

FE68

Diagram No.1222-3

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey Field Examination.....
Field No. CO-2148.....
Office No..... FE-68.....

LOCALITY

State Virginia.....
General Locality ... Chesapeake Bay.....
Locality York Spit Channel.....

19 48

CHIEF OF PARTY
E.B. Latham

LIBRARY & ARCHIVES

DATE June 15, 1948.....

☆ U.S. GOV. PRINTING OFFICE: 1976-669-441

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as:

FE No.5 1948

8971
FE68

FENo.5 1948

Diag'd. on Diag. Ch. No. 1222-3

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. CO-2148 Office No. F.E.-# 5-1948

LOCALITY

State Virginia
General locality Chesapeake Bay
Locality York Spit Channel

1948

CHIEF OF PARTY

E. B. Latham

LIBRARY & ARCHIVES

DATE JUN 15 1948

B-1870-1 (1)

FENo.5
1948

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. F. E. # 5-1948

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. F.E.-#5-1948

Field No. CO-2148

State Virginia /

General locality Chesapeake Bay /

Locality York Spit Channel /

Scale 1:20,000 Date of survey 12 May to 18 May 1948

Instructions dated 13 May 1948

Vessel COWIE

Chief of party Ector B. Latham

Surveyed by E. B. Latham and C. A. Schoens

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

Protracted by A. G. Atwill

Soundings penciled by A. G. Atwill

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

REMARKS: Survey of small area to investigate shoaling at south end of
York Spit Channel

FE #5-1948

DESCRIPTIVE REPORT

See L. 418 (1948)

SHIP COWIE

Ector B. Latham, Comdg.

A. Project - No project number assigned - Instructions dated 13 May 1948 to Supervisor Southeastern District. Subject: "Shealing at South Entrance of York Spit Channel Chesapeake Bay."

B. Survey limits and dates:

General Locality: Southern approach to York Spit Dredged Channel.

Limits Latitude $37^{\circ}-09.0$ Long. $76^{\circ}-08.75$,: $37-09.0$, $76-10.15$ $37-11.65$, $76-08.75$ and $37-11.65$, $76-10.15$. with extensions over the limits where necessary to obtain fixes at ends of lines.

Field work was accomplished between 12 and 18 May 1948.

The survey makes a junction with Army Engineers Survey of York Spit Channel - HOWEVER The Dredge Comber was working in York Spit channel at the time of the survey and that part of the survey within the dredged cut may have been altered by dredging operations (Applies to A & B days)

The survey constitutes a re-survey of the old surveys and "junctions" should be considered in the light of agreement with charted depth curves. This should be accomplished by the Processing Office after smooth plotting on final buoy positions.

Progress made is considered normal under conditions encountered. However it is considered pertinent to include in this report that it was found not feasible to sound with two watches with personnel available. The assignment of an additional Officer to the COWIE would do much to alleviate the personnel shortage.

Weather: In a survey of critical depths in exposed water, weather conditions are very important. In this project, sounding over the critical areas was limited to times when the motion of the Ship due to action of the sea was about one foot or less. Non critical areas outside the limits of the channel and/or deeper than the controlling depths were done when motion from action of the sea amounted to 2 to $2\frac{1}{2}$ feet maximum.

C. Vessels and Equipment. Work was accomplished by Ship COWIE, operated at half speed, or at 7.8 knots.

Tactical diameter at this speed, is approximately 500 yards with both engines operating and approximately 400 yards with inside engine stopped for the turn.

Eche sounding apparatus 808 Fathometer No.57 S, throughout entire range of depths sounded.

D. Tide and Current Stations:

Standard Gage at Hampton Roads operated by Supervisor SE District, is the basis for tide reducers. No tide or current stations were established by the Ship COWIE in connection with this work.

E. Smooth Sheet:

Smooth Sheet to be prepared and plotted by Supervisor, SE District. It is recommended that fixes at end of buoy line be plotted on Aluminum Sheet, Scale 1 - 40,000 and that these positions be transferred to the smooth sheet and intermediate buoys plotted by T.W. & Sun Azimuth observations on a scale of ~~1/10,000~~ or 1/20,000.

F. Control Stations are Triangulation Stations FOX HILL MUN WATER TANK, 1939, YORK SPIT L.H. 1900-32 and NEW PT. COMFORT L.H. 1871-1932-Additional information to be supplied by Norfolk Processing Office.

Survey Buoys.

Existing Navigational buoys were used to control the hydrography.

Taut wire sun azimuth traverse was run along the line EAT, GAD, HOW, INK and ABE, and buoys DOG, CAT, and BOY were located by sun azimuths observed from the traverse line.

Buoys EAT and ABE were located by shore fixes to the three triangulation stations, Paragraph F.

Fixes observed on 18 May are accepted, conditions of visibility being satisfactory on this day.

Observations were made on 12 May under conditions of poor visibility and served to locate buoys on the Boat Sheet. The fixes and cuts should be disregarded for smooth plotting (At the time observation was made it was not known whether sun azimuths could be obtained during the day)

Taut wire machine No. 259-B was calibrated on 14 May. Method: was to mount the machine on Ship's Truck and a common line was measured with steel tape and machine, line was measured fwd and backward with tape and two measurements were made with the T.W. machine. The tape measurements agreed exactly and the two measurements with the machine were within 0.0002 naut. miles in 177 meters. The value of 1 naut mile on the machine was determined to be 1864.5 meters. (.0950 mi -177.13 meters)

All buoys are considered to be located with satisfactory accuracy.

Captain Manyen, USCG, advises that all buoys are anchored with 15 fathoms of chain.

G. Shore line and Topography - Not applicable.

H. Soundings - All soundings were obtained from 808 Fathometer recorder No. 57-S. Bar checks and comparative soundings with lead line were obtained at specified intervals (Hydro. Manual) Three cross lines were run at slow speed with lead line and fathometer in conjunction.

Leadsman stated that ridges or lumps approximately 2 - 2½ feet in height were encountered during fathometer comparisons and the tops of the humps used. During the running of cross lines mentioned above, such procedure was not possible. Please note that line 51C - 54C was run with both engines at slow speed, while 55 - 61C and 62-70C were run with one engine at slow speed. It is believed that the first line may have been run at too high speed for accurate hand lead sounding.

Echo correction of 0 was determined from comparative soundings and bar checks. See also paragraph U-Y.

I. Hydrography was controlled by 3-point sextant fixes on buoys. Sufficient notes appear in the records so that scope circles can be applied to the smooth plotting. This refinement is not considered necessary, if work is plotted on 1/20,000 scale but may improve the appearance of the hydrography if plotted on scale of 1/10,000.

J. Adequacy of Survey.

Survey is complete and adequate to supersede prior surveys for charting except for areas lying inside the dredged channel on A and B days where bottom may have been altered by dredging operations then in progress. Soundings outside the limits stated in paragraph B, notably at SE end of project are for the purpose of control of lines within subject limits.

Junction with improved channel are satisfactory insofar as can be determined from the boat sheet - Project depth in the improved channel is assumed to be 36 feet.

It is assumed that the Processing Office will supply additional information after final tide reducers have been applied.

K. Cross lines: Approximately 20% of cross lines were run. Excess of cross lines was occasioned in part by peculiarity of control situation at the SE part of area. Crossings appear satisfactory on the boat sheet. It is assumed that the Processing Office will furnish additional information in this subject.

L. Comparison with prior Surveys:

It is evident that considerable shoaling has occurred in the vicinity of and for a distance of 0.4 miles NELY from Buoy INK- (Lighted Whistle Buoy 1A)

It is assumed that the Processing Office will furnish additional information.

Engineer Survey of York Spit Channel was being conducted at this time. It is assumed that the Processing Office will furnish necessary information as to sheet numbers, dates, scales, etc. (Sp. 43735).

Bp. 44277
July-Aug 1948

M. Comparison with chart:

Same as paragraph L. with respect to depths. Please note that charted buoys C-3 and N-4 are actually lighted buoys. (GAD and DOG).

N. Dangers and Shoals.

Shoaling mentioned in paragraph L. - (35 ft. 0.4 miles NE by E of Buoy 1A and 34 ft. 0.32 miles NE by N of same buoy) constitute a danger to deep draft vessels. It is understood that these shoals have been reported to the "Notice to Mariners". H.O.N.M #24(1948)

O. Coast Pilot Information:

Deep draft vessels should pass west of buoy N-14, leaving buoy close aboard. It is believed however that moving of buoys and/or dredging is contemplated so that publication of the information contained herein should not be incorporated in the Coast Pilot at this time. C.L. #448, 1948

Currents. Flood current sets generally northerly, ebb current southerly, estimated normal strength of 1 knot. At slack between flood and ebb an easterly set of approximately 0.3 knot was observed. However this set may have been due to the westerly wind then blowing.

P. Aids to Navigation:

To be supplied by Processing Office after final positions of buoys have been plotted on the smooth sheet. (See Review)

Q. Landmarks for Charts.

Not applicable

R. Geographic Names

Not applicable

S. Net applicable

T. By-Product Information:

Change in current affecting the path of the survey vessel was noted in the area about half way between HOW and INK (Buoy "1" and "1A") It is believed that there is a connection between the effect of the dredged cut on the currents and the shoaling already mentioned.

Attention is directed to the ^{32 1/2}33 ft. lumps (2 ft. shallower than surrounding depths) NW of INK (Buoy "1A"), and the hypothesis offered that this lump consists of sand or other suspended material deposited around the buoy anchor. Edthogram shows sand lumps in this area.

U-Y. (Copies of letters attached to ltr paragraph A)

Fish Mounting:

Opinion is expressed that it is desirable to attach regular fish to the keel of the vessel. Such mounting is contemplated at next dry docking. It is noted that, with oscillators mounted inside the hull, the fathometer was operated at gain of 10 and on at least one occasion a tendency of the amplifier to break into oscillation was observed. This fathometer mounted on launch was operated at gain 5 and seems to give a better bottom trace.

Bar checks are inconsistent and range from -0.7 to 0.0. It is believed that the failure of agreement is due in large part to the fact that trace from bar is weak. No correction is applicable.

Z. Tabulation of Applicable Data attached hereto.

- (a) Bar check and comparative soundings
- (b) Calibration of taut wire machine.
- (c) Statistics

Ester B. Latham

Ester B. Latham,
Chief of Party.

F.E.#5-1948

STATISTICS FOR HYDROGRAPHIC SURVEY CO - 2148

SHIP "COWIE" -- MAY 1948

YORK SPIT CHANNEL - CHESAPEAKE BAY

Day	Vol. No.	Date	Soundings Hand-lead	Stat, Miles	No. Positions
A	1	5-12-48	3	5.0	38
B	1	5-13-48	15	50.1	155
C	1 & 3	5-17-48	51	23.7	75
D	2	5-18-48	10	32.5	116
<hr/>					
Totals	- - - - -	- - - - -	79	111.3	384

Total Area - 4.0 Sq. Stat. Miles

F.E.#5,1948

CALIBRATION OF TAUT WIRE

Machine No. 259-B

USC&GSS COWIE

14 May 1948

A to B - 177.130 meters.

1st.

T.W. Register	Wire at A -	99.9970	
	Wire at B -	100.0921	
			<u>0.0951</u>
	at A -	0.0984	2nd.
	at B -	0.1933	
			<u>0.0949</u>

Mean - 0.0950 - A to B. - 177.130 m.

$\frac{177.13}{.0950}$ - 1864.5 m. - 1 Naut. miles *

*Calibrated to read Naut. miles

Observed by Ector B. Latham
Checked by John C. Phillips

Handwritten initials and scribbles

FE #5-1948

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
SOUTHEASTERN DISTRICT HEADQUARTERS
ROOM 418, U. S. POST OFFICE BLDG.
NORFOLK 10, VIRGINIA

MAY 27 11 30 AM '48

26 May 1948

To: The Director
U.S. Coast & Geodetic Survey
Washington 25, D. C.

Subject: Shoaling in York Spit Channel

There is enclosed a copy of the local Notice to Mariners issued by the Fifth Coast Guard District, dated 25th of May, in which the results of the survey made by the Ship COWIE has been reported.

George L. Anderson
George L. Anderson
Lieut. Comdr. USC&GS
Supervisor Southeastern Dist.

F.F.#5-1948

CG 85
(Rev. 1-47)

TREASURY DEPARTMENT
UNITED STATES COAST GUARD

NOTICE TO MARINERS

ISSUED BY THE COMMANDER, _____ COAST GUARD DISTRICT

FIFTH

ADDRESS:

P. O. BOX 540, NORFOLK 1, VA.

PHONE NO.: 22771

VIRGINIA---Chesapeake Bay---Southern Entrance York Spit Channel---Advice has been received that shoaling to the depth of 34 and 35 feet has occurred for a distance of about 600 yards to the eastward of YORK SPIT CHANNEL ENTRANCE LIGHTED WHISPLE BUOY 1A and on an approximate line thence to YORK SPIT CHANNEL LIGHTED BUOY 1. Deep draft vessels should keep close to the easterly side of the waterway between MIDDLE GROUND BUOY 14 and YORK SPIT CHANNEL LOWER END LIGHTED BUOY 2. This will be shown in detail in Fifth District Local Notice to Mariners No. 96, published 26 May, 1948.

(USC&GS chart 1222) ✓

NORTH CAROLINA---Seacoast---Firing may be expected between 1000 and 1200, on 25, 26 and 27 May, and between 0800 and 1630, on 27 May, in the vicinity of Browns Island. Vessels are advised to proceed with caution in this area.

(USC&GS chart 1234)

J. E. WHITBECK, Commodore, U.S.C.G.,
Commander, Fifth Coast Guard District.

Mariners are requested to report directly to the District Commander any defect in, or displacement of, an aid to navigation. Radio reports, for relay to the District Commander, should be prefixed COASTGUARD and transmitted direct to one of the Government shore radio stations listed under Communications in the Hydrographic Bulletin or under section 407, Radio Aids to Navigation (HO-205). If the radio call sign of the nearest Government shore radio station is not known, radiotelegraph communication may be established by the use of the general call NCG on the frequency of 500 kcs. Merchant ships may send messages relating to defects noted in aids to navigation through commercial facilities ONLY when they are unable to contact a Government shore radio station. Charges for these messages will be paid by the United States Coast Guard. Such cooperation will assist materially in the prompt correction of defects, and in the effective maintenance of aids to navigation.

PLEASE POST CONSPICUOUSLY

NOTICE No.

95

U. S. GOVERNMENT PRINTING OFFICE 16-12294-6

DATE:

25 May, 1948.

F. E. #5-1948

The original descriptive report was sent directly to the Washington Office from the field. The attached sheets are to be included to complete the report.

See also C.L. #418 (1948) for advance tracing

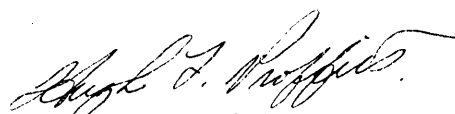
F.E. #5-1948

ADDENDUM
to accompany -
HYDROGRAPHIC SURVEY - CO-2148

CONTROL - Signals EAT and ABE were plotted directly on the smooth sheet with sextant angles, observed by field party on May 18. The remaining Hydrographic signals were plotted on Sun Azimuths and taut wire distances.

SOUNDINGS - Positions 55C to 68C. Hand lead soundings were taken simultaneously with fathometer soundings ~~in~~ these positions. From Pos. 55C to 61C the soundings are in fair agreement, however, on line 62C to 68C, which runs directly across current, the handlead sounding average 2 to 4 feet deeper than the fathometer. These ^{referred} handlead soundings were plotted on a ~~template~~ ~~which will be sent in with smooth sheet.~~ tracing enclosed in envelope of bar checks.

Respectfully submitted,



Hugh L. Proffitt
Engr. Draftsman

Norfolk, Va.
June 2, 1948

Approved & Forwarded



George L. Anderson
Supervisor S.E. District

F. E. # 5-1948

LIST OF SIGNALS
CO - 2148
York Spit Channel

Triangulation

NEW PT. COMFORT L.H., 1871-1932

YORK SPIT L.H. (VA.), 1900-32

FOX HILL, MUN. W.T. 1939

Hydrographic

Abe	Est
Boy	Gad
Cat	How
Dog	Ink

F.E. # 5-1948

TIDAL NOTE

CO -2148

York Spit Channel - Chesapeake Bay, Va.

The Standard Tide Gage at Sewalls Point, Hampton Roads, Virginia, was used to furnish tides for the reduction of soundings on Sheet CO-2148. A time correction of -20 minutes was applied.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

TO BE CHARTED }
~~TO BE DELETED~~ } STRIKE OUT ONE

Ship COWIE York Spit Channel, Va. May 24, 1948

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks, be charted on (*deleted from*) the charts indicated.

The positions given have been checked after listing.

E. B. Latham, Lt. Comdr.

Chief of Party.

GENERAL LOCALITY	POSITION					METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
	LATITUDE			LONGITUDE								DATUM
	°	'	D. M. METERS	°	D. P. METERS							
(F1 W) "5" (Eat)	37	12	1242.0	76	08	1268.0	NA-1927 Hydro.	5/18/48	✓		78 1222	
C-3 (Gad)	37	12	22.0	76	09	170.0	" "	" "		✓	"	
N-4 (Dog)	37	11	1724.0	76	08	1348.0	" "	" "		✓	"	
(F1 W) "1" (How)	37	11	310.0	76	09	670.0	" "	" "		✓	"	
(F1 R) "2" (Cat)	37	11	242.0	76	09	350.0	" "	" "		✓	"	
N-12 (ABE)	37	08	1410.0	76	08	1164.0	" "	" "		✓	"	
Whistle (FLW) "1A" (INK)	37	10	76.0	76	09	1038.0	" "	" "		✓	"	
N 14 (Boy)	37	10	02.0	76	09	212.0	" "	" "		✓	"	

This form should be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography:~~

1 July 1948

Division of Charts:

R. H. CARSTENS

Plane of reference approved in

3 volumes of sounding records for

~~HYDROGRAPHIC SHEET~~

FE No. 5 1948

Locality - York Spit Channel, Chesapeake Bay, Virginia

Chief of Party: E. B. Latham in 1948

Plane of reference is mean low water, reading

1.8 ft. on tide staff at Hampton Roads (N.O.B.)

13.5 ft. below B. M. 6 (1927)

Height of mean high water above plane of reference is 2.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division of Tides and Currents.~~

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E.#5-1948

Records accompanying survey:

Boat sheets .1...; sounding vols. 3.....; wire drag vols.;
 bomb vols.; graphic recorder rolls .4...;
 special reports, etc. Tidal Note, Landmarks for Chts., List of Signals,
 Tautwire Traverse Obs., Azimuth by inclined angle, Bar Checks, Etc.....

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

Number of positions on sheet	.....	359
Number of positions checked	.....	74
Number of positions revised	.....	5
Number of soundings revised (refers to depth only)	.....
Number of soundings erroneously spaced	.....	11
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	0
Junctions	Time	0
Verification of soundings from graphic record	Time	3

Verification by *S. S. Williard* Total time *52 hrs* Date *9/20/48*

Reviewed by *J. J. Jordan* Time *8* Date *10/14/48*

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF FIELD EXAMINATION

REGISTRY NO. FE 5, 1948

FIELD NO. CO-2148

Virginia, Chesapeake Bay, York Spit Channel
Surveyed in May, 1948
Project No. -----
Scale 1:20,000

Soundings:

808 Fathometer

Control:

Visual fixes on buoys

Chief of Party - E. B. Latham
Surveyed by - E. B. Latham and C. A. Schoene
Protracted by - A. G. Atwill
Soundings plotted by - A. G. Atwill
Verified and inked by - G. S. Hilliard
Reviewed by - G. F. Jordan, October 14, 1948
Inspected by - R. H. Carstens

1. A complete description of this field examination and the control signals is given in the Descriptive Report. The smooth sheet has been cut to filing size and is enclosed with the accompanying records.
2. Prior survey H-4039 (1918) does not show close development in this area, but a comparison with the present survey reveals that in the area of ship groundings in the vicinity of lat. $37^{\circ} 10.2'$, long. $76^{\circ} 09.5'$, the 34-ft. depths on the present survey are 1-ft. shoaler than depths on H-4039. One other change is noted on the east side of the channel in lat. $37^{\circ} 10'$ where the 30-ft. curve is now 150 meters nearer to the dredged channel.
3. A comparison with Chart 1222 (print date of May 24, 1948, hand-corrected) shows that present depths do not conflict with the controlling depth of 36 feet in 1947. Buoys Nos. 1, 1A and 14 were changed in position or type subsequent to the survey (H.O. N.M. Nos. 24 and 38, 1948), but other aids are in substantial agreement with those on the chart.

SHEET CO-2148

COMPARISONS

DAY	Leadline	Fath.	Correct			DAY	Leadline	Fathometer	Corr.			
A	41.5	42.0	-0.5			C	42.0	41.5	+0.5			
	41.5	42.0	-0.5				41.5	41.5	0.0			
	42.0	42.0	± 0.0				42.0	41.5	+0.5			
Mean			-0.3				42.0	42.0	0.0			
B	30.5	30.5	0.0			Mean	41.5	42.0	-0.5			
	30.0	30.5	-0.5							+0.1		
	30.0	30.0	0.0					44.0	44.5	-0.5		
	30.5	30.5	0.0					44.0	44.0	0.0		
	30.5	30.5	0.0					44.0	44.0	0.0		
Mean			-0.1				44.0	44.0	0.0			
	41.0	40.5	+0.5				44.5	44.0	+0.5			
	40.5	40.0	+0.5			Mean			0.0			
	40.5	40.0	+0.5			D	40.5	40.5	0.0			
	40.5	40.0	+0.5				40.0	40.5	-0.5			
	40.5	40.0	+0.5				40.5	41.0	-0.5			
	40.5	40.0	+0.5				40.5	40.5	0.0			
Mean			+0.5				40.5	41.0	-0.5			
	35.0	35.0	0.0			Mean			-0.3			
	35.0	35.0	0.0				40.5	39.5	+1.0			
	35.0	35.0	0.0				40.0	39.5	+0.5			
	35.0	35.0	0.0				39.5	39.5	0.0			
Mean			0.0				39.5	39.5	0.0			
						Mean			+0.3			

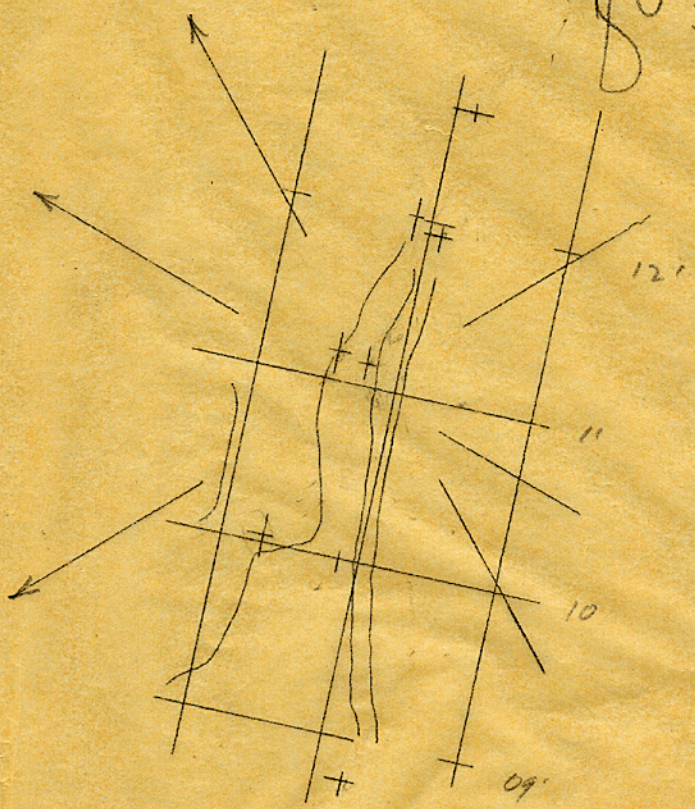
MEAN CORRECTION - A, B, C, & D DAYS - 0.0 FT.

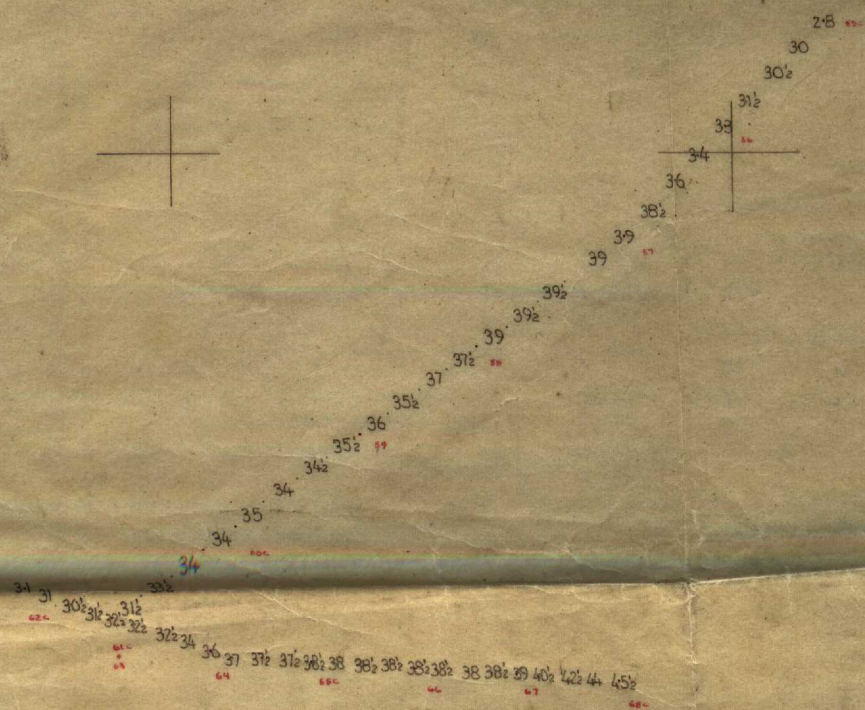
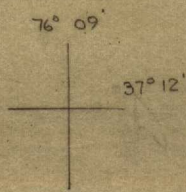
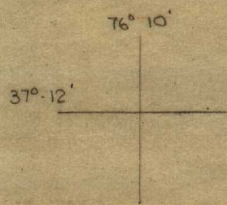
U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
LIST OF SPECIES

JULY 22 1948

ACC. NO. S-2587

5-
48





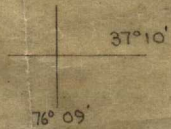
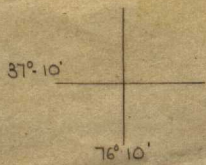
Co-2148

Overlay showing LL soundings

taken May 17, 1948

positions 55C-6BC ✓

CHESAPEAKE BAY - YORK SPIT



TO ACCOMPANY H

FE No. 5

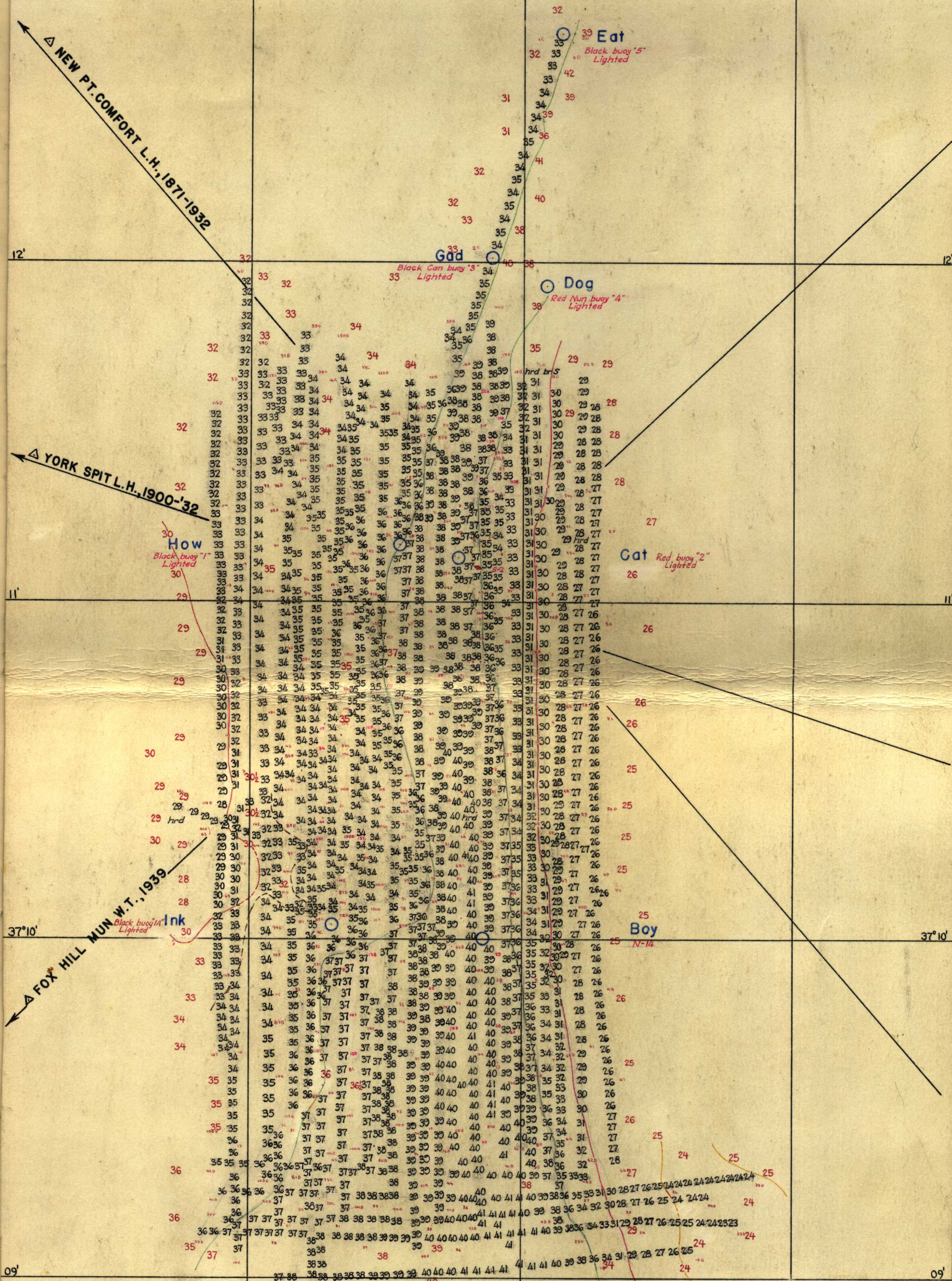
1948

File with
FE 5 (1948) RAC

NEW PT. COMFORT L.H., 1871-1932

YORK SPIT L.H., 1900-'32

FOX HILL MUN W.T., 1939



NAUTICAL CHARTS BRANCH

SURVEY NO. FE 5 1948

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2/4/49	75	<i>J. M. Gann</i>	Before <u>After</u> Verification and Review
14 Apr 49	122		
14 Apr 49	1222	<i>Richards</i>	Before After Verification and Review
10-6-59	562	R. F. Elkin	Before After Verification and Review <i>Completely Applied.</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

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.