

# FE 137

Diagram No. 78-3

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-1756  
Office No. .... FE-137

### LOCALITY

State ..... Virginia  
General Locality ..... James River  
Locality ..... Jamestown

1956

CHIEF OF PARTY  
CDR E.L. Jones

### LIBRARY & ARCHIVES

DATE ..... April 17, 1956

☆ 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. 3 1956

FE 137

# FENo. 3 1956

Diag. Cht. No. 78-3

Form 504 U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE  DESCRIPTIVE REPORT	
Type of Survey <u>HYDROGRAPHIC</u>	
Field No. <u>CO-1756</u>	Office No. <u>E.E. No. 3, 1956</u>
LOCALITY	
State <u>VIRGINIA</u>	
General locality <u>JAMES RIVER</u>	
Locality <u>JAMESTOWN</u>	
<u>1956</u>	
CHIEF OF PARTY <u>COMMANDER EDMUND L. JONES</u>	
LIBRARY & ARCHIVES	
DATE <u>APR 17 1956</u>	

B-1870-1 (1)

FENo. 3  
1956

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. ....

Field No. **CO-1756** .....

State **VIRGINIA** .....

General locality **JAMES RIVER** .....

Locality **JAMESTOWN** .....

Scale **1:10,000** Date of survey **3 - 5 April 1956** .....

Instructions dated **2 March 1956** .....

Vessel **COWIE** .....

Chief of party **COMMANDER EDMUND L. JONES** .....

Surveyed by **E. L. Jones, B. E. Greene, O. L. Doster and C. I. Harding** .....

Soundings taken by fathometer, graphic recorder, hand lead, wire **Fathometer, Hand Lead, Wire** .....

Fathograms scaled by **Ships Personnel** .....

Fathograms checked by **C.I. Harding** .....

Protracted by **C.I. Harding** .....

Soundings penciled by **W.W. Feazel** .....

Soundings in ~~XXXXXX~~ feet at MLW ~~MLW~~ .....

REMARKS: **Revision of Shoreline and location of graphic control stations on photographic copy of 8076 which is considered part of the hydrographic records.**

8773

DESCRIPTIVE REPORT  
TO ACCOMPANY

HYDROGRAPHIC SHEET (FIELD) NO. CO-1756

JAMES RIVER  
AT  
JAMESTOWN, VIRGINIA

SHIP COWIE  
1956

COMMANDER EDMUND L. JONES, COMMANDING

A - PROJECT:

Project 1398, the instructions for which are dated 2 March 1956, consists of a small hydrographic survey of the site of construction of a 1500 foot ferry pier and area under consideration for dredging operations on the James River in the vicinity of Jamestown, Virginia. This work was requested by the Jamestown Festival Committee in connection with construction for the 350th anniversary commemorating the founding in 1607 of the first colony on Jamestown Island.

A copy of the instructions are attached.

B - SURVEY LIMITS AND DATES:

The limits of this hydrographic survey are shown on attached copy of the progress sketch on the scale of Chart No. 530 (1:40,000).

The area is on the northern shore of the James River immediately to the northwest of the northwest corner of Jamestown Island and extends along the north shore for about 1000 meters.

The field work was started on 3 April and completed on 5 April 1956.

The prior survey covering the project area was done in 1948 on 1:10,000 scale hydrographic sheets H-7641 and H-7642. Four photographic copies of topographic sheet T-8076 (1:10,000 scale) were furnished by the Washington Office for boat sheet, smooth sheet, and topographic sheet (revision of topography and location of graphic control).

C - VESSELS AND EQUIPMENT:

The new Eastern Shore built Launch No. 178 with 808 type fathometer No. 114S was used only on the offshore part of the project due to the foul and shoal inshore areas. The inshore area was done by hand lead and pole with 25-foot skiff No. 749 powered with outboard motors.

All field parties were operated from the Ship COWIE anchored on the south side of the James River opposite Jamestown Island.

D - TIDE AND CURRENT STATIONS:

A tide staff was established on the Jamestown Island ferry pier and connected to the previously established tidal bench marks on Jamestown Island by levels. Staff readings were taken at half-hour intervals while hydrography was in progress. The soundings were reduced based on the 18 July 1951 published elevation above mean low water of the tidal bench marks. Tide observations and soundings are on eastern standard time.

No current observations were observed.

E - SMOOTH SHEET:

A photographic copy of topographic sheet T-8076 was furnished for a smooth sheet. The smooth sheet will be plotted by a Junior Officer under the supervision of the Norfolk Processing Office.

F - CONTROL STATIONS:

Triangulation Stations	Hydrographic Name
Jamestown Monument, 1910	Mon
New Pine, 1938	Pin
White House S. Gable, 1938	Gab

Topographic Stations - located by plane table on sheet T-8076 print.

*12 m. SW ~~oo~~ with  $\Delta$  and old pos*  
 Win - Windmill moved from <sup>old</sup> location on T-8076.  
*ca 50 ft windmill over 8x18' bldg* Located by cuts and checked by tape distance from triangulation station White House S. Gable, 1938.

- Pie - Temporary banner on new ferry pier.
- Sip - Banner on cypress tree in water.
- Res - Banner on cypress tree on MHW line. Witness mark No. 3 of triangulation station Cypress, 1870. The station was not recovered.
- Pit - 3-pile cluster in water believed to be old dredging range. Located on boat sheet in advance of plane table by recorded sextant fix.
- Las - Banner on tree. Located on boat sheet in advance of planetable by recorded sextant fix.
- (Hydro Sta)* Roy - Banner on up-ended tree on shore line. Located by planetable cuts and recorded sextant fixes.
- San - Temporary signal on bridge approach fill.

G - SHORELINE AND TOPOGRAPHY:

Basic shoreline and topography for this survey are from air photographic survey T-8076, 1942. Revisions to shoreline and topographic details and location of hydrographic signals were accomplished by planetable graphic control methods directly on a section of a photostat copy of T-8076. This sheet is submitted as a part of this hydrographic survey.

The principle features of the revision are the addition of the new ferry pier at latitude  $37^{\circ} 13.4'$ , Longitude  $76^{\circ} 47.4'$ , which is now under construction, the new highway fill and bridge across the entrance of Sandy Bay, and the erosion of the shoreline between these two features back to a distance of about 10 meters. The new Virginia Department of Highways Ferry pier mentioned above is completed to a distance of 100 meters offshore. Construction underway at this time of the survey extends an additional 36 meters offshore. From information obtained locally the proposed completed length of the pier is approximately 1500 feet. A cut showing the extension of the south side of the pier is shown on the topographic sheet. A narrow channel is being dredged on the north side of the pier and the dredge tailings are being dumped parallel to it on the north side as shown on the sheet. The new highway across the mouth of Sandy Bay which is now under construction will connect Jamestown Island with Glass House Point.

A concrete bridge is being constructed across an opening in the fill which will admit passage of small boats. When completed, the

overhead clearance will be about 12 feet above mean high water.

The highway fill on the north side of the bridge is now complete to its final height but on the south side of the bridge it is not. There is a wooden retaining wall along the entire east side of the fill. This wall is at the mean high water line except for a section of about 100 meters at its northern end. It is about 3 feet above mean high water at the top.

Incidental to the revision described above, shoreline changes on Swann Point were noted. At triangulation station CYPRESS, 1870, the shoreline has eroded back to a maximum distance of 10 meters resulting in the loss of the station mark. Shoreline revision shown on the topographic sheet in this vicinity was located by planetable. The north shore of the small islet 400 meters east of Swann Point has eroded away considerably from what is shown on T-8076. The revision sketched by the topographer is approximate and agrees closely with revision sketched by hydrographer on H-7641 and H-7642.

The following topographic stations shown on T-8076 are lost. Windmill, latitude  $76^{\circ} 47.6'$ , longitude  $34^{\circ} 13.85'$  has been torn down. A new windmill, station WIN on the present survey, has been erected about 8 meters closer to the shoreline over a low 8 foot by 18 foot building. South Gable, 1942, latitude  $37^{\circ} 12.9'$ , longitude  $76^{\circ} 46.7'$ , has been destroyed.

Triangulation Stations CHURCH POINT LIGHT, 1938 and SWANN POINT SHOAL CHANNEL, FRONT RANGE LIGHT, 1938 have both been destroyed. SWANN POINT SHOAL CHANNEL, FRONT RANGE LIGHT has been established 630 meters off shore from the former location. It is a temporary light atop a 2-foot square wooden box, 10 feet above mean high

See Review



water on a single pile. It was not operating at the time of this survey. *Lt subsequently moved to permanent structure - see H.O. N to M 17(1957)*

SWANN POINT SHOAL CHANNEL REAR RANGE LIGHT was recovered but its position was not verified. A sextant angle taken at the front range light to the rear range light to determine the bearing of Swann Point Shoal Channel Range indicates that the rear range light is about 12 meters south of the position shown on T-8076. *See Review Lt subsequently moved to a new position - see H.O. N to M 16(1957)*

Declinatoire observations at the new ferry pier indicate a variation of 3 degrees east, an anomaly of about 9 degrees. This may be due to the heavy reinforcing steel in the pier over which the planetable was set up.

H - SOUNDINGS:

Soundings were taken with 808 Fathometer No. 114S, hand lead and sounding pole. Depths measured by fathometer, hand lead and sounding pole agree satisfactorily, and depth curves can be adequately drawn at the junctions. Vertical casts were used to obtain fathometer corrections.

I - CONTROL OF HYDROGRAPHY:

The hydrography was controlled by 3-point fixes on signals previously listed.

J - ADEQUACY OF SURVEY:

This survey is adequate and complete as of the date of the field operations. Dredging of a boat basin as contemplated within this next year will again change many of the depths in this area.

K - CROSSLINES:

Crosslines are in good agreement and comprise approximately 10% of the principal system of lines.

L-M - COMPARISON WITH PRIOR SURVEYS AND CHARTS:

The two pilings shown on H-7641 in latitude 37° 13.20', longitude 76° 46.45' was not found during this survey. Since these piles were in 9 foot depths they may have been broken off and still constitute a danger to inshore navigation. It is recommended that they be retained on the chart as submerged piling.

*Retain on chart*

The old survey does not show two parallel rows of piling extending offshore from the new ferry pier in latitude 37° 13.3', longitude 76° 47.4'. There are 21 pilings in the northwestern row and 11 in the eastern row. All of these piling extend above MHW generally 6 to 8 feet. Some of the piling appear to have been in place for some years while the majority are newly driven. As the construction of the new ferry pier progresses most of the eastern row will have to be removed.

The piling of dock ruins shown on H-7641 in latitude 37° 13.2', longitude 76° 47.3' is still there. There are 118 broken pilings in this double row which extend above MLW. About half of the piling extend 1 - 2 foot above MHW.

A least depth of 2.6 feet was obtained at latitude 37° 13.00', 30 sec. after 46c (purple) 15 seconds after position 24a (blue) which falls in general depths of 4 to 6 feet on the 1948 survey. A choppy sea caused launch 178 to touch bottom at this point.

*2 ft. sdg. smooth plotted.*

*There is a sdg. of 2.8 ft.*

The depths in the offshore area of the present survey beyond 10 feet agree closely with the previous survey. Due to the dredging operations for the fill across Powhatan Creek and Back River the in-shore depths are in general greatly changed.

See  
Review

According to Mr. King Meehan, Director of Special Projects, Jamestown Festival Committee, Post Office Box 1835, Williamsburg, Virginia additional dredging to form a boat basin may soon be started. The tentative area under consideration is immediately to the east of the new ferry pier. It is likely that all of the broken piling now in the area surveyed will be removed before the Jamestown Festival next year.

N - DANGERS AND SHOALS:

In addition to the many pilings discussed under heading L-M there are numerous old scattered fish stakes inshore from the 8 foot depths which constitute a danger for launch and small boat navigation.

O - COAST PILOT INFORMATION:

The following notes apply to Coast Pilot No. 3, Atlantic Coast (Sixth Edition) 1953:

Page 236, lines 2, 3 and 4

Although the Government wharf has a 22 foot depth at the face, the wharf is in ruins and unsafe for all vessels to tie to. There is no water piped to the wharf. 20 to 30 feet of the inshore end of the wharf has been removed. There are no stores operating either at Jamestown or Scotland and no supplies available.

Page 236, line 12

Back River is more commonly referred to locally as The Thorofare.

Page 236, lines 26 and 27

Part of the piling at the old Scotland Lumber wharf (referred to as the old Scotland wharf in the Coast Pilot) are submerged.

Page 236, lines 12 and 17

A hydraulic fill pumped from the James River has been built up across the mouth of Back River and Powhatan Creek. The Concrete bridge now under construction is to have a vertical clearance above mean high water of 12 feet. Topographic revision of this detail is shown in red on a photographic copy of T-8076.

P - AIDS TO NAVIGATION:

Floating aids to navigation in this general area fall outside hydrographic area and were not located.

The following non-floating aid to navigation, shown on Chart No. 530, were found destroyed:

1. Swan Point Shoal Channel, Front Range (triangulation station Swann Point Channel Front Range Light, 1938).
2. The two "markers" on either side of the Swan Point Shoal Channel Range at latitude 37° 13.3', longitude 76° 47.7' have been removed.

Deleted from Ch. 530. (print date 7-8-77)

Form 567 is submitted for the following non-floating aid to navigation not previously charted on Chart No. 530:

Swan Point Shoal Channel, Front Range - a white light, which would show ~~around~~ the horizon but does not appear to be in operation, is on the top of lone pile at latitude 37° 13.30',

longitude  $76^{\circ} 47.72'$ . The range piling appears to be of a temporary nature. The position of this range is located by planetable cuts on the photographic copy of sheet T-8076.

Q - LANDMARKS FOR CHARTS:

The land marks charted in the vicinity of Jamestown Island and Scotland, Virginia were viewed from seaward and are recommended for continuation on chart No. 530.

R - GEOGRAPHIC NAMES:

Geographic names were investigated in the field for that section of James River on chart No. 530 east of longitude  $76^{\circ} 50'$ .

The following local residents were contacted and verified all of the charted geographic names as well established in local useage except for Back River:

Mr. H. W. Williams  
Captain, Jamestown-Scotland Ferry  
Severn, Virginia

Mr. Smith, Postmaster  
Jamestown, Virginia

Mr. E. F. Younglobe  
Captain, Jamestown-Scotland Ferry  
Scotland, Virginia

The name Back River (latitude  $37^{\circ} 12.8'$ , longitude  $76^{\circ} 46.7'$ ) is used to some extent locally but is more often referred to as The Thorofare which is shown on Sheet T-8076 and Chart No. 529 as a larger body of water on the north side of Jamestown Island which connects with Back River. No change in charting of this name is recommended.

The name Glass House Point which applies to the point of land between Powhatan Creek and James River (latitude  $37^{\circ} 13.2'$ , longitude  $76^{\circ} 47.0'$ ) is well established in local useage and verified by the residents contacted. This name is correctly shown on the 1942 topographic sheet T-8076. Excavations reveal that it was here that the first glass was produced in America in 1608. Because of it's historical significance and because of its wide useage both in published sources and locally, it is recommended that the name Glass House Point be charted.

U-Y - MISCELLANEOUS:

Fathometer corrections were obtained by 17 vertical casts on 3 April for soundings (27 positions) taken that day. An abstract of these corrections is included in this report.

Z - TABULATION OF APPLICABLE DATA:

A list of signals is attached to sounding volume record No. 1.

Respectfully submitted,

*Bruce E. Greene*  
Bruce E. Greene  
Lieutenant, US&GS

*Oscar L. Doster*  
Oscar L. Doster  
Ensign, US&GS

Approved and Forwarded  
9 April 1956

*Edmund L. Jones*  
Edmund L. Jones  
Commanding Ship COWIE

TIDE NOTE

HYDROGRAPHIC SHEET CO-1756

JAMES RIVER, VIRGINIA

A tide staff was established on the west side of the present ferry pier at Jamestown, Virginia, (latitude  $37^{\circ} 12.63'$ , longitude  $76^{\circ} 46.66'$ ) and connected to existing tidal bench marks by levels. Tides were observed at half hour intervals (eastern standard time) while hydrography was in progress. Tide curves were plotted and the tide reducers were entered in the sounding volume and checked.

ABSTRACT OF CORRECTIONS  
TO ACCOMPANY DESCRIPTIVE REPORT

FATHOMETER CORRECTIONS:

Fathometer Reading (Feet) A Scale	Correction (Feet)
0 - 4.0	<del>0.2</del>
4.5 - 9.0	0.0
9.5 - 13.5	-0.2
14.0 - 18.5	-0.4
19.0 - 23.0	-0.6
23.5 - 28.0	-0.8
28.5 - 32.5	-1.0
33.0 - 37.0	-1.2
37.5 - 42.0	-1.4
42.5 - 46.5	-1.6
47.0 - 51.0	-1.8

B Scale

No soundings on B Scale

LEAD LINE CORRECTIONS:

Mark (Feet)	True Depth (Feet)	Mark (Feet)	True Depth (Feet)
6	6.00	30	30.00
12	12.00	36	36.00
18	18.00	42	42.00
24	23.95	48	48.00

No Corrections Applied.

Comp: B.E.L.  
✓ GH



ABSTRACT OF CORRECTIONS  
TO ACCOMPANY DESCRIPTIVE REPORT

INITIAL CORRECTIONS:

LAUNCH 178

Position 1a to Position 7a plus 45 seconds	0.0
Position 7a plus 1 minute to Position 8a plus 30 seconds	-0.2
Position 8a plus 45 seconds to Position 14a plus 15 seconds	0.0
Position 14a plus 30 Seconds to Position 15a plus 1 minute	0.2
Position 15a plus 1 minute 15 seconds to Position 27a	0.0

Comp. B.E.G.  
r 94

TIDE REDUCERS

Elevation above zero of tide staff (feet)	Elevation above MLW (feet)	Elevation of Staff Zero above MLW (feet)
BM No. 1 13.172	10.91	-2.26
BM No. 2 14.507	12.24	-2.27
BM No. 3 19.469	17.19	-2.28

Mean -2.27 Feet

4 April 1956

5 April 1956

Time	Reducer	Time	Reducer
0750 - 0800	2.0	0745 - 0900	2.0
0800 - 0830	1.8	0900 - 0920	1.8
0830 - 0920	1.6	0920 - 1000	1.6
0920 - 0948	1.4	1000 - 1030	1.4
0948 - 1013	1.2	1030 - 1115	1.2
1013 - 1100	1.0	1115 - 1130	1.0
1230 - 1300	0.6	1245 - 1300	0.8
1300 - 1430	0.4	1300 - 1430	0.6
1430 - 1500	0.6	1430 - 1500	0.8

Comp. B.B.G  
✓ GH

STATISTICS

HYDROGRAPHIC SHEET (FIELD) NO. CO-1756

JAMES RIVER, VIRGINIA

STATISTICS:

	<u>Day</u>	<u>Date</u>	<u>Sdg. Vol. No.</u>	<u>Statue Miles</u>	<u>Positions</u>
Launch No. 178	a	3 April	1	2.7	27
Skiff No. 749	a	3 April	1	-	13
	b	4 April	1	3.7	60
	c	5 April	1	<u>7.2</u>	<u>108</u>
TOTAL:				10.9	171
Area, square statue miles				2.0	

76° 50'

JAMES  
RIVER

Jamestown I.  
tide staff

COAST & GEODETIC SURVEY  
H. ARNOLD KARO, DIRECTOR  
SHIP COWIE  
PROJECT CS-1398  
PROGRESS SKETCH  
JAMES RIVER

37° 10'

3-5 APRIL  
1956  
E.L. JONES, CDR

scale 1:40000, Chart 530

FORM 537a  
(9-24-47)

DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO.

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE

VIRGINIA

GENERAL LOCALITY

JAMES RIVER

LOCALITY

JAMESTOWN

SCALE

1:10,000

DATE OF SURVEY

3 - 4 April

, 1956

VESSEL

Ship **COWIE**

CHIEF OF PARTY

COMMANDER EDMUND L. JONES

SURVEYED BY

B. E. Greene

INKED BY

B. E. Greene

HEIGHTS IN FEET ABOVE MHW OR None

TO GROUND

TO TOPS OF TREES

CONTOUR

None

APPROXIMATE CONTOUR

None

FORM LINE INTERVAL

None

FEET

PROJECT NUMBER

1398

REMARKS

This sheet a photographic copy of T-8076 used for revision of shoreline and location of graphic control stations. It is submitted as part of the hydrographic records.

ADDENDUM  
To Accompany

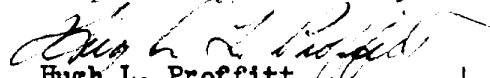
HYDROGRAPHIC FIELD EXAMINATION Co-1756

GENERAL

This survey was smooth plotted under supervision of the Norfolk Processing Office by Deck Officer C.I. Harding. It appears to be an excellent field examination and no difficulty was experienced with the plot.

Due to the extreme congestion of hydrographic lines, parts of the survey are being submitted on two overlays. The depth curves were drawn on the basic sheet with consideration being given to soundings on the overlays.

Respectfully submitted,

  
Hugh L. Proffitt  
Cartographer

Norfolk, Va.  
13 April 1956



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

James town, Virginia

5 April

19 50

~~TO BE CHARTED  
OR BE DELETED~~

STRIKE OUT ONE

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 by \_\_\_\_\_

Edward L. Jones,

Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE * D. M. METERS //	LONGITUDE * D. P. METERS //							
	P1 1 Sec	Swann Pt. Shoal Channel Point Range Light		87 13	562.5	76 47	1659.5	NA 192 Control	4/4/50	22		580

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. 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.  
\* TABULATE SECONDS AND METERS



R116

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

11 May 1956

Division of Charts: R. H. Carstens

Plane of reference approved in  
1 volume~~s~~ of sounding records for FE No. 3 1956

HYDROGRAPHIC SHEET

Locality Jamestown, Island, Virginia

Chief of Party: E. L. Jones in 1956  
Plane of reference is mean low water, reading  
2.3 ft. on tide staff at Jamestown Island  
10.9 ft. below B. M. 1 (1910)

Height of mean high water above plane of reference  
is 2.0 feet.

Condition of records satisfactory except as noted below:



Branch  
Chief, ~~Division of~~ Tides ~~and Currents~~

# GEOGRAPHIC NAMES

Survey No. **F.E.No. 3**, 1956

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
											1
											2
											3
											4
											5
											6
											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E. No. 3, 1956

Records accompanying survey:

Boat sheets .1....; sounding vols. .1....; wire drag vols. ....; bomb vols. ....; graphic recorder rolls .1-Envelope special reports, etc. .1-Smooth sheet, 2-Overlay Tracings, 7-Recover Notes Triangulation, and 1-Print of T-8076 (Topographic Survey).....

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

Number of positions on sheet		171	
Number of positions checked		14	
Number of positions revised		0	
Number of soundings revised (refers to depth only)		0	
Number of soundings erroneously spaced		0	
Number of signals erroneously plotted or transferred		0	
Topographic details	Time	1	
Junctions	Time	0	
Verification of soundings from graphic record	Time	1	
Verification by <i>J. J. Bestund</i> .....	Total time	36	Date 6-26-57
Reviewed by <i>J. J. Bestund</i> .....	Time	12	Date 6-27-57

Field Examination No. 3, 1956

The field examination was accomplished in accordance with the instructions for Project 1398, contained in the Director's letter dated 2 March 1956. The field examination consists of small hydrographic and topographic surveys. The hydrographic survey covers the area immediately north of Jamestown, Virginia, where a ferry pier and a causeway connecting Jamestown Island with the mainland to the north are under construction. The topographic survey consists of shoreline revisions which are shown in red color and the location of supplemental horizontal control for the hydrographic survey. Both surveys have been smooth-plotted on photographic copies of T-8076. Supplementary bottom characteristics are plotted on tracing cloth.

A comparison of the field examination with surveys H-7641 and H-7642 of 1948, shows only minor 1 - 2 ft. differences in depths greater than 10 ft. In lesser depths differences of as much as 27 ft. between the present and prior surveys are noted. These differences in depths are caused by dredging operations for the fill across Powhatan Creek and Back River, and the construction of the ferry pier mentioned above. Several piles have been carried forward from H-7641 (1948) to the present survey. With the addition of these piles the present survey supersedes the prior surveys within the common area.

The work was applied to chart 530, dated 8 July 1957, prior to verification and review of the field examination. No differences between the field examination and the charted depths were noted. However, the following discrepancies between the charted and field examination data are noted:

1. Swann Pt. Shoal Channel F. R. Light located on the field examination topographic survey in lat.  $37^{\circ}31.31'$ , long.  $76^{\circ}47.72'$ , is charted about 95 meters to the eastward. It was located on a temporary structure (See pg. 5 of the Descriptive Report) at the time the present survey was accomplished, and was subsequently moved to a permanent structure (H.O.N. to M. 17, 1957.).
2. Swann Pt. Shoal Channel R. R. Light located on the field examination topographic survey in lat.  $37^{\circ}13.36'$ , long.  $76^{\circ}46.99'$  (see pg. 6 of the Descriptive Report), is charted about 200 meters to the west-southwestward. The light was moved and reestablished subsequent to the present survey (H.O.N. to M 16, 1957).

The Descriptive Report adequately covers all matters pertaining to the examination. No further discussion is considered necessary.

Reviewed by - I. M. Zeskind  
27 June 1957

Inspected by - R. H. Carstens

11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0  
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

1956

Mar 6

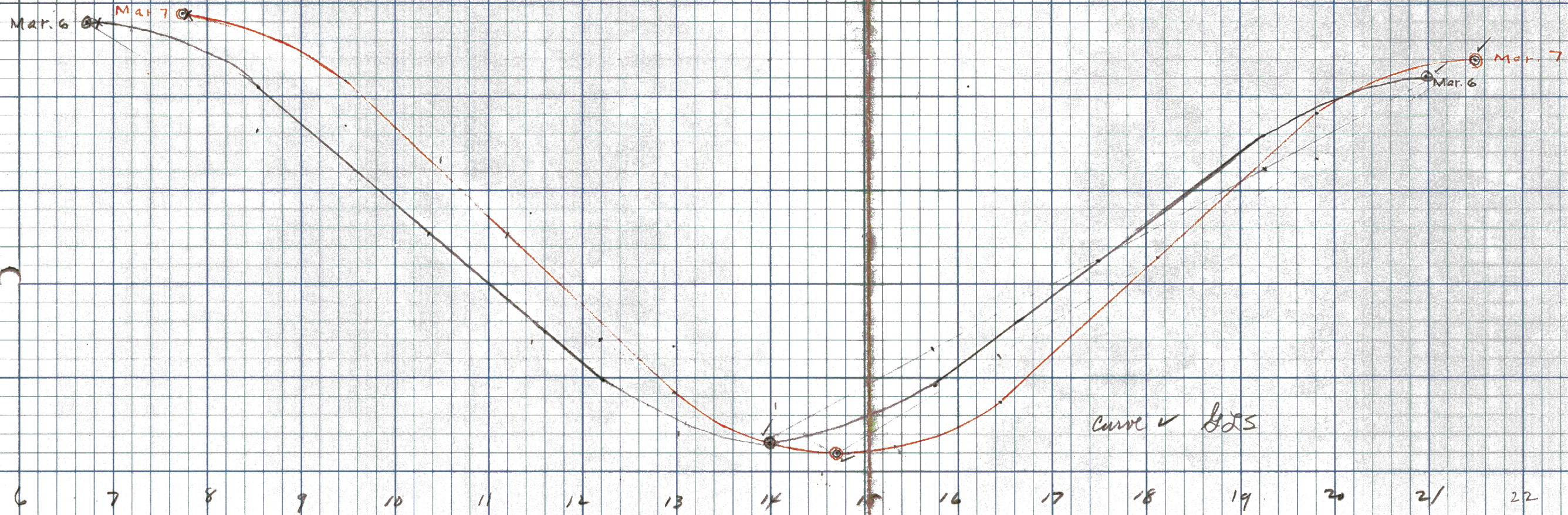
Mar 7

1130-1136 - 1.6 ✓  
 - 1149 - 1.4 ✓  
 1205 - 1.2 ✓  
 1220 - 1.0 ✓  
 1242 - 0.8 ✓  
 1306 - 0.6 ✓

1036-1049 - 3.0 ✓  
 1102 - 2.8 ✓  
 1114 - 2.6 ✓  
 1127 - 2.4 ✓  
 1140 - 2.2 ✓  
 1152 - 2.0 ✓  
 1205 - 1.8 ✓  
 1218 - 1.6 ✓  
 1230 - 1.4 ✓  
 1243 - 1.2 ✓  
 1255 - 1.0 ✓  
 1309 - 0.8 ✓  
 1327 - 0.6 ✓  
 1400 - 0.4 ✓

Scaled G.L.F.  
✓ G.L.F.

Scaled G.L.F.  
✓ G.L.F.



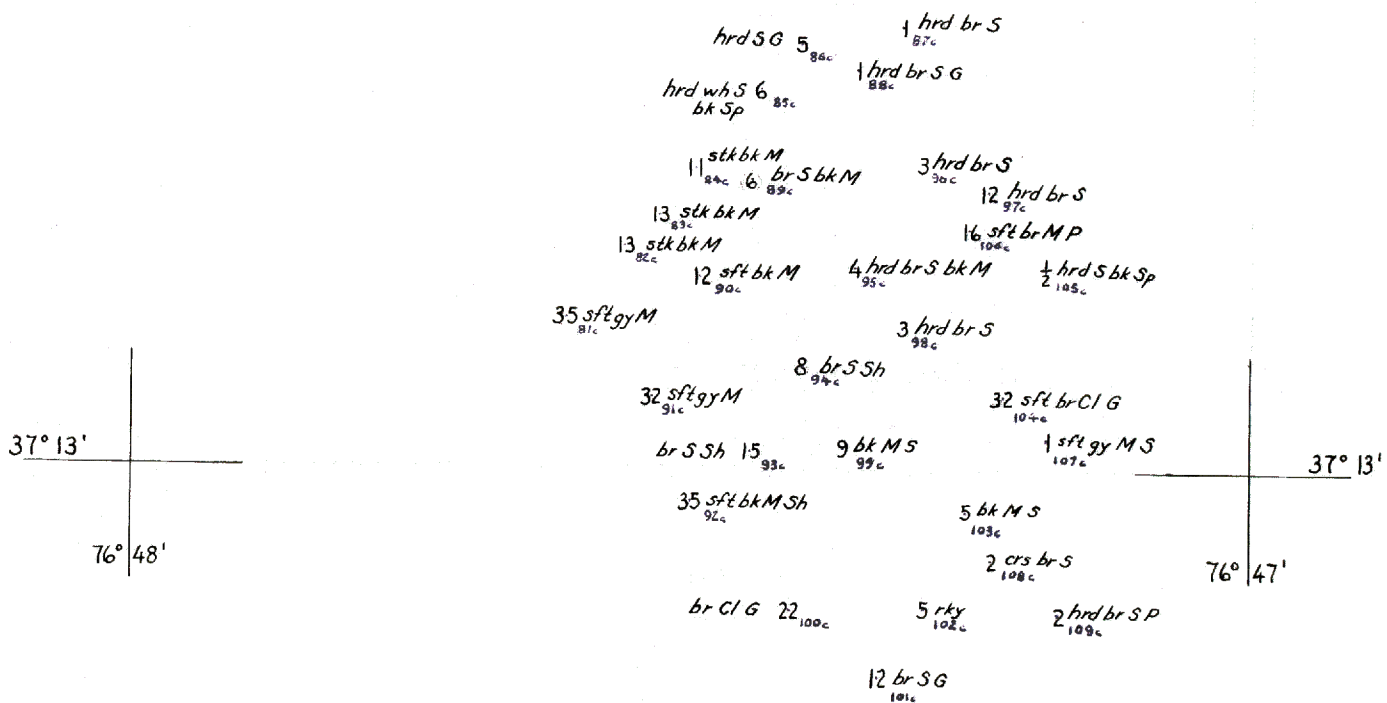
Curve & G.L.F.

76° 48'  
37° 14'

76° 47'  
37° 14'

F. E. No. 3, 1956  
BOTTOM CHARACTERISTICS  
JAMESTOWN ISLAND, VIRGINIA

Scale: 1 - 10,000  
Ship - COWIE April, 1956



48'

76° 47'

37° 13'

piles 1 ft. above H.W.  
from H-7641 (1948)

(temp) **Pie**  
concrete ferry pier under construction  
proposed length approx. 1500 ft.  
dredge tailings

(dredging range marker) **Rit**

SWANN PT. SHOAL CHANNEL  
REAR RANGE LT. 1942

SWANN PT. SHOAL CHANNEL  
REAR RANGE LT. 1942

**Roy**

**Lus**

MHW line

**San**

Fixed Bridge under construction  
proposed vert. cl. 12 ft.

**Sandy Bay**  
Retaining wall

**Sip**  
(tree)

MUSEUM  
USE, 1938

Church Pt

GOVERNMENT  
WHARF

FERRY  
SLIP

**Tide Sta**

# FIELD EXAMINATION No. 3, 1956

## VIRGINIA

## JAMES RIVER

## JAMESTOWN ISLAND

Scale: 1-10,000

Ship COWIE April, 1956

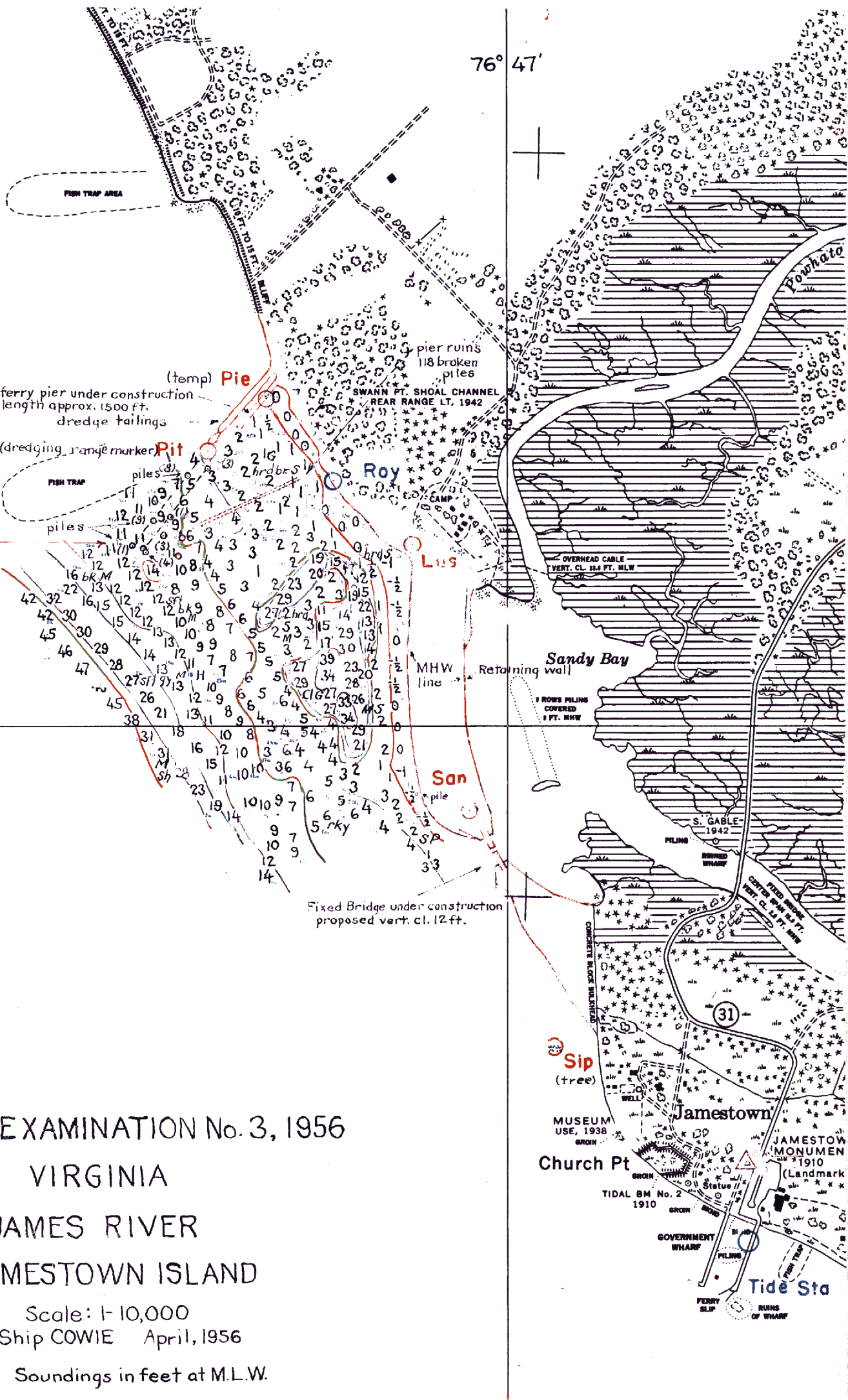
Soundings in feet at M.L.W.

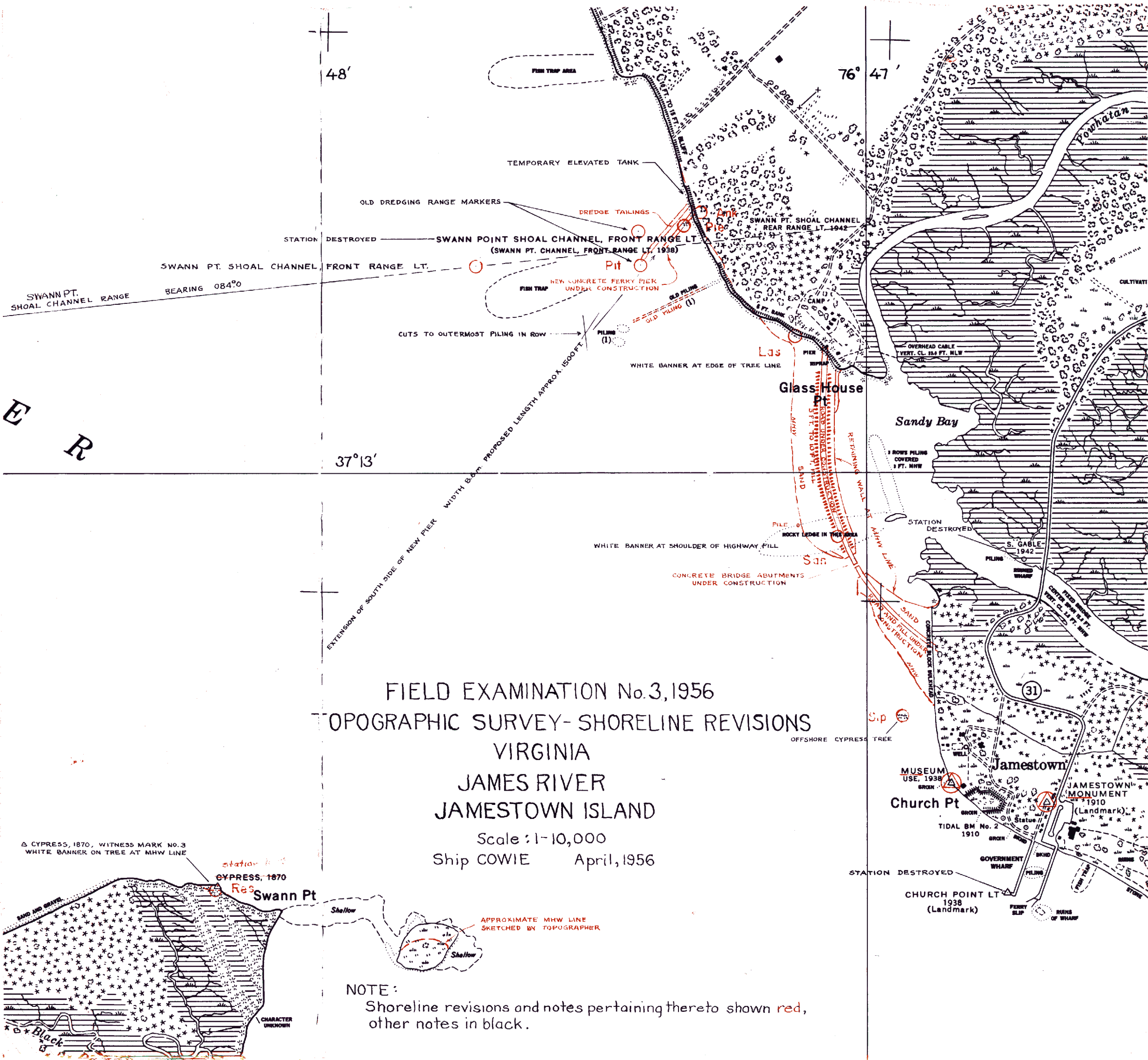
S.S. 1870

Swann Pt

Shallow

Shallow





48'

76° 47'

37° 13'

E R

FIELD EXAMINATION No. 3, 1956  
 TOPOGRAPHIC SURVEY - SHORELINE REVISIONS  
 VIRGINIA  
 JAMES RIVER  
 JAMESTOWN ISLAND

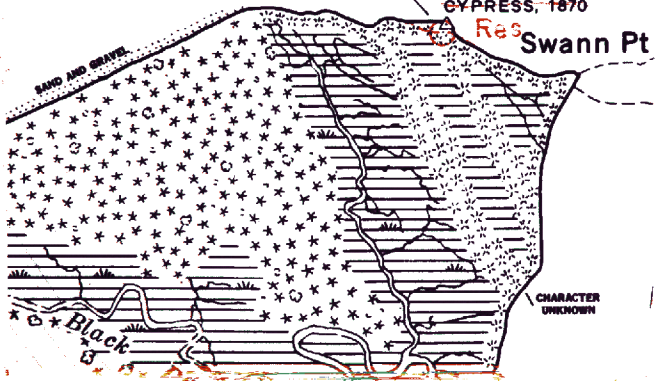
Scale: 1-10,000  
 Ship COWIE April, 1956

NOTE:  
 Shoreline revisions and notes pertaining thereto shown red,  
 other notes in black.

△ CYPRESS, 1870, WITNESS MARK NO. 3  
 WHITE BANNER ON TREE AT MHW LINE

station 103  
 CYPRESS, 1870  
 Res Swann Pt

APPROXIMATE MHW LINE  
 SKETCHED BY TOPOGRAPHER



EXTENSION OF SOUTH SIDE OF NEW PIER  
 WIDTH 80 FT. PROPOSED LENGTH APPROX. 1500 FT.

SWANN PT. SHOAL CHANNEL RANGE  
 BEARING 084°0

STATION DESTROYED  
 SWANN POINT SHOAL CHANNEL, FRONT RANGE LT.  
 (SWANN PT. CHANNEL, FRONT RANGE LT., 1938)

OLD DREDGING RANGE MARKERS

TEMPORARY ELEVATED TANK

NEW CONCRETE FERRY PIER  
 UNDER CONSTRUCTION

WHITE BANNER AT EDGE OF TREE LINE

WHITE BANNER AT SHOULDER OF HIGHWAY FILL

CONCRETE BRIDGE ABUTMENTS  
 UNDER CONSTRUCTION

Glass House Pt

Sandy Bay

Jamestown

Church Pt

JAMESTOWN MONUMENT  
 (Landmark) 1910

TIDAL BM No. 2  
 1910

GOVERNMENT WHARF

CHURCH POINT LT  
 1938 (Landmark)

FERRY SLIP

RUINS OF WHARF

OFFSHORE CYPRESS TREE

STATION DESTROYED

S. GABLE  
 1942

1 ROWS PILING  
 COVERED  
 1 FT. MHW

OVERHEAD CABLE  
 VERT. CL. 22.6 FT. M.L.W.

6 FT. BANK

OLD PILING (1)

PILING (1)

FISH TRAP

DREDGE TAILINGS

FISH TRAP AREA

Powhatan

CULTIVATED

31

WELL

Statue

GRON

GRON

GRON

GRON

GRON

GRON

GRON

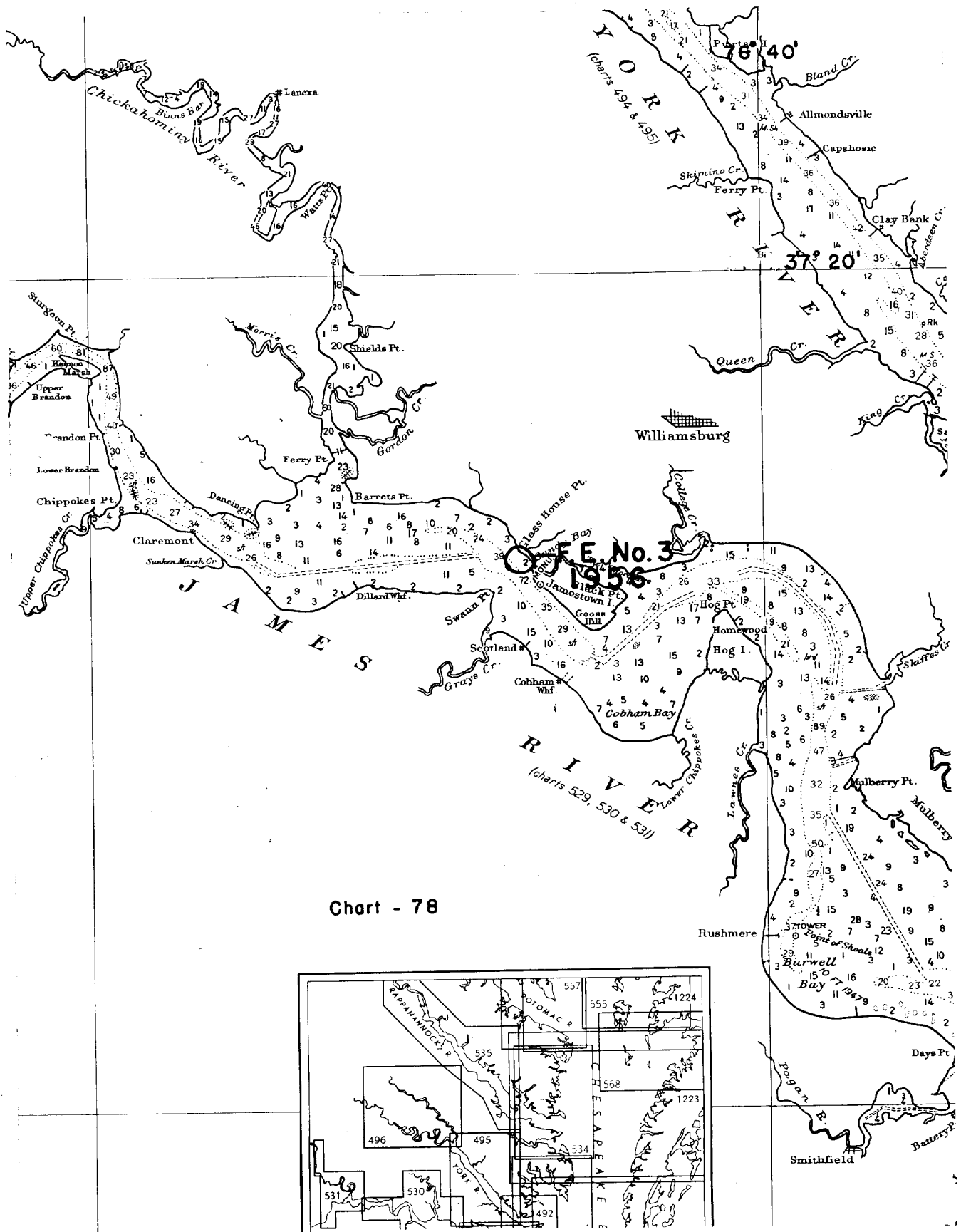
GRON

GRON

GRON

GRON





# NAUTICAL CHARTS BRANCH

SURVEY NO. F.E.3, 1956

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
4/14/56	530	J. G. McGann	Before <del>After</del> Verification and Review
5/9/57	529	J. G. McGann	Before <del>After</del> Verification and Review
3/26/71	<sup>INSET</sup> 529	Benny B. Dugan	Before <del>After</del> Verification and Review <i>Applied to inset</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
			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.