on the eastern limit of H-10268 and overlies the same position in which a shoal was investigated on survey H-10257. The NAD 83 position is latitude 58°22'28"N longitude 135°29'14"W. The two sites show a difference in least depth of 0.1 fms, the shoaler, 2.1 fms, obtained during the spring of 1988. This depth should supersede the least depth from H-10257. Junctions between the surveys is considered good.

A rock awash located southeast of station ICE was positioned and plotted on survey H-10268 although it is not within the sheets limits (Pos. No. 2348). This item was addressed on survey H-10258. It is included here to insure the accuracy and completeness of the junction survey.
This rock was accurately plotted on H-10257 as a ledge and is not shown on this survey.

K. **COMPARISON WITH PRIOR SURVEYS** See Final Report, section 6

Comparison between survey H-10268 and the following prior surveys were made:

1. Survey H-3671 (1914), scale 1:40,000, photographically enlarged to 1:10,000

Comparison with survey H-3671 was difficult; overlaying the 1914 survey by correlating NAD 27 tick marks and then adjusting those tick marks for the NAD 83 adjustment. Some distortion due to enlargment was also encountered.

Considerable shoaling has occured in the main channel on the western portion of the survey with differences up to 5 Fathoms. All depths to the west of Icy Passage Light 2, appear to be shoaler than those from survey H-3671. The northern limit of the channel appears to have maintained its position throughout the aforementioned shoaling indicating that sedimentation/deposition are the chief contributors to the shallower depths. To the east of Icy Passage Light 2 the same trend is observed to a lesser degree. Soundings from survey H-10268 are generally 1 to 3 fathoms shoaler with the exception of one sounding at latitude 58°23'35"N, longitude 135°31'57"W. H-10268 shows an 8-fathoms depth adjacent to a 7 1/4-fathom depth from survey H-3671. Shoreline features have been obscured during the enlargment of H-3671 except for the high water line which appears to be a good match with shoreline from survey H-10268. In general sounding agreement is considered good between the two surveys. Recommended that survey H-10268 supersede prior survey H-3671.

See Final Report, section 6

All non-sounding features indicated on survey H-3671 within the present survey area were located.

The following **AWOIS** item was investigated:

51075 - Lat. 58°22'30"N Long. 135°35'00"W

A 30-foot fishing vessel in PA (note above position), various debris is reported in area and rigging of wreck is exposed at high tide.

FAIRWEATHER personnel conducted three dives and began a 200% bottom coverage survey with side scan sonar. The wreck was not found during the course of our investigation which was concluded when new information was learned. Conversations with residents and fishermen of the nearby town of Gustavus finally led to the conclusion the wreck had been salvaged by a Mr. Dan Folley from Juneau, Alaska, telephone (914) 697-2264. He is quoted as saying that he "salvaged the F/V THE SPIRIT approximately 3 weeks after it sank." This would indicate the wreck was salvaged in December of 1983. Mr. Folley confirmed the AWOIS description of the vessel and gave the approximate position of the salvage operation as latitude 58°21.75'N, longitude 135°34.22"W in 6-fathoms of water. Mr. Folley affirmed that lives had been lost when the boat sank. The vessel is currently moored in the Gustavus Boat Harbor. Personal contact was made through Ensign Stacy Birk whom said Mr. Folley would be willing to send a letter of verification to the Nautical Charting Branch and NOAA. Recommend this AWOIS item be deleted from chart 17302. concur

AWOIS updated M&M 3/29/89

L. COMPARISON WITH THE CHART See Final Report, section 7

Comparison was made between survey H-10268 and a 1:10,000-scale enlargement of Chart 17302 (14th edition, Oct. 3, 1981, scale 1:80,000, NAD 27). All soundings on the chart are from prior survey H-3671. Comparison between soundings from the prior survey and the present survey was done under Section K, Comparison of Prior Surveys, and will not be repeated here.

Nonsounding features along the southeastern shoreline include one previously mentioned shoreline map rock and a group of three additional rocks in a area which have been denoted as foul, approximate position latitude 58°22'36"N longitude 135°36'31"W.

In the vicinity of Icy Passage Light 2 hydrographers visually verified the existance of an islet marked on the chart. Due east of the islet a shallow reef was positioned. See ~~final field~~ smooth sheet.

The position for Icy Passage Light 2 was determined during horizontal control operations and proved the charted position to be in error. The NAD 83 position for the light is latitude 58°23'10.984"N, longitude 135°37'43.239"W.

To the west of Icy Passage Light 2 and to the west of the mud flats adjacent to it is an area with numerous rocks and fouls. Shown on the smooth sheet as rocks and foul limit line at lat. 58°23'08"N, long 135° 39'27"W.

The entire northwestern shoreline of Icy Passage as shown on chart 17302 is depicted as mud flats. During the course of survey operations this area was verified to be just that, extensive mud flats. The enormity of these flats made navigation impractical even at the highest tides. Therefore no information was aquired concerning features on this broad flats nor were any features seen from afar to be dangers to navigations.

In the northernmost apex of the survey area three new features were positioned: a rock at latitude 58°24'~~52~~47"N, longitude 135°35'25"W uncovers ~~11~~10 feet; a rock found at latitude 58°24'37"N, longitude 135°34'5~~7~~5"W, uncovers ~~10~~7 feet; an Obstruction consisting of a large log (apparently anchored to the bottom although not rigidly as the top foot or so was visible at all stages of the tide) at latitude 58°24'36"N, longitude 135°35'07"W. No other logs or log booms were seen in the vicinity.

Changes to shoreline on the northeastern portion of Icy Passage were addressed in section H and will not be repeated here. Note these changes are in red ink on the final field sheet. Charted shoreline matches very closely with what we found with one exception. The beach located at position latitude 58°24'27"N, longitude 135°33'51"W apparently has migrated in a southerly direction, with a prominent point that is visible to the mariner, on radar. Shoreline change appears in dash red on the smooth sheet.

Although the chart depicts kelp along the northeastern shoreline none was observed. This may have been because the survey took place during the early spring. Retain kelp symbols on chart.

A foul area was delineated by three positions, at approximate latitude 58°24'24"N, longitude 135°34'33"W. To the southeast of the above mentioned foul many new rocks were positioned. All are significant features and should be included on future editions of chart 17302. Of significant mention though is a northwesterly trending offshore shoal. Divers determined six least depths and positional fixes defining the extent of the reef and the new rocks. Concur
Offshore shoal located at lat. 58°22'54"N, long. 135° 30'53"W.

A charted submerged cable was not seen or positioned and is therefore not depicted on the final field sheet. FAIRWEATHER hydrographers have no reason to believe the status or position of the cable area has changed. Retain as charted

A list of uncharted dangers to navigation, including descriptions and positions were forwarded to the Commander (OAN), Seventeenth Coast Guard District. A copy of the letter is included in (Appendix X, Dangers to Navigation).

M. ADEQUACY SEE Evaluation Report, sections 4, 6, 7

This survey is complete and adequate to supersede the prior survey in their common areas.

N. AIDS TO NAVIGATION ✓

Icy Passage Light 2, on the northern most point of Pleasant Island, was located by Third-order, Class I methods at latitude 58°23'10.984"N, longitude 135°37'43.239"W, NAD 83. This position differs from the light list position and from the charted position. The aid serves its intended purpose. Concur

O. STATISTICS

Vessel	2020	2024	2025	2026	2028	2029	Total
Positions	-	1185	832	615	-	32	2906
Nautical Miles	-	137.6	81.0	80.4	-	-	327.2
Square Miles	-	-	-	-	-	-	22.8
Bottom Samples	-	-	89	-	-	-	89
Velocity Casts	5	-	-	-	-	-	5
Tide Stations	2	-	-	-	-	-	2
Days of Production (Hydrography Only)	-	-	-	-	-	-	18

Vessel 2028 was only used for shoreline verification thus no statistics have been compiled for it.

P. MISCELLANEOUS

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

No magnetic or current stations were established during this survey. Divers on 8 least depth determinations did encounter currents. None were noted as anomolously strong or dangerous.

Q. RECOMMENDATIONS

See Eval Report, section 9

Additional field work is necessary concerning the true position of the obstr. PA latitude 58°23'54"N, longitude 135°38'30"W as shown on chart 17302. This is not however an item of significant concern as its approximate position is well to the north of the navigatable channel.

R. AUTOMATED DATA PROCESSING

The following programs were used for data acquisition or processing.

Number	Program Name	Version Date
RK 112	Range-Range Real Time Plot	04/23/84
RK 116	Range-Azimuth Real Time Plot	03/01/86
RK 201	Grid, Signal and Lattice Plot	04/18/75
RK 221	Range-Range Non-Real Time Plot	07/25/86
RK 226	Range-Azimuth Non-Real Time Plot	07/25/86
RK 300	Utility Computations	10/21/80
RK 330	Reformat and Data Checker	05/04/76
RA 362	330/602 Combined	08/20/84
AM 500	Predicted Tide Generator	11/10/72

RK 407	Geodetic Inverse/Direct Computation	09/25/78
AM 602	Elinore	12/08/82
VELTAB		02/01/85

S. **REFERRAL TO REPORTS** ✓

The following reports will be submitted separately:

Report	Date
Horizontal Control Report	July 1988
Coast Pilot Report	July 1988
Electronic Control Data Package	July 1988
Corrections to Echo Soundings Data Package	July 1988

Field Tide Note
Point Adolphus, Icy Strait, Alaska
Station Number 945-2516
April to May, 1988

Field tide reduction of sounding data for surveys H-10271 and H-10268 was based on predicted tides from Juneau, Alaska (945-2210), and corrected to the survey area. Tide correctors were interpolated by PDP/8e computer using AM 500.

The calculated correctors shown below were based on zone correctors specified by project instructions.

Survey	Time Correction High Water	Time Correction Low Water	Height Correction Range Ratio
H-10271	0	0	× 0.90
H-10268	0	0	× 0.90

All times of predicted and reported tides are expressed in Coordinated Universal Time. Predicted tides were acceptable for hydrography with no discrepancies in the raw data attributed to tidal errors.

A Bristol Gas-Purged Pressure Recording Tide Gauge, Model 15 (gauge s/n 67A10294, chart drive s/n 512332), range 0 to 30 feet, was installed in support of surveys H-10271 and H-10268. Location and dates of operation are as follows:

Site	Location	Dates of Operation
Point Adolphus, Icy Strait, Alaska	58/17/12N 135/46/12W	April 13 to May 18

Point Adolphus

The tide gauge, staff and orifice were installed at Point Adolphus, Icy Strait, Alaska, on April 13. A three-hour observation on April 13 confirmed consistent gauge-to-staff differences. Data collection continued until May 18, when the gauge, staff, and orifice were removed.

The gauge ran well throughout the project. The zero mark on the tide staff corresponded to 6.1 feet on the gauge.

Levels

The comparison between opening and closing level runs indicates no significant staff movement.

Zoning Recommendations

None

Approval

Submitted by:

Michael Lemon
Ensign, NOAA

Reviewed by:

C. Douglas Mason
Lieutenant Commander, NOAA
Field Operations Officer

Date:

22 JUL 88

Field Tide Note
North Side, Pleasant Island, Icy Strait, Alaska
Station Number 945-2478
April to May, 1988

Field tide reduction of sounding data for surveys H-10271 and H-10268 was based on predicted tides from Juneau, Alaska (945-2210), and corrected to the survey area. Tide correctors were interpolated by PDP/8e computer using AM 500.

The calculated correctors shown below were based on zone correctors specified by project instructions.

Survey	Time Correction High Water	Time Correction Low Water	Height Correction Range Ratio
H-10271	0	0	× 0.90
H-10268	0	0	× 0.90

All times of predicted and reported tides are expressed in Coordinated Universal Time. Predicted tides were acceptable for hydrography with no discrepancies in the raw data attributed to tidal errors.

A Bristol Gas-Purged Pressure Recording Tide Gauge, Model 15 (gauge s/n 64A11033, chart drive s/n 210105), range 0 to 30 feet, was installed in support of surveys H-10271 and H-10268. Location and dates of operation are as follows:

Site	Location	Dates of Operation
North Side, Pleasant Island, Icy Strait, Alaska	58/23/12N 135/37/42W	April 15 to May 18

North Side, Pleasant Island

The tide gauge, staff and orifice were installed at North side, Pleasant Island, Icy Strait, Alaska, on April 15. A three-hour observation on April 15/16 confirmed consistent gauge-to-staff differences. Data collection continued until May 18, when the gauge, staff, and orifice were removed.

The gauge ran well throughout the project. The zero mark on the tide staff corresponded to 5.8 feet on the gauge.

Levels

The comparison between opening and closing level runs indicates no significant staff movement.

Zoning Recommendations

None

Approval

Submitted by:

Michael Lemon
Ensign, NOAA

Reviewed by:

C. Douglas Mason
Lieutenant Commander, NOAA
Field Operations Officer

Date:

22 JULY '88

SIGNAL LISTING
OPR-0186-FA
FA-10-1-88
H-10268

DITCH 2,1988 (Field Position) FAIRWEATHER 58135314
105 0 58 23 54641 135 42 32179 250 0004 000000
HELP 1901 1027 58135312
110 0 58 20 23377 135 32 11011 250 0007 000000
~~ICE 1922~~ 0001 58135244
~~115 0 58 22 30552 135 29 02346 139 0000 000000~~
~~CAMP 1914~~ 0009 58135243
~~120 0 58 21 14164 135 24 44196 139 0002 000000~~
~~KNOB 1923~~ 1032 58135313
~~130 0 58 20 47010 135 42 26049 139 0004 000000~~
~~ANT 1923~~ 1003 58135313
~~135 0 58 22 02097 135 44 01316 139 0005 000000~~
HIGH 1914 1029 58135311
170 0 58 24 26749 135 34 33856 250 0005 000000
CHAKSI, 1988 (Field Position) FAIRWEATHER 58135314
210 0 58 22 00658 135 35 05705 250 0003 000000
ICY PASSAGE LIGHT 2, 1988 (Field Position) FAIRWEATHER 58135314
215 0 58 23 10984 135 37 43239 250 0008 000000
LUNCH, 1988 (Field Position) FAIRWEATHER 56135314
220 0 58 22 38999 135 42 38435 250 0005 000000
~~THIEF~~ FAIRWEATHER 58135314
~~225 0 58 23 32010 135 43 40756 139 0005 000000~~

NOAA FORM 76-40
(8-74)

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

Replaces C&GS Form 567.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- [X] HYDROGRAPHIC PARTY
- [ ] GEODETIC PARTY
- [ ] PHOTO FIELD PARTY
- [ ] COMPILATION ACTIVITY
- [ ] FINAL REVIEWER
- [ ] QUALITY CONTROL & REVIEW GRP.
- [ ] COAST PILOT BRANCH

(See reverse for responsible personnel)

- [ ] TO BE CHARTED
- [X] TO BE REVISED
- [ ] TO BE DELETED

REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE
NOAA Ship FAIRWEATHER	ALASKA	Icy Strait Icy Passage	05-30-88

The following objects HAVE [X] HAVE NOT [ ] been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM
OPR-0186-FA-88		H-10268	NAD 83

CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	POSITION LATITUDE ° ′	LATITUDE ″ D.M. Meters	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. Meters	METHOD AND DATE OF LOCATION (See instructions on reverse side) OFFICE	FIELD	CHARTS AFFECTED
L.L. 24180	Icy Passage Light 2	58/23	10.982	135/37	43.242		F-2-6-L 04-18-88	17302
	Ref L-689 (88)							

55

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	CAPT Glen R. Schaefer	☐ PHOTO FIELD PARTY ☒ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER *(Specify)*
POSITIONS DETERMINED AND/OR VERIFIED	CAPT Glen R. Schaefer	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64)

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field	P - Photogrammetric
L - Located	Vis - Visually
V - Verified	
1 - Triangulation	5 - Field identified
2 - Traverse	6 - Theodolite
3 - Intersection	7 - Planetable
4 - Resection	8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

SUPERSEDES NOAA FORM 76-40 (2-71) WHICH IS OBSOLETE, AND EXISTING STOCK SHOULD BE DESTROYED UPON RECEIPT OF REVISION.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-665-073/1030 Region 6

TOD

NOT | 221014Z JUL 88
[illegible] | 5.4220 MHZ RTTY

RTTUZYUW RUHPTEB0135 2032350-UUUU--RUHSPUU.
ZNR UUUUU
R 212350Z JUL 88
FM NOAAS FAIRWEATHER
TO CCGDSEVENTEEN JUNEAU AK
INFO NOAAMOP SEATTLE WA
DMAHTC WASHINGTON D//NVS//
ACCT CM-VCAA
BT
UNCLAS
SUBJ: DANGERS TO NAVIGATION
1. UNCHARTED DANGERS TO NAVIGATION WERE FOUND DURING SURVEY OPERATIONS (SURVEY H-10268) IN ICY STRAIT, ALASKA.
2. CHART 17302, 14TH ED., OCT3/81, NAD 27: ALASKA, SOUTHEAST COAST, ICY STRAIT AND CROSS SOUND

ADD	ROCK SUBMERGED 2.1 FM	58/22/27 N	135/29/14 W
	ROCK SUBMERGED 1.1 FM	58/22/52 N	135/30/49 W
	ROCK SUBMERGED 0.5 FM	58/23/05 N	135/40/11 W
	ROCK UNCOVERS 4.0 FEET	58/22/56 N	135/41/18 W

3. AS MUCH AS 3 FATHOMS OF SHOALING HAS OCCURRED IN AREAS OF ICY PASSAGE CHARTED DEEPER THAN 10 FATHOMS AND IN AREAS WITHIN 0.25 NM OF THE ZERO-FATHOM DEPTH CURVE.
4. DANGERS REFERENCED TO MEAN LOWER LOW WATER DATUM PREDICTED TIDES AND NAD 83. REPEAT NAD 83, WHICH DIFFERS FROM CHART DATUM.
5. CONFIRMATION LETTER TO BE MAILED NEXT INPORT.
BT
#0135

NNNN

SURVEY. 268

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

NOAA SHIP FAIRWEATHER
1801 Fairview Ave. E.
Seattle, WA 98102-3767

July 21, 1988

Commander (OAN)
Seventh Coast Guard District
P.O. Box 3-5000
Juneau, Alaska 99802-1217

Dear Sir:

Uncharted dangers to navigation were found by NOAA Ship FAIRWEATHER while surveying Icy Passage, Icy Strait, Alaska (survey H-10268). The information below is submitted for inclusion in Local Notice to Mariners (reference radio message R 212350Z 88). The enclosed copy of the chartlet is for your information.

Chart 17302, 14th Ed., Oct 3/81, NAD 27
ALASKA, SOUTHEAST COAST, ICY STRAIT AND CROSS SOUND.

As much as 3 fathoms of shoaling has occurred in areas of Icy Passage charted deeper than 10 fathoms and in areas within 0.25nm of the 0-fathom curve.

Add	Item	Latitude	Longitude
	Rock submerged 2.1 fathoms	58°22'27"N	135°29'14"W
	Rock Submerged 1.1 fathoms	58°22'52"N	135°30'49"W
	Rock submerged 0.5 fathom	58°23'05"N	135°40'11"W
	Rock uncovers 4.0 feet	58°22'56"N	135°41'18"W

Depths in fathoms are from the sounding datum of mean lower low water (MLLW) based on predicted tides. Positions are from the North American Datum of 1983 (NAD 83). Note chart datum and positions listed are on different datums.

Questions concerning this survey may be directed to chief, Nautical Chart Branch, telephone 206 526-6835.

Sincerely,

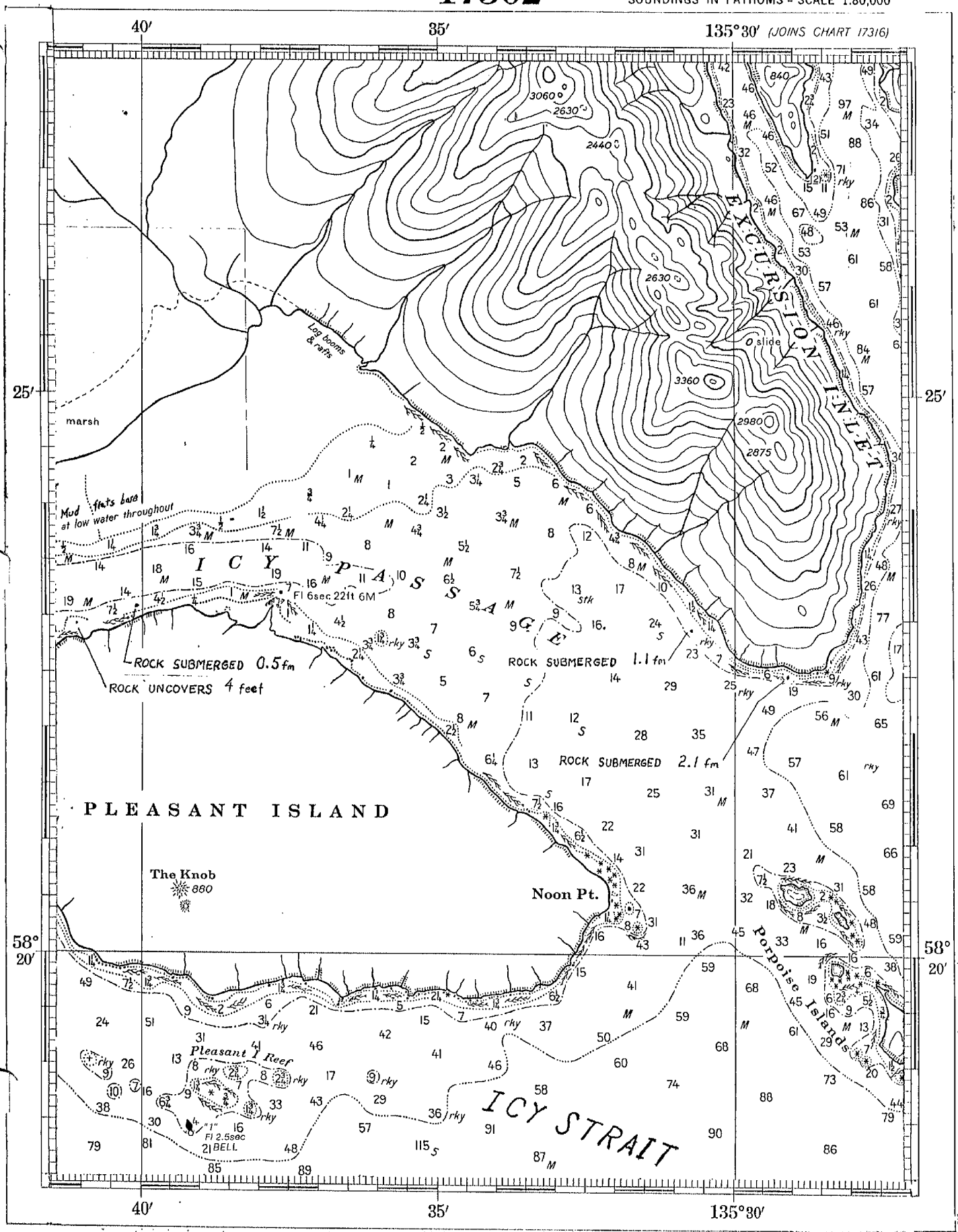
Glen R. Schaefer
Captain, NOAA
Commanding Officer

Enclosure

14th Ed., Oct. 3/81

17302 (Icy Strait and Cross Sound)

SOUNDINGS IN FATHOMS - SCALE 1:80,000



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
NOAA Ship FAIRWEATHER
1801 Fairview Avenue East
Seattle, WA 98102-3767

July 23, 1988

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

Dear Sir:

In accordance with NOAA Project Instructions OPR-0186-FA-88 dated March 8, 1988, and in response to requests by the 17th Coast Guard District, FAIRWEATHER personnel have determined the field position for the following light in the vicinity of Icy Passage, Icy Strait, Alaska.

ICY PASSAGE LIGHT 2 Light List No. 24180

Latitude 58°23'10.984"N Longitude 135°37'43.239"W

Elevation 7.9 meters above mean high water

The above field position has been determined to Third-order, Class I accuracy, unadjusted, and supersedes my radio message R 220440Z JUL 88. Horizontal datum is NAD 83.

Questions concerning this survey may be directed to Chief, Nautical Chart Branch, telephone (206) 526-6835.

Sincerely,

Glen R. Schaefer
Captain, NOAA
Commanding Officer

XII. Approval Sheet

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

Submitted by:

Brent M. Bernard
Ensign, NOAA

Reviewed by:

Charles D. Mason
Lieutenant Commander, NOAA

Approved by:

Glen R. Schaefer
Captain, NOAA
Commanding Officer

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: August 30, 1988

MARINE CENTER: Pacific

OPR: 0186

HYDROGRAPHIC SHEET: H-10268

LOCALITY: Icy Passage, Icy Strait, Alaska

TIME PERIOD: April 26 - May 16, 1988

TIDE STATION(S) USED: 945-2478 Pleasant Island, AK

PLANE OF REFERENCE (MEAN LOWER LOW WATER): - 1.45 ft.

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 13.4 ft.

REMARKS: RECOMMENDED ZONING

1. Zone Direct

for Brian K. Cole

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-10268

GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO.	C ON U.S. QUADRANGLE MAPS	D FROM LOCAL INFORMATION	E ON LOCAL MAPS	F P.O. GUIDE OR MAP	G RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
ALASKA (title)										1
ICY PASSAGE										2
ICY STRAIT (title)										3
PLEASANT ISLAND										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
				Approved:						17
				Chief Geographer						18
				SEP 21 1988						19
										20
										21
										22
										23
										24
										25

NOAA FORM 76-155 SUPERSEDES C&GS 197

NOAA FORM 77-27(H) (9-83) | U.S. DEPARTMENT OF COMMERCE | REGISTRY NUMBER

HYDROGRAPHIC SURVEY STATISTICS

H-10268

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET	1	SMOOTH OVERLAYS: POS., ARC, EXCESS	8
DESCRIPTIVE REPORT	1	FIELD SHEETS AND OTHER OVERLAYS	2

DESCRIPTION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/ SOURCE DOCUMENTS	
ACCORDION FILES	2					
ENVELOPES						
VOLUMES	5					
CAHIERS						
BOXES						

SHORELINE DATA

SHORELINE MAPS (List):

PHOTOBATHYMETRIC MAPS (List):

NOTES TO THE HYDROGRAPHER (List):

SPECIAL REPORTS (List):

NAUTICAL CHARTS (List): Chart Enlargements 17302

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS VERIFICATION	AMOUNTS EVALUATION	AMOUNTS TOTALS
POSITIONS ON SHEET			2691
POSITIONS REVISED			
SOUNDINGS REVISED			
CONTROL STATIONS REVISED			

	TIME-HOURS VERIFICATION	TIME-HOURS EVALUATION	TIME-HOURS TOTALS
PRE-PROCESSING EXAMINATION	19		19
VERIFICATION OF CONTROL			
VERIFICATION OF POSITIONS	63.5		64
VERIFICATION OF SOUNDINGS	39.0		39
VERIFICATION OF JUNCTIONS			
APPLICATION OF PHOTOBATHYMETRY			
SHORELINE APPLICATION/VERIFICATION			
COMPILATION OF SMOOTH SHEET	56.0		56
COMPARISON WITH PRIOR SURVEYS AND CHARTS		4	4
EVALUATION OF SIDE SCAN SONAR RECORDS			
EVALUATION OF WIRE DRAGS AND SWEEPS			
EVALUATION REPORT		24	24
GEOGRAPHIC NAMES			
OTHER* Digitization			
*USE OTHER SIDE OF FORM FOR REMARKS — TOTALS	177	28	

Pre-processing Examination by S. Otsubo	Beginning Date 8/10/88	Ending Date 8/24/88
Verification of Field Data by R.N. Mihailov	Time (Hours) 159	Ending Date 1/17/89
Verification Check by S. Otsubo, B. Olmstead	Time (Hours) 54	Ending Date 1/18/89
Evaluation and Analysis by C.R. Davies	Time (Hours) 28	Ending Date 1/31/89
Inspection by D. Hill	Time (Hours) 4	Ending Date 2/6/89

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

PACIFIC MARINE CENTER
Evaluation Report
H-10268

1. INTRODUCTION

Survey H-10268 is a basic hydrographic survey accomplished by the NOAA Ship FAIRWEATHER under the following Project Instructions.

OPR-0186-FA-88, dated March 8, 1988
CHANGE NO. 1, dated March 11, 1988
CHANGE NO. 2, dated April 22, 1988
CHANGE NO. 3, dated May 3, 1988

This survey occurred in Alaska and covers the area of Icy Passage and the northern shoreline of Pleasant Island. The surveyed area extends from latitude 58°22'00"N north to the mainland and between longitude 135°29'10"W and longitude 135°41'40"W. The shoreline of Pleasant Island and the northeastern shoreline of the mainland are characterized by ledges and isolated off-lying rocks with stretches of gravel, stone and boulder beaches. The northwestern mainland shore consists of an extensive mud flat. The bottom consists of mud, sand and shells. Depths range from 0 to 55 fathoms.

Predicted tides for Juneau, Alaska were used for the reduction of soundings during field processing. Approved hourly heights zoned from Pleasant Island, Alaska, gage 945-2478, were used during office processing.

The field sheet parameters have been revised to center the hydrography on the smooth sheet and to change the projection to polyconic. The TRA and electronic control correctors are adequate. The sound velocity correctors were extrapolated for a total of approximately 35 percent of the maximum depth of 55 fathoms. There is no indication that the quality of the sound velocity correctors exceeds the 35 percent maximum tolerance specified in section 4.9.5 of the Hydrographic Manual. An accompanying computer printout contains the parameters and the correctors.

A digital file, generated for this survey, 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 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.

2. CONTROL AND SHORELINE

Sections F and G of the hydrographer's report and the Horizontal and Electronic Control Reports for OPR-0186-FA-88 contain adequate discussions of horizontal control and hydrographic positioning.

Positions of horizontal control stations used during hydrography are 1988 field and published values based on NAD 83. These values were used during office processing for the computation of positions. The smooth sheet and

accompanying overlays are annotated with NAD 27 adjustment ticks based on values determined by N/CG121. Geographic positions based on NAD 27 may be plotted on the smooth sheet utilizing the NAD 83 projection by applying the following corrections:

latitude: -1.213 seconds (-37.5 meters)
longitude: 6.524 seconds (106.1 meters)

The year of establishment of control stations shown on the smooth sheet originates with the hydrographer's signal list and is subject to change pending certification of the data by NGS.

There is one weak fix (angles of intersection less than 30 degrees or more than 150 degrees) noted in this survey. However, there are no significant plotting differences between the sounding located by this fix and those in adjacent areas. Also, this fix is not used to position a danger to navigation. This fix is considered acceptable.

The following shoreline maps apply to this survey.

	Photo Date	Class
TP-01309	June, July 1985	III
TP-01318	June 1987	III

Shoreline change was observed at latitude 58°23'49"N, longitude 135°32'11"W and is drawn in dashed red on the smooth sheet. The change was transferred from the final field sheet without supporting positional information. Although this revision is portrayed without supporting positional information, it is considered adequate to supersede the common photogrammetrically delineated shoreline.

A discrepancy was noted by the hydrographer in the junction of the two shoreline maps at latitude 58°23'49"N, longitude 135°32'11"W. With the revision of the shoreline in this area, the discrepancy is resolved.

The northwestern shoreline was drawn in blue on the final field sheet. It is drawn in black on the smooth sheet because it is believed that the present photogrammetric shoreline compilation is adequate. This is based on a review of the field verified portions of the HWL which show no changes when compared to the shoreline maps except for the above mention shoreline. In addition, a discussion with an officer present during the survey resulted in the statement that field verification did occur but at a distance because of the extensive mud flats.

3. HYDROGRAPHY

With the exceptions noted in this report, hydrography is adequate to:

a. delineate the bottom configuration, determine least depths, and draw the standard depth curves;

b. reveal there are no significant discrepancies or anomalies requiring further investigation; and

c. show the survey was properly controlled and soundings are correctly plotted.

4. CONDITION OF SURVEY

The hydrographic records and reports received for processing are adequate and conform to the requirements of the Hydrographic Manual, 4th Edition, revised through Change No. 3; the Hydrographic Survey Guidelines; and the PMC OPORDER except as follows.

a. An unidentified charted feature was investigated by the hydrographer and a description was noted, however, a geographic position was not determined. This feature is depicted on the smooth sheet with the note, PA. To merely prove the existence of a charted feature is insufficient; a detached position and least depth/elevation must be determined. See section 7 for additional discussion.

b. The final field sheet depicts shoreline in blue indicating the shoreline was not verified. There was no discussion by the hydrographer as to why verification was not accomplished. All shoreline in the survey area requires verification. See section 2 for additional discussion.

c. A comparison with H-4310(1923)WD and disproval of an 11-foot sounding charted at latitude 58°23'51"N, longitude 135°36'04.5"W, was not accomplished. See section 6 for additional discussion.

5. JUNCTIONS

Survey H-10268 junctions with the following surveys.

Survey	Year	Scale	Area
H-10257	1987	10,000	east
H-10271	1988	10,000	west

The junction with survey H-10257 has not been formally completed since that survey was previously processed and forwarded for charting. The junction comparison was made using a copy. Soundings are in good agreement. Two soundings have been transferred to the H-10268 smooth sheet to better portray the bottom in the common area.

The junction with contemporary survey H-10271 has been formally completed.

There are no other contemporary surveys to the southeast. A comparison with charted depths reveals good agreement with the present survey.

6. COMPARISON WITH PRIOR SURVEYS

H-3671(1914) 1:40,000

Survey H-3671 covers the entire area of the present survey. Since the early 1900's, this area has experienced earthquakes, possible isostatic rebound and natural accretion and erosional processes. These processes, the different horizontal datums and the relative accuracy of the data acquisition techniques make a comparison difficult. However, the comparison shows isolated differences as great as 5 fathoms. The northwestern shoreline shows significant accretion seaward of the mean high waterline.

In accordance with Hydrographic Survey Guideline No. 39, the effects of the 1964 Prince William Sound earthquake were considered in the comparison of these surveys. No reasonable adjustment value for prior soundings could be determined.

Survey H-10268 is adequate to supersede the prior survey H-3671 within the common area.

H-4310(1923)WD 1:40,000

Survey H-4310WD covers the entire area of the present survey. One sounding is in the common area. An 11-foot (1.8 fm) sounding at latitude 58°23'51"N, longitude 135°36'04.5"W, was not investigated. The 1.8-fathom depth was carried forward from the prior survey.

There are no AWOIS items originating from the prior surveys.

7. COMPARISON WITH CHART

Chart 17302, 14th Edition, dated Oct. 3, 1981; scale 1:80,000(NAD27)

a. Hydrography

All charted hydrography originates with the prior surveys except one unidentified obstruction charted as a rectangular symbol which originates from an unidentified miscellaneous source.

This obstruction, charted at latitude 58°23'52"N, longitude 135°38'30"W(NAD27), was identified by the hydrographer as a large diesel engine attached to a mounting bracket. A detached position was not obtained. The feature was transferred from the final field sheet as an obstruction PA, which covers and uncovers at MLLW, at latitude 58°23'50"N, longitude 135°38'35"W. It is recommended that the feature be retained at its charted position but revised to an obstruction symbolized with cartographic code 085.

added to AWOIS as #51738 - assigned in 1979 to obtain GP

Except for the obstruction noted in this section, survey H-10268 is adequate to supersede charted hydrography within the common area.

b. AWOIS

There is one AWOIS item originating from miscellaneous sources applicable to the survey. AWOIS item 51075, a reported wreck of a 30-foot fishing vessel, position approximate, at latitude 58°22'30.00"N, longitude 135°35'00.00"W, was investigated by the hydrographer and found to be salvaged. It is recommended that AWOIS item 51075 be removed from the chart. See section K of the hydrographer's report for additional information.

c. Controlling Depths

There are no charted channels with controlling depths within the area of this survey.

d. Aids to Navigation

The only aid to navigation in the survey area is Icy Passage Light 2. It was located and serves its intended purpose.

e. Geographic Names

Names appearing on the smooth sheet and in the survey title have been approved by the Chief Geographer.

f. Dangers to Navigation

The hydrographer reported four rocks to the USCG, DMA and N/MOP. Copies of the messages/reports are attached. No additional dangers were discovered during office processing

8. COMPLIANCE WITH INSTRUCTIONS

Survey H-10268 adequately complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is an adequate hydrographic survey. Additional field work is recommended on a low priority basis to position the obstruction mentioned in section 7 of this report and section K of the hydrographer's report.

Charles R. Davies

C. R. Davies
Cartographer

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

Dennis Hill
Chief, Hydrographic Section

APPROVALS

I have reviewed the smooth sheet, accompanying data, and reports associated with hydrographic survey H-10268. This survey meets or exceeds Charting and Geodetic Services' standards for products in support of nautical charting.

2/16/89

Chief, Nautical Chart Branch (Date)

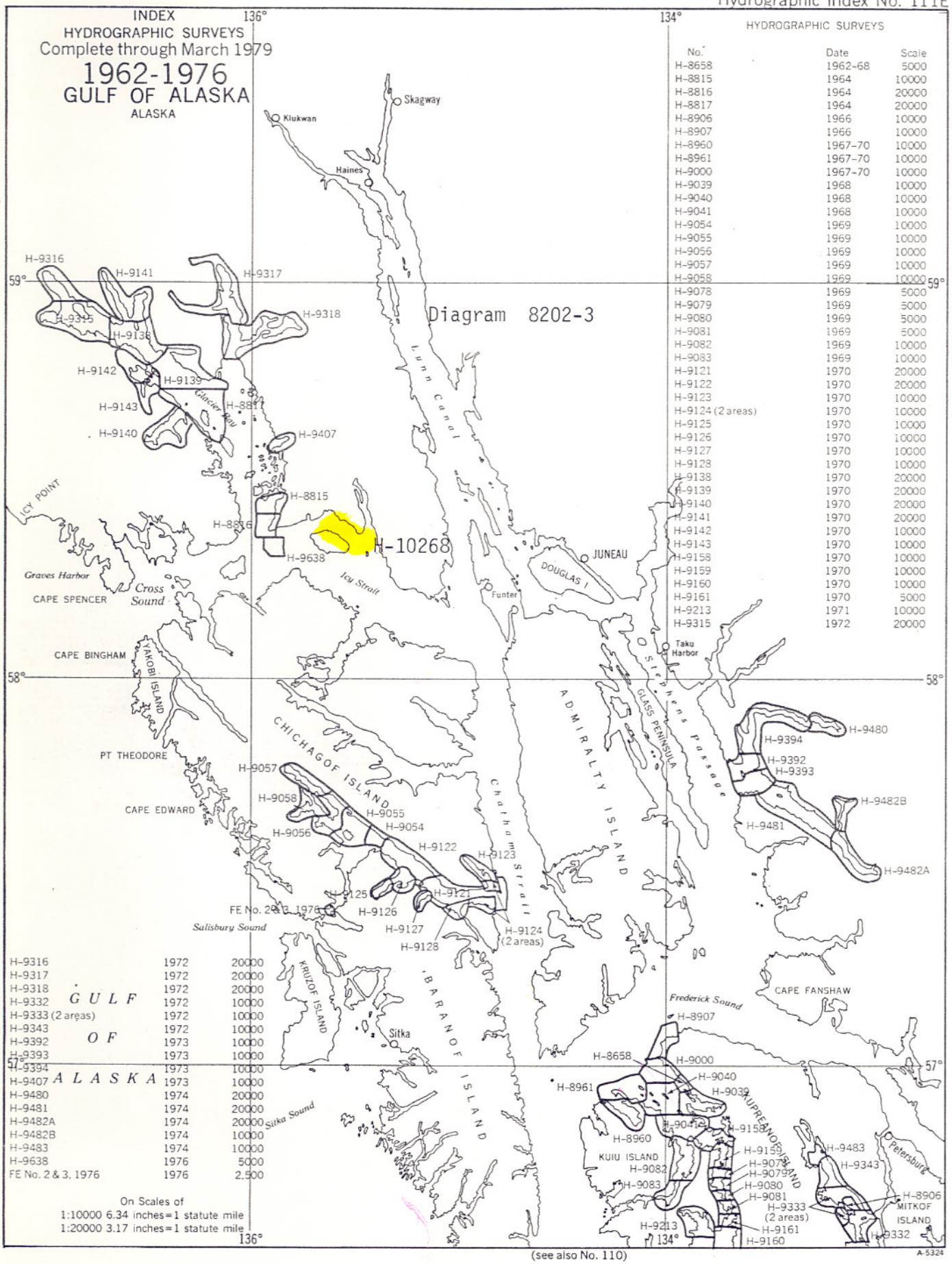
After review of the smooth sheet and accompanying reports, I hereby certify this survey is accurate, complete, and meets appropriate standards.

Sigmund R. Petersen 2/16/89

Director, Pacific Marine Center (Date)

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
FE No. 2 & 3, 1976	1976	2,500

GULF OF ALASKA

On Scales of
1:10000 6.34 inches=1 statute mile
1:20000 3.17 inches=1 statute mile

(see also No. 110)

A-5324

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-10268

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
17302	10/2/89	Domingo	Full ~~Part Before~~ After Marine Center Approval Signed Via full application of
			Drawing No. Soundings from SS
17300	10/31/89	AL MACEN	Full ~~Part Before~~ After Marine Center Approval Signed Via FULL APPLICATION OF
			Drawing No. SNDGS. FROM SS THRU 17302
17316	10/18/89	E. DOMINGO	Full ~~Part Before~~ After Marine Center Approval Signed Via FULL APPLICATION OF
			Drawing No. SNDGS FROM S.S. thru 17302
			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.
			Full Part Before After Marine Center Approval Signed Via
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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.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.

SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED.