9330

Diag. Cht. No. 8102-3.

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey Hydrographic

Field No. FA-20-3-72

Office No. H-9330

LOCALITY

State Alaska

General Locality Clarence Strait

Locality Off Nichols Passage & Felice Strait

19 72

CHIEF OF PARTY
R. H. Houlder

LIBRARY & ARCHIVES

DATE 2-24-75

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

AREA-6

9330

FORM C&GS-537 (2-66)

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

REGISTER NO.

H-9330

HYDROGRAPHIC TITLE SHEET

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 20-3-72

State Alaska

General locality ~~Southeast Alaska~~ Clarence Strait

Locality Off Nichols Passage and Felice Strait

Scale 1:20,000 Date of survey October 4-27, 1972

Instructions dated 07 June 1972 Project No. OPR-424

Vessel NOAA Ship FAIRWEATHER

Chief of party CAPT R. H. HOULDER, Cmdg.

Surveyed by CDR. S. C. Miller, LCDR D. E. Nortrup, LTJG K. H. Underwood, LT R. D. Hopkins.

Soundings taken by echo sounder, ~~hand lead, pole~~ Echo Sounder

Graphic record scaled by Hydrolog/Hydroplot system

Graphic record checked by Ship's Personnel

Protracted by ~~Hydroplot~~ Automated plot by ~~Hydroplot~~ PMC Gerber Digital Plotter

Soundings ~~xxxxxxxxx~~ plotted by Hydroplot

Soundings in fathoms and tenths at ~~xxxx~~ MLLW

REMARKS:

Applied to stds 3/13/75
OSS

Descriptive Report
to accompany
Hydrographic Survey FA 20-3-72 (H-9330)
OPR-424
Nichols Passage and Felice Strait
Alaska

A. Project

This survey is a continuation of work begun by NOAA Ship McARTHUR in 1970. The survey was accomplished in accordance with Project Instructions OPR-424-FA-72, Nichols Passage and Felice Strait, Alaska dated 07 June 1972 and with the Pacific Marine Center OPORDER. ✓

B. Area Surveyed

The area surveyed lies in ~~Nichols Passage~~ Clarence Strait south of the Bronaugh Islands and west of Annette Island. The survey area does not encompass any shoreline. Limits of the area are as follows: ✓ approximate

North- Latitude 55° 06' N
South- Latitude 54° 53' N
West - Longitude 131° 45' W
East - Longitude 131° 37' W

Junctions with contemporary surveys are as follows:

North- MA 10-1-70 (H-9182) 1970, 1972
East - MA 10-2-70 (H-9157) 1970
MA 10-3-70 (H-9184) 1970, ~~1972~~
FA 10-7-72 (H-9331) 1972-73
West - LJ 2157 (H-8382) 1957
South- None

Prior surveys of the area are:

H-3712, 1:20,000, 1914
H-3781, 1:20,000, 1915
H-3787, 1:40,000, 1915
H-3709, 1:40,000, 1914

Hydrography began 04 October 1972 and was completed 27 October 1972.

C. Sounding Vessels

Ship FAIRWEATHER and FAIRWEATHER launch FA-5 (hydrolog equipped) were used to accomplish the hydrography. No color differentiation is made in plotting as all data was plotted

by the hydroplot system. Position numbers are as follows:

FAIRWEATHER Positions 0001-0650
Launch FA-5 Positions 4001-4257

D. Sounding Equipment

FAIRWEATHER used Ross Model 5000 Fineline fathometer, S/N 1047, in conjunction with the hydroplot system and Raydist control throughout the hydrography. Launch FA-5 used Ross Model 5000 Fineline fathometer, S/N 1046, in conjunction with the hydrolog system and Raydist control. Depths ranging from 17 to 272 fathoms were recorded by the ship and 5 to 155 fathoms were recorded by lauch FA-5.

Velocity corrections to soundings were determined by one Nansen cast taken 16 October 1972 at latitude 54° 59' 22" N, longitude 131° 43' 16" W to 380 meters depth (208 fathoms). Velocity correction abstract is appended hereto. For details and substantiation see Fathometer and Velocity Corrections Report, OPR-424, NOAAS FAIRWEATHER, 1972.

TRA and instrument error corrections for Launch FA-5 were determined by bar check. TRA corrector for FAIRWEATHER is considered 2.6 fathoms as determined by lead line comparison during previous project. All hydrography was run with fathometer initial set at zero. An abstract of daily TRA correctors is appended hereto.

Fathometers performed satisfactorily during the survey. Due to the precipitous nature of the bottom in portions of the survey area strong side echos were not uncommon. On day 278 the fathogram of FAIRWEATHER shows a trace displaced by approximately 4 fathoms between positions 0049 and 0051. No satisfactory explanation for this occurence is available. However, during the period of this displacement the hydroplot system digitizer indicated, and logged, depths consistent with the trace on either side of the displaced portion. Therefore, these logged depths were accepted as accurate.

E. Smooth Sheet

All data was plotted by the hydroplot system, discrepancies located and rectified, and data replotted in final boatsheet form. All data has been logged in the hydroplot master tape format for smooth plotting at PMC.

F. Control

All hydrography in this survey was controlled by Hastings-Raydist electronic positioning equipment. Raydist base stations were installed over existing triangulation stations "Drick 1912-21" and"Wedge 1912" located respectively in the

Kendrick and Wedge Island groups. See appended Raydist Note for specifics.

Calibration of Raydist navigators was accomplished by 3 point fixes with check angles. Conversion of fix to Raydist lane count was made by PDP8/e computer using program AM-560. Daily calibrations were made prior to beginning hydrography and at day's end. ✓

G. Shoreline

No shoreline detail or field edit is included in this survey. ✓ (See Review, Par. 1)

H. Crosslines

Crosslines constitute 9.3% of the hydrography accomplished. ✓ Agreement between crossline and main scheme soundings was excellent considering the irregular bottom configuration in much of the area.

I. Junctions

Junction sounding comparison with H-8382, western junction, ✓ shows good agreement with discrepancies only rarely exceeding 2% of the sounded depth. Comparison with H-9157 (1970) and H-9184, (1970) on the eastern junction shows very good agreement with only minor discrepancies over steep slopes. Good agreement was obtained between FAIRWEATHER and launch FA-5 on sheet MA 10-1-70 to the north. Agreement was very good between the soundings of launch FA-5 and those of launch FA-6 on sheet MA 10-3-70 to the east. Launch FA-5 worked both sides of the junction between this survey and sheet FA 10-7-72 (1972-73) southeast of Percy Islands.

J. Comparison with Prior Surveys

Two dashed circled presurvey review items are included in the survey area. ✓ A dashed circle sounding of 54 fathoms at 55° 04.6' N, 131° 41.3' W has been verified as accurate.* A dashed circle sounding of 45 fathoms is located at 55° 04.7' N, 131° 42.3'W, sounded depth at this location was 49 fathoms, However, a 46 fathom sounding was recorded at 55° 04.9' N, 131° 42.5' W.

*However 54-fm sounding falls in present depths of greater than 64 fms.

The overlap with survey H-3787 (1:40,000, 1915) is a small ✓ area in the southeast corner of the current survey. Depths in the area are generally greater than 100 fathoms. Soundings on H-3787 (1915) are generally greater than those of this survey by 10-20%.

The overlap of this survey with H-3781 (1:20,000, 1915) is ✓ a small area in the immediate vicinity of Percy Point. The area is steeeply sloping, dropping to 130 fathoms 0.7 nm from the point. Prior survey soundings are generally greater

than present soundings increasing to about 10% at 100 fathoms and deeper.

Prior survey H-3709 (1:40,000, 1914) overlaps the majority of the present survey area. Soundings are consistently greater on the prior survey and average 6% greater. Occasional discrepancies of greater than 10% occur in depths of 125 fathoms and deeper with the prior survey soundings being the greater.

Prior survey H-3712 (1:20,000, 1914) overlaps a portion of the eastern side of the present survey. Again the prior survey soundings are consistently greater than soundings of the present survey. Discrepancies range from zero to as much as 18% in some cases, with the average of 6% greater depth reported by the prior survey.

Considering the very irregular bottom configuration and the sounding techniques of the period, the agreement between surveys is actually good. The present survey should supersede all prior surveys of the area.

K. Comparison with the Chart

The largest scale chart of the area is NOS 8075, 1:80,000, 5th edition, 13 May 1972. Comparison of random soundings shows a good agreement between survey and published soundings. No dangers to surface navigation exist in the major portion of the survey area.

A charted depth of 33 fathoms located at 54° 54.5' N, 131° 37.1' W was found to have a least depth of 29 fathoms. This item is included in the presurvey review and is discussed in The Descriptive Report of FA 10-7-72, OPR-424, NOAA FAIRWEATHER, 1972. H-9331 (1972-73)

L. Adequacy of the Survey

This survey is considered complete and adequate for charting.

M. Aids to Navigation

No floating or fixed aids to navigation are located in the survey area.

N. Statistics

	FAIRWEATHER	Launch FA-5
Positions	650	264
Sounding lines (lnm)	215.7	68.4

Total area surveyed - 36.1 snm
Number of bottom samples- 2

O. Micellaneous

There is a longitudinal offset between the transducer and Raydist antenna aboard FAIRWEATHER. The skeg mounted Ross transducer is 108 feet aft of the foremast mounted Raydist antenna. Consequently, the true positions of soundings obtained by FAIRWEATHER are 108 feet in the direction opposite the ship's heading at the time. No compensation for the discrepancy has been made during the on-board processing. The situation was reported in the Hydrolog/ Hydroplot System Status Report, OPR-465, NOAAS FAIRWEATHER, 1972.

P. Recommendations

None

Q. References to Reports

Fathometer and Velocity Corrections Report, OPR-424, NOAAS FAIRWEATHER 1972.

Descriptive Report, FA 10-7-72 (H-9331), OPR-424, NOAAS FAIRWEATHER 1972.

Hydrolog/Hydroplot System Status Report, OPR-465, NOAAS FAIRWEATHER 1972.

Respectfully submitted,

Donald E. Nortrup

Donald E. Nortrup
LCDR, NOAA

Transmittal Sheet

The field work was examined daily under the supervision of this command. The boatsheet was inspected daily for completeness and no additional work is considered necessary.

R. H. Houlder
CAPT, NOAA
Cmdg, Ship FAIRWEATHER

Triangulation Plotter 11-23-73

SIGNAL PLOTTER CARDS

H-NO.	LATITUDE	LONGITUDE	X	Y	X	
09330 001	72	55020618	131385013	03375	10003	001
09330 002	72	55004557	131382578	03147	08694	002
09330 004	72	54593961	131364445	02201	07624	004

000000

SIGNAL LIST
FA 20-3-72

001 55 02 0618 131 38 5013 TRIANGULATION STATION "HID, 1924" -1970
002 55 00 4557 131 38 2578 TRIANG. STA. "DUNCAN, 1912" -1970
~~003 54 58 3378 131 34 5695 TRIANG. STA. "COW 1914"~~
004 54 59 3961 131 36 4445 TRIANG. STA. "DAVIS 1914" -1970
~~005 55 06 4966 131 40 1978 TRIANG. STA. "PT MCCARTEY LT 1921"~~
~~006 55 07 1004 131 40 1977 TRIANG. STA. "MCCARTEY 1924"~~
~~007 55 06 4645 131 43 5093 TRIANG. STA. "SNOW 1970"~~
~~008 55 07 1740 131 43 4408 TRIANG. STA. "NUFF 1970"~~
~~009 55 09 0338 131 43 1004 TRIANG. STA. "BRON 1914"~~
~~010 55 07 5561 131 37 5780 TRIANG. STA. "DURT 1924"~~

~~54 51 5917 131 58 1727 TRIANG. STA. "DRICK 1912-21"~~
~~RED RAYDIST STATION~~

~~55 09 1403 131 57 2924 TRIANG. STA. "WEDGE 1912"~~
~~GREEN RAYDIST STATION~~

SOUND VELOCITY CORRECTORS

Depth (fathoms)	Correctors (fathoms)
0.0 - 5.9	0.0
6.0 - 15.5	+0.1
15.6 - 25.5	+0.2
25.6 - 36.0	+0.3
36.1 - 51.9	+0.4
52.0 - 75.0	+0.6
75.2 - 97.5	+0.8
97.7 - 139.0	+1.0
139.5 - 197.0	+1.5
198.0 - 284.0	+2.0

TRANSDUCER & INITIAL CORRECTORS

BOATSHEET FA 20-3-72 LAUNCH Ship FAIRWEATHER

DAY #	COMPUTER SHEET #	BEGINNING TIME	BEGINNING POS. #	TRA CORR.	INITIAL CORR.	TOTAL CORR.
278	FA 20-3-72	120611	0001	+2.6	0.0	+2.6
279	"	112857	0096	+2.6	0.0	+2.6
284	"	130425	0204	+2.6	0.0	+2.6
"	"	095452	0296	+2.6	0.0	+2.6
286	"	100113	0440	+2.6	0.0	+2.6
287	"	102851	0564	+2.6	0.0	+2.6
290	"	110149	0625	+2.6	0.0	+2.6
		"				

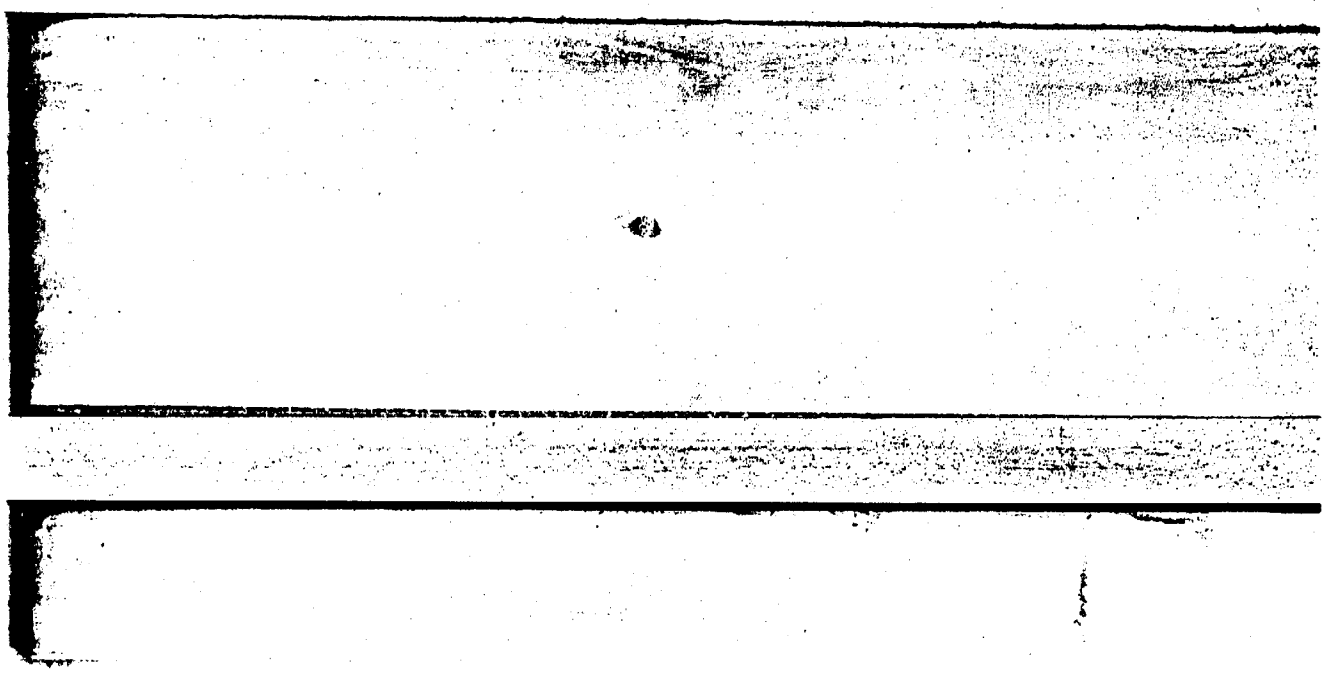
TRANSDUCER & INITIAL CORRECTORS

BOATSHEET FA 20-3-72 LAUNCH FA-5

DAY #	COMPUTER SHEET #	BEGINNING TIME	BEGINNING POS. #	TRA CORR.	INITIAL CORR.	TOTAL CORR.
286	FA 20-3-72	105233	4001	+0.4	0.0	+0.4
299	"	104449	4024	+0.4	0.0	+0.4
300	"	090501	4102	+0.4	0.0	+0.4
301	"	085754	4253	+0.4	0.0	+0.4

H-9330 VELOCITY CORRECTION TABLES

```
000059 0 0000 0001 000 000000 000000
000155 0 0001
000255 0 0002
000360 0 0003
000519 0 0004
000750 0 0006
000975 0 0008
001390 0 0010
001970 0 0015
002840 0 0020
```



TIDE NOTE
OPR - 424

Reference tide gage for this project was the standard gage at Ketchikan. Field tide reduction of soundings was based on predicted tides for Metlakatla. Predicted tides were interpolated by PDP8/e computer using program AM 500.

Two Bristol Bubbler Tide Gages were installed in the project area. Location and period of operation are as follow:

Site	Location	Period
Metlakatla	55° 07.7' N	44 days
	131° 34.1' W	28 Sept - 10 Nov
Tamgas Hbr.	55° 04.0' N	22 days
	131° 32.6' W	19 Oct - 10 Nov

All gages operated on 105° W time for the entire period of operation. However, times as listed on the hourly heights abstracts, Form C&GS - 362, were based on 120° W after 0200 29 October with the change from daylight savings to standard time.

Metlakatla - Gage S/N 62A91
This site was previously occupied by NOAAS McARTHUR in 1970. The staff and gage were installed and the gage began operation on 28 September. Levels were run between staff and marks on 04 October. Two new bench marks were established making a total of five recoverable marks at the site. The marigram read 0.8 feet higher than the staff. This value is the average of five comparison readings made during routine servicing periods. (Actually seven comparisons were made, the first and last of which were discounted. The first was made prior to the time that the gage had completely settled and the last after the gage had stopped operating.) The gage operated very well with only a slight time lag. This has been adjusted in scanning the marigram. The gage was removed and levels run to three of the marks on 10 November.

Tamgas Harbor - Gage S/N 63A10293
This site was previously occupied by NOAAS McARTHUR in 1970. The gage was installed 19 October and the existing staff leveled the following day. Two new bench marks were established making a total of five recoverable marks at the site. The marigram read 3.8 feet lower than the staff, based on an average of five comparison readings. The gage was quite sensitive and it was necessary to mean out recorded wave action when scanning. This however was not a serious deficiency and the gage operation was very good. The gage was removed and levels run to three marks on 10 November.

10/15/74

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center:

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): Metlakatla

Period: September 28 - November 10, 1972

HYDROGRAPHIC SHEET: H9330

OPR: 424

Locality: Felice Strait, Southeast Alaska

Plane of reference (mean lower low water): 10.1 Metlakatla

Height of Mean High Water above Plane of Reference is 13.7 ft.

Remarks: Recommended zoning. Direct on Metlakatla gage.

James L Hubbard
for Chief, Tides Branch

GEOGRAPHIC NAMES

Survey No.

Name on Survey	On Chart No. A	On previous survey No. B	On U.S. standard maps C	From local information D	On local maps E	P.O. Guide or Map F	Rand McNally or Atl. G	U.S. Light List H	K	
ANNETTE ISLAND										1
CLARENCE STRAIT										2
~~TAYLOR HARBOR~~ To four feet C&H										3
PERCY ISLANDS										4
HID REEF										5
NICHOLS PASSAGE										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
					Approved					20
					C. E. Harrington					21
					Staff Geographer					22
					19 May 1975					23
										24
										25
										26

APPROVAL SHEET

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

Examined and approved,

James S. Green
Supervisory Cartographic Technician

Approved and forwarded,

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

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

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

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-933Ø

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & PNO	1	BOAT SHEETS CANNOT LOCATE	1
DESCRIPTIVE REPORT	1	OVERLAYS	3

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

T-SHEET PRINTS *(List)*
None

SPECIAL REPORTS *(List)*
None

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS: PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				914
POSITIONS CHECKED		65Ø	114	764
POSITIONS REVISED		Ø		
DEPTH SOUNDINGS REVISED		96	25	121
DEPTH SOUNDINGS ERRONEOUSLY SPACED		Ø		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		Ø		
	TIME (MANHOURS)			
Verification of Control		4	1	5
Verification of Positions		46	20	66
Verification of Soundings		3Ø	30	60
Smooth Sheet Compilation		34	0	34
ALL OTHER WORK D. Report		2	19	21
TOTALS		116	70	186

	BEGINNING DATE	ENDING DATE
PRE-VERIFICATION BY Mr. James Green	1/12/74	1/12/74
VERIFICATION BY Howard E. Clark [signature]	2/2Ø/74	2/1Ø/75
REVIEW BY [signature]	10 JUN 75	15 Sep 75

Compilation 9/2/76 2 hrs.

Insp. D.V. Romesburg 10/3/75 12 hrs. D.K. Myers 2 hrs. 7/13/81

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

Reg. No. 49330

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

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

CARDS CORRECTED

DATE_____ TIME REQ'D_____ INITIALS_____

REMARKS:

Reg. No. _____

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

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

MAGNETIC TAPE CORRECTED

DATE_____ TIME REQ'D._____ INITIALS_____

REMARKS:

H-9330

Information for Future Presurvey Reviews

Except for changes that may occur as the result of earthquake activities, the bottom in this area is quite stable.

Position Index Lat.	Long.	Bottom Change Index	Use Index	Resurvey Cycle
540	1315	0	1	50 years
540	1314	0	1	50 years
550	1315	1	1	50 years
550	1314	2	1	50 years

OFFICE OF MARINE SURVEYS AND MAPS

HYDROGRAPHIC SURVEYS DIVISION

MODIFIED HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9330 FIELD NO. FA-20-3-72

Alaska, Clarence Strait, Off Nichols Passage and Felice Strait

SURVEYED: October 4-27, 1972

SCALE: 1:20,000 PROJECT NO.: OPR-424

SOUNDINGS: Ross Digital Depth Recorder CONTROL: Raydist (Range-Range)

Chief of Party ..... R. H. Houlder
Surveyed by ..... S. C. Miller
..... D. E. Nortrup
..... K. H. Underwood
..... R. D. Hopkins
Automated Plot by ..... Gerber Digital Plotter (PMC)
Verified by ..... H. E. Clark
Reviewed by ..... L. Quinlan
Date: August 22, 1975
Inspected by ..... D. J. Romesburg

1. Control and Shoreline

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

The small amount of shoreline added to the survey in the vicinity of Percy Islands originates with Class I unreviewed manuscript T-12456 (1963-73).

2. Hydrography

a. The depths at crossings are in good agreement.

b. The usual depth curves were adequately delineated.

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

3. Condition of Survey

The field work, survey records, automated plotting, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual

and the Instruction Manual - Automated Hydrographic Surveys, except as follows:

a. There was no boat sheet available at the time of review.

b. Bottom samples were not obtained as specified in section 1-42 of the Hydrographic Manual.

4. Junctions

Adequate junctions were effected with H-9814 (1970) on the east, H-9157 (1970) on the northeast, and H-8382 (1957) on the west. Junctions with surveys H-9331 (1972) and H-9182 (1970-72) will be discussed in the reviews of those surveys. No contemporary surveys junction the present survey on the south. However, present survey depths are in general harmony with charted depths.

5. Comparison with Prior Surveys

a.

H-1618a	(1883)	1:80,000
H-1622	(1883)	1:80,000
H-1649a	(1885)	1:80,000
H-2142	(1892)	1:80,000

These early prior surveys fall in the area of the present survey but are not discussed in the present review.

b.

H-3709	(1914)	1:40,000
H-3712	(1914)	1:20,000
H-3718	(1914)	1:20,000
H-3781	(1915)	1:20,000
H-3787	(1915)	1:40,000
H-4158 Ad. Wk.	(1920-21)	1:50,000

Taken together, these prior surveys cover the area of the present survey. A comparison between the prior surveys and the present survey showed good depth agreement in the shoaler areas but differences of 6-15 fathoms in depths over 100 fathoms. These differences are attributed to less accurate control and the use of a wire sounding machine on the prior surveys versus depths recorded by modern fathometer and electronic control on the present survey. With the addition of bottom characteristics carried forward from the prior surveys, the present survey is adequate to supersede the prior surveys within the common area.

c. H-3700 W.D. (1915) 1:10,000

No conflicts exist between the effective drag depths on this prior survey and the depths on the present survey.

6. Comparison with Charts 17434 (8075), 6th Ed., January 12, 1974
17432 (8086), 3rd Ed., October 20, 1973

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys, which require no further consideration.

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

b. Aids to Navigation

There are no aids to navigation on this survey.

7. Compliance with Instructions

The survey adequately complies with the project instructions except for the failure to run 100-meter line spacing in depths less than 20 fathoms.

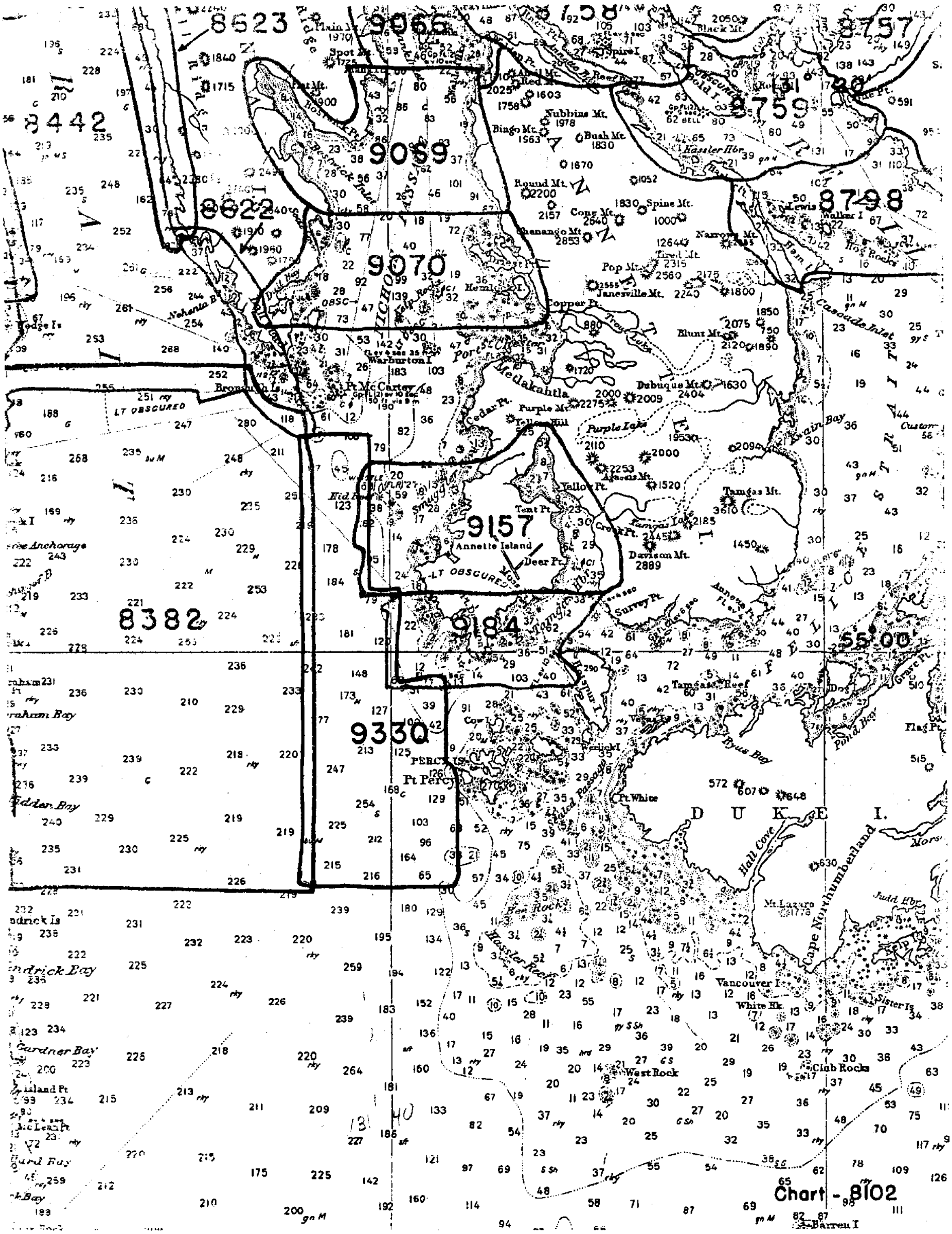
8. Additional Field Work

This survey is considered to be a good basic survey and no additional field work is recommended.

Examined and Approved:

Chief
Hydrographic Surveys Division

F/ Associate Director
Office of Marine Surveys
and Maps



8623
9066
8757
8442
9069
8759
8622
8798
9070
9157
Annette Island
8382
9184
9330
5500
Metlakahtla
Warburton I
Pt McCarter
Purple Mt
Purple Lake
Yellow Pt
Tent Pt
Deer Pt
Davison Mt
Tamgas Mt
Copper Pt
Dubuque Mt
Spine Mt
Bush Mt
Round Mt
Bingo Mt
Nubbins Mt
Cedar Pt
Cascade Inlet
Percy Is
Pt Percy
Pt White
D U K E I.
Hall Cove
Cape Northumberland
Mt Lazaro
Vancouver I
White Rk
Club Rocks
West Rock
Hassler Reefs
Hassler Hbr
Tamgas Reef
Survey Pt
Barren I
Chart - 8102

(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9330

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
8075	5/15/75	Kennon	~~Full~~ Part Before ~~After Verification~~ Review Inspection Signed Via
			Drawing No. Exam no changes
8086	9/8/75	Stembel	~~Full~~ Part ~~Before~~ After Verification before review ~~Review Inspection~~ Signed Via
			~~Drawing~~ No. 5 Applied critical corrections [2] directly to Chart
8102	9/8/75	Stembel	~~Full~~ Part Before ~~After Verification~~ Review ~~Inspection~~ Signed Via
			Drawing No. 23 Examined thru Chart 8075 - no corrections
8075	7/20/76	Kennon	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via before
			Drawing No. 15. added three soundings 5.10$\frac{1}{2}$, 30 and a 36 fm 3dly. deleted a 41 and a 16 fm soundings just Northwest of Pt. Dawson.
8086	5/26/77	Naitoh	~~Full~~ Part ~~Before~~ After Verification Review Inspection ~~Signed~~ Via
			Drawing No. 5 PROOF. Exam for critical corrs only. No corr
8075 (17434)	7/7/78	House	Full ~~Part Before~~ After Verification Review Inspection before Signed Via
			Drawing No. 16 Examined, no correction
			Final application
17432	10/10/80	Naitoh	Full ~~Part Before~~ After Verification Review Inspection before Signed Via
			Drawing No. 6 Fully applied
17434	8-15-83	LA Simmons	Full ~~Part Before~~ After Verification Review Inspection Signed Via
[redacted]			Drawing No. 18 Reapp'd to agree w/ 17432 #7
17426	6/20/84	B. Fernandez	Full ~~Part Before~~ After Verification Review Inspection Signed Via
			Drawing No. 32
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

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

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