

# 8326 a

## WIRE DRAG

Diag. Cht. No. 8152-2.

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	WIRE DRAG
Field No.	PA-05158 WD
Office No.	H-8326 & W.D.
LOCALITY	
State	Alaska
General locality	Sukkwan Strait
Locality	Approach to cannery dock at Hydaburg, Alaska
1958	
CHIEF OF PARTY	
F. X. Popper	
LIBRARY & ARCHIVES	
DATE	FEB 18 1959

part of H-8326

8326 a  
WIRE DRAG

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER NO. H-8326 a

Field No. PA-05158

State SOUTHEAST ALASKA

General locality SUKKWAN STRAIT

Locality APPROACH TO CANNERY DOCK AT HYDABURG, ALASKA

Scale 1:5,000 Date of survey 1958 Field Season

Instructions dated \_\_\_\_\_

Vessel USC&GS SHIP PATTON

Chief of party F. X. POPPER

Surveyed by PERSONEL USC&GS SHIP PATTON

Soundings taken by fathometer, graphic recorder, hand lead, wire drag

Fathograms scaled by -

Fathograms checked by -

Protracted by K.W. Jeffers

Soundings penciled by K.W. Jeffers

Area-Depth Diagram

Soundings in fathoms feet at MLW MLLW

REMARKS: This sheet has been formally verified. Additional processing was considered necessary to assure the satisfactory resolution of the discrepancy discussed in section J of this D.R. and in the Verifier's notes. This end has been accomplished.

During the present processing only one hang was verified, inked and appropriately annotated on the smooth and A+D sheets. A comparison between the present survey and H-8326 revealed the remaining hangs (see section N of this D.R.) to be on known shoals thus obviating the need for any further consideration of them. The smooth plotter erroneously utilized yellow rather than green ink in delimiting the areas dragged at effective depths of 20 ft or greater. It was not considered necessary however, to correct the affected drag strips.

No further processing of this survey is planned. X.W.W. 5-7-76

Upon formal approval, the smooth and A+D sheets will be trimmed for insertion in this D.R.

{ Approved R.H. Carter  
Date 6/24/66

DESCRIPTIVE REPORT TO ACCOMPANY

WIRE DRAG SURVEY PA-05158 WD

SUKKWAN STRAIT, HYDABURG, SE ALASKA

1958

SCALE 1:5,000

U. S. C. & G. S. S. PATTON, F. X. POPPER, COMDG.

\* \* \*

A. PROJECT:

This survey was carried out in accordance with Revised Instructions for Project CS-357, dated 7 January 1955; and additional Supplemental Instructions Project 1357 dated 9 December 1955, Project CS-357 dated 1 November 1957, and Instructions dated 29 January 1958. All instructions were addressed to Commanding Officer, Ship PATTON.

B. SURVEY LIMITS AND DATES:

This survey was done to supplement hydrographic survey H-8326, a 1:5,000 sheet completed by the PATTON in the 1956 field season.

The area wire dragged in 1958 covers the approaches to the cannery dock at Hydaburg, Alaska. The area has the appearance of a semicircle, with the end of the dock at the center, and having a radius of approximately 1200 ft.

The drag was accomplished in two days; June 16 and 24.

C. VESSELS AND EQUIPMENT:

The wire drag was done with launch No. 87 and a skiff, operating from the ship PATTON.

With the exception of one sweep, the far end of the drag was secured to a piling with 200 ft of wire between the piling and F buoy. Launch No. 87 was used as the guide vessel, and towed the drag using 250 ft of wire from the launch to N buoy.

The last sweep on "B" day was accomplished using the launch as the guide vessel and a skiff as the end vessel.

The drag was composed of standard equipment: N buoy, F buoy, 3 intermediate buoys at the uprights, 300 ft sections, and aluminum floats every 100 ft.

No fathometer soundings or lead line soundings were obtained.

D. TIDE STATION:

Tides recorded at the Hydaburg, Sukkwan Strait gage, Lat. 55°-12.16'N Long. 132°-49.35'W, were used for reduction of drag depths. No time or range corrections were applied.

E. SMOOTH SHEET:

The projection was made by hand at the Ship's Base, Seattle, Washington.

Shoreline for the area was not available and was left off the projection.

Signals were transferred by usual methods.

F. CONTROL STATIONS:

Triangulation stations and topographic signals previously established in the area were used to control the wire drag. The triangulation was established by J.M.S. in 1925. The topographic signals were located by J. T. Jarman in 1956 on graphic control sheet PATT-56-B.

G. SHORELINE:

No shoreline was available for transfer to the smooth sheet.

H. SOUNDINGS:

Inapplicable.

I. CONTROL OF WIRE DRAG:

The positions of the guide and end vessels were entirely controlled by three point sextant fixes on signals ashore. Sextant cuts were taken to locate buoy positions at the time of each fix.

J. ADEQUACY OF SURVEY:

This survey is adequate for charting purposes. No holidays exist.

A discrepancy was found at Lat. 55° 12' 01"N Long. 132° 49' 19"W. On position No. 41A, No. 1 buoy grounded at a depth of 16½ ft in an area that was previously cleared with the drag set at 18½ ft. Since the drag did not hang, it was believed that the weight attached to the upright at No. 1 buoy bounced over the top of a shoal at this point. With the weight located in a different position on the previous drag set at 18½ ft, it is conceivable that the bottom wire could drag over the shoal and give no indication of a hang. This discrepancy was resolved on the Area Depth Sheet by drawing a straight line from the

Concur



J. ADEQUACY OF SURVEY: (Cont.)

(~~from the~~) fixed end of sweep 24A-32A to the position of buoy No.1 when grounded at position No. 41A. The offshore side of this line is shown as cleared to 18½ ft. and the inshore side is not shown as dragged at all. A sounding of 16½ ft., circled in green, is shown at the location of grounding at buoy No. 1. Shown on A+D sheet only See note re pos 41A; sec 1 N of this D.R.

K. CROSSLINES:

Inapplicable.

L. COMPARISON WITH PRIOR SURVEYS:

There are no prior wire drag surveys in the area.

A comparison was made with hydrographic survey H-8326 (PA-05156), and the location of rocks on that sheet agree with the inshore hangs on the wire drag survey.

M. COMPARISON WITH CHART:

This survey compares favorably with C.&G.S. Chart 8151.

N. LIST OF WIRE DRAG GROUNDINGS:

Position No.	Location of Grounding	Buoy No.	Effective Depth of Drag	Remarks
17A	55° 11.985' 132° 49.38'	2	26'	Solid hang
23A	55° 11.985' 132° 49.375'	2	22½'	Solid hang, 5 meters inshore from hang on pos. 17A. Cleared at 18 Ft. <span style="font-size: small;">Disregard, hang in vicinity of 3<sup>2</sup> fathoms on hydro. sheet</span>
32A	55° 12.013' 132° 49.26'	2	18½'	Solid hang See hang at Pos 8B
41A	55° 12.035' 132° 49.325'	1	16½'	Weight bouncing over shoal. Disregard, (2 <sup>2</sup> fathoms in vicinity on H-8326)
8B	55° 12.020+ 132° 49.255+	1	17'	Solid hang, 10 meters inshore from hang on pos. 32A Cleared by 9 ft (Pos. 39-41 A)
25.5A	55° 12.02' 132° 49.36'	2 to 3	18'	Temporary hang on known shoal.

DATA ATTACHED TO THIS REPORT:

- Table of statistics
- Tide Note
- List of Signals

Approved and Forwarded:

*F. X. Popper*  
F. X. Popper  
Comdg, Ship PATTON

Respectfully submitted,

*K. William Jeffers*  
K. William Jeffers  
by: F. X. Popper *F.X.P.*

TIDE NOTE TO ACCOMPANY H8326 (PA-05158)WD)

The Hydaburg, Sukkwan Strait portable tide gage was used for this survey. The location of the gage was Lat.  $55^{\circ}-12.16'N$  Long.  $132^{\circ}-49.35'W$ .

The observed tides were used for the reduction of soundings, with no time or height corrections being applied.

Mean-lower-low-water corresponded to 3.9 feet on the staff.

STATISTICS FOR HYDROGRAPHIC SURVEY  
H-8326 (PA-05158WD) PROJECT CS-357  
USC&GSS PATTON

Date	Letter	Volume	Drag		Miles	
			Length	Positions	Statute	Soundings
June 16, 1958	A	1	1200	43	1.3	0
June 24, 1958	B	1	900	13	0.5	0
				56		

LIST OF SIGNALS FOR HYDROGRAPHIC  
SURVEY H-8326 (PA-05158WD)

NAME	SOURCE
BEA	BEACH, 1925
Day	Hydaburg Day Beacon, PATT-56-B
FIR	FIRST, 1925
Lig	Sukkwan Narrows Light, PATT-56-B
Mor	PATT-56-B
Sow	"
Tee	Church Steeple, PATT-56-B
URN	TURN, 1925



Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8326 W.D.

Records accompanying survey:

Boat sheets 1; sounding vols. ....; wire drag vols. 2;  
 bomb vols. ....; graphic recorder rolls ....;  
 special reports, etc. 1-Smooth sheet, 1-Descriptive report, ....  
1-Area & Depth Diagram, and 1-Sketch book. ....

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

Number of positions on sheet	.....	112 56
Number of positions checked	.....	24 4
Number of positions revised	.....	
Number of soundings revised (refers to depth only)	.....	
Number of soundings erroneously spaced	.....	
Number of signals erroneously plotted or transferred	.....	
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	.....

Verification by X.W.W. Carl Fefe ..... Total time 53 hrs Date 11/13/73  
X.W. Wellman ..... 14 hrs. 5-7-76

Reviewed by ..... Time ..... Date .....

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens:

10 June 1959

Plane of reference approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET 8326A

Locality Hydaburg, Alaska

Chief of Party: F. X. Popper in 1958

Plane of reference is mean lower low water, reading  
3.9 ft. on tide staff at Hydaburg  
17.3 ft. below B.M. 1 (1955)

Height of mean high water above plane of reference is 12.0 feet.

Condition of records satisfactory except as noted below:

  
Signature

Chief, Tides Branch

Note to Reviewer

H-8326 W.D.

Difficulty was encountered in ascertaining the correct positions of the hangs. This was due to a lack of agreement between the position given by the Guide ship, Tender, and Party on the dock.

A shoal of 2.6 (15.6 feet) fathoms on Hydrographic Survey Sheet 8326 and indicated in green on Wire Drag Boat sheet 8326a as 2.9 fathoms, was shown to be cleared by the wiredrag at 17 and 18½ feet. This discrepancy was discussed with Mr D. Engle (11-12-73), he indicated that perhaps the wire may have slid over the shoal & therefore, gone undetected. See section J of the wiredrag D.R. Situation adequately discussed and resolved therein. K.W.W. 5-6-76

Carl Fiefe,

11-13-73

Additionally, approval has been given by Mr D. Engle to trim the A&D and Smooth sheet for insertion into the Descriptive Report.

Additionally, part of the A&D diagram was done in yellow rather than green ink as per depth scheme required. This did not seem critical to warrant re-doing in the proper color.



49' 45"

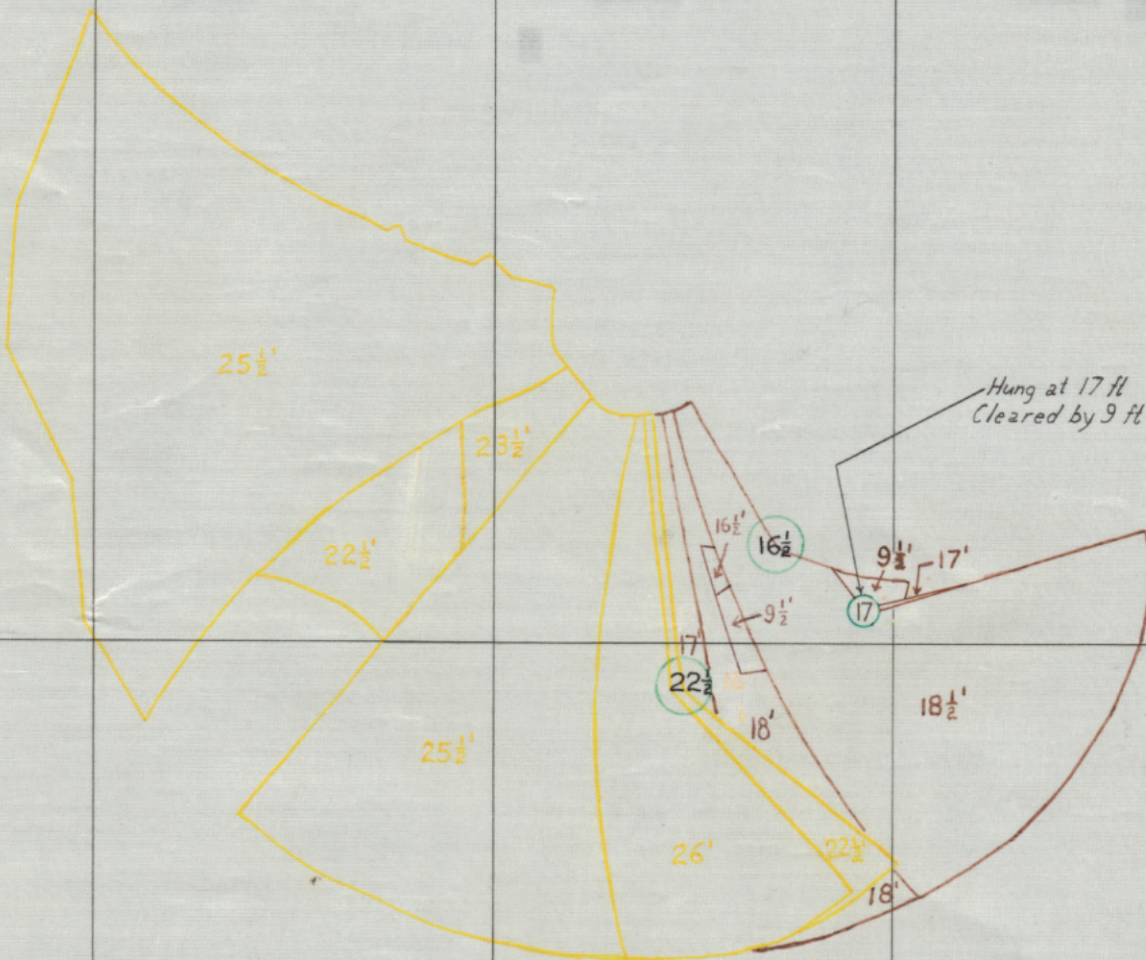
49' 30"

49' 15"

132° 49' 00"

12' 15"

12' 15"



55° 12' 00"

55° 12' 00"

### AREA DEPTH SHEET

PA-05158 WD

(To be incorporated as part of H-8326)

11' 45"

11' 45"

SUKKWAN STRAIT

HYDABURG, S.E. ALASKA

SURVEYED BY PERSONNEL, SHIP PATTON

F. X. POPPER, COMDG.

1958

SCALE 1:5,000 HYDABURG DATUM

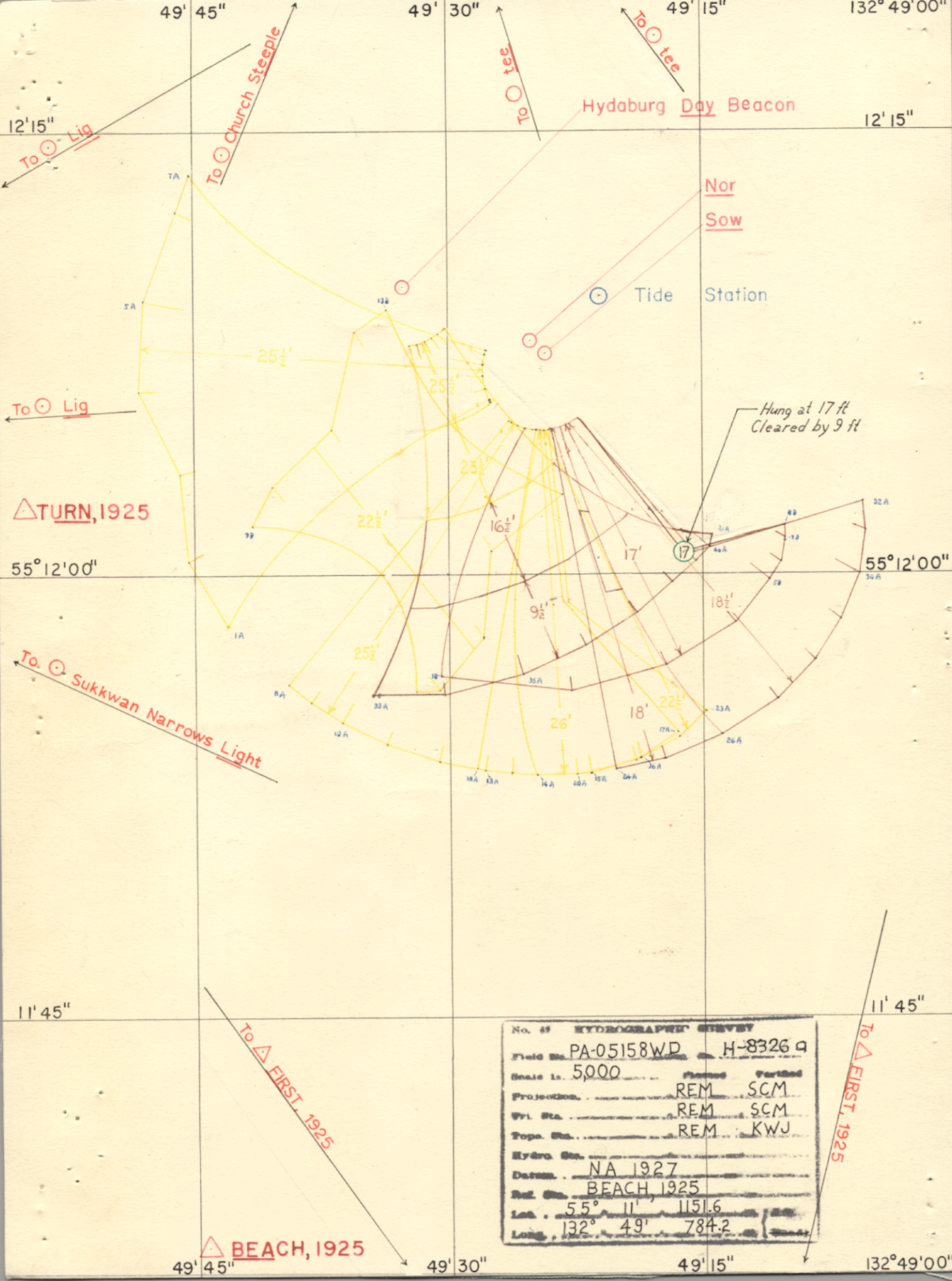
49' 45"

49' 30"

49' 15"

132° 49' 00"





No. 49	HYDROGRAPHIC SURVEY	
Field No.	PA-05158WD	H-8326 a
Scale 1:1	5000	Plotted
Projection	REM	SCM
Tri. Sta.	REM	SCM
Tops. Sta.	REM	KWJ
Hydro. Sta.		
Date	NA 1927	
Ref. Sta.	BEACH, 1925	
Lat.	55° 11'	1151.6
Long.	132° 49'	784.2

△ TURN, 1925

△ BEACH, 1925

Nor  
Sow

Hung at 17 ft  
Cleared by 9 ft

To △ FIRST, 1925

To △ FIRST, 1925

To ⊙ Sukkwan Narrows Light

To ⊙ Lig

To ⊙ Lig

To ⊙ Church Steeple

To ⊙ tee

To ⊙ tee

Hydaburg Day Beacon

Tide Station

49' 45"      49' 30"      49' 15"      132° 49' 00"

55° 12' 00"      55° 12' 00"

11' 45"      11' 45"

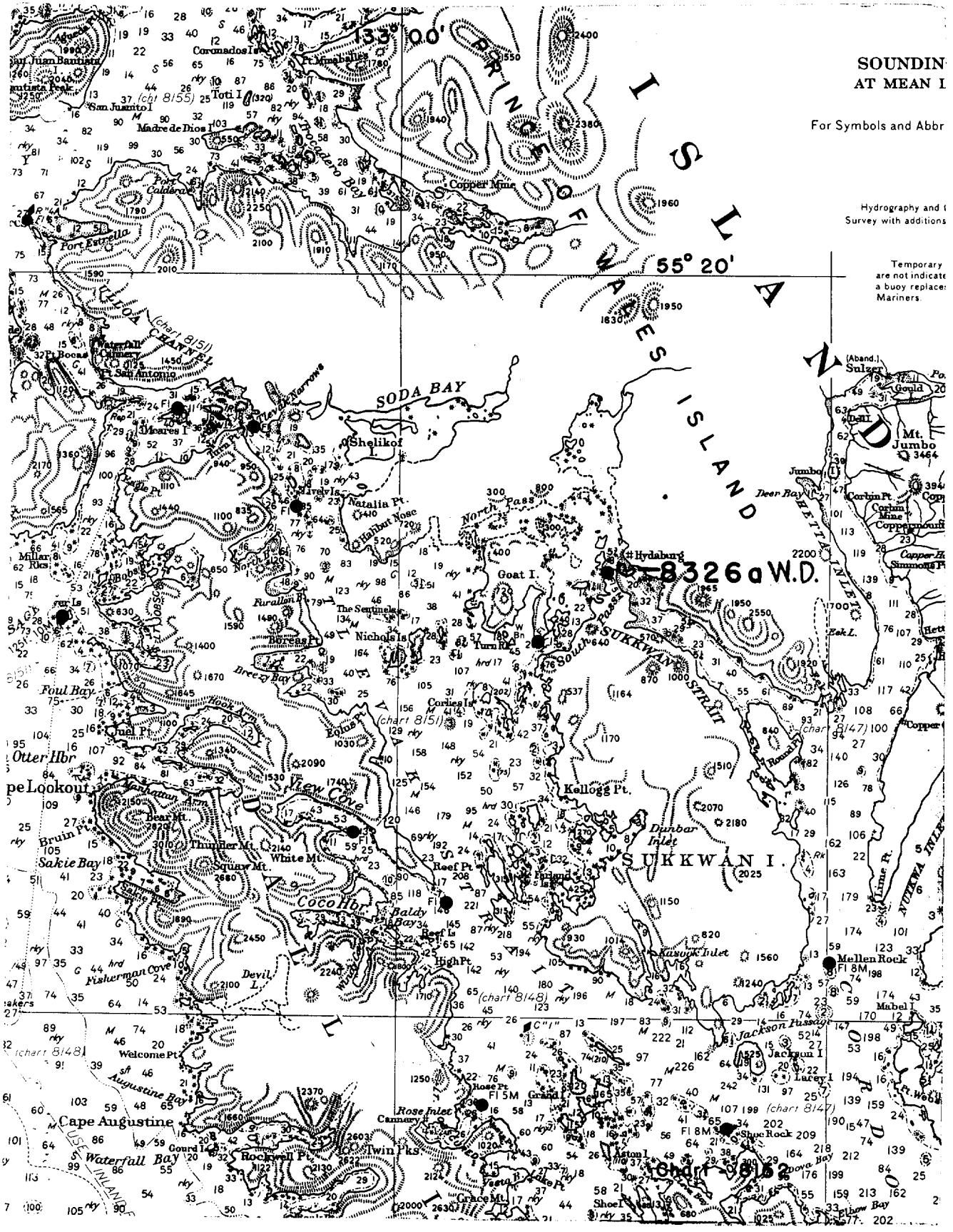


SOUNDING  
AT MEAN TIDE

For Symbols and Abbreviations

Hydrography and Tidal Survey with additions

Temporary soundings are not indicated by a buoy replace Mariner's



# NAUTICAL CHARTS BRANCH

SURVEY NO. H-8326 W.D.

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2-16-59	8151	Nichols	Before <del>After</del> Verification and Review <i>Examined</i> <i>No revision.</i>
10-25-60	8152	R.E. Elkins	Before <del>After</del> Verification and Review <i>Examined thru</i> <i>chart 8151 dty #5 - no revision</i>
1-9-62	8152	R.S. House	<i>part appl</i> Before <del>After</del> Verification and Review <i>thru chart 8151</i> <i>Duty #6</i>
7-24-63	8147	h.j. Keeler	Before <del>After</del> Verification and Review <i>Examined. No Cor</i> <i>Reviewed thru ch 8151 8-7-63 R.K.D.</i>
12-5-63	8147	H. Redden	Before <del>After</del> Verification and Review <i>part. Applied</i> <i>to 8147 Recon</i>
1/26/79	8147	Nator	<del>Before After Verification and Review</del> <i>Full as a Cat I</i> <i>survey Duty to Partial Application</i>
1/31/79	8157	Nator	<del>Before After Verification and Review</del> <i>Full as a Cat I</i> <i>survey thru 8147 Partial Application</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.