

9152

Diag. Ch. Nos. 1207-2, 1208-2 & 1107

FORM C&GS-504

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. PE-20-2-70 Office No. H-9152

LOCALITY

State Massachusetts

General locality Massachusetts Bay

Locality Scituate

19 70

CHIEF OF PARTY

CDR. Bruce T. Williams

LIBRARY & ARCHIVES

DATE 2/25/77

USCOMM-DC 37022-P66

9152

Area 1

Charts

- 70
- 71
- 245
- 1207
- 1208
- 1000
- 1106
- 1107

HYDROGRAPHIC TITLE SHEET

H-9152

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.

PE-20-2-70

State Massachusetts

General locality Massachusetts Bay

Locality Scituate

Scale 1:20,000 Date of survey Sept. 4 - Sept. 10, 1970

Instructions dated 14 May 1970 Project No. OPR-473

Vessel NOAA Ship PEIRCE

Chief of party CDR. Bruce I. Williams

Surveyed by Officers and crew of Ship PEIRCE

Soundings taken by echo sounder, ~~5000, 3000, 2000~~

Graphic record scaled by Ship's survey technicians

Graphic record checked by Ship's Officers R.G. Cram

Protracted by Ship's Officers and CST Lewis Automated plot by Cal Camp Plotter AMC

Soundings penciled by Ship's Officers and CST Lewis

Soundings in ~~3000~~ feet at MLW ~~MLW~~

REMARKS: ~~None~~ Verifier R.G. Cram

Category 1 survey

Applied to plots 2-28-77  
CB

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY PE-20-2-70 (H-952)

NOAA Ship PEIRCE

Scale 1:20,000

Bruce I. Williams, CDR NOAA

Chief of Party

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A. PROJECT

This survey was accomplished as part of OPR-473, Cape Ann to Cape Cod Massachusetts. Instructions dated 14 May, 1970 supersede all previous instructions.

B. AREA SURVEYED

Field work began on 4 September, 1970 and was completed on 10 September, 1970. General locality is offshore, east and southeast of Scituate Massachusetts.

The survey is bounded on the north by contemporary survey PE-20-1-70 (H-9159)  
The survey is bounded on the east by survey H-9013. The survey is bounded on the west by shoreline and survey H-8164. It is also bounded on the west by contemporary survey PE-10-3-70. The survey is bounded on the south by H-6563.

C. SOUNDING VESSEL

All hydrography on this survey was accomplished using the ship PEIRCE.

D. SOUNDING EQUIPMENT

All soundings were observed with Raytheon fathometer, Model 723, Serial number 259. Soundings varied from 24 feet to 145 feet. All soundings were observed in feet. Velocity corrections were obtained by combining a leadline comparison with the results of one nansen cast.

E. SMOOTH SHEET

The smooth sheet will be computer plotted at the Atlantic Marine Center.

F. CONTROL

HI-FIX electronic control was used for all position information on this survey. Stations were located at Race Point on Cape Cod Massachusetts, and at Eastern Point near Gloucester Massachusetts. The stations were previously located by the ship PEIRCE during the 1968 and 1969 field seasons.

#### F. CONTROL (cont)

HI-FIX calibration was accomplished using three-point sextant fixes. A 1:10,000 calibration sheet covering the vicinity of Minot's Ledge Lighthouse was used for calibration. Two triangulation stations were established: HOG 1970 and SHAG 1970. MINOT'S LEDGE LIGHTHOUSE 1915, SUTTON HOLE LIGHT 1950, WHITEHEAD LIGHT 1950, SHAG, and HOG were used as signals for calibration. One calibration was done on Day 250 using signals 308, 303, 300, 302 on sheet PE-10-3-70.

#### G. SHORELINE

There is no shoreline to be considered on this sheet.

#### H. CROSSLINES

Crosslines were run at 5.1% of the total hydrography mileage including development. Crosslines were in very good agreement and check well over depth curves and shoal areas.

#### I. JUNCTIONS

Junction along the eastern limit of the survey with H-9013 was generally good and within 1 or 2 feet. An exception is around Lat.  $42^{\circ}02'$ , Long  $70^{\circ}34'$ , where the 90 foot depth curve is irregular. Smooth plotting and applied correctors should better the area and improve the junction.

Junction to the south with H-6563 was satisfactory and within 2 feet before corrections are applied.

Junction with H-8164 along the southwestern limit was good, indicating that depth curves and shoals agreed.

Junction with contemporary survey PE-10-3-70 (H-9150) was very good. The agreement along the 60 foot depth curve was good with H-9150 showing a little better definition on the 1:10,000 scale.

*JUNCTION N H-9151, PE 26-1-70*

#### J. COMPARISON WITH PRIOR SURVEYS

Pre-survey review item #1 was within the limits of this survey and was overlooked. It is a 58 foot sounding wreck at Lat.  $42^{\circ}09'32''$ , Long.  $70^{\circ}33'80''$ , and plots in an area of 80 feet of water. Since hydrography failed to reveal this feature a search will be recommended for the 1971 field season.

A questionable 78' depth at Lat.  $42^{\circ}08'0''$ , Long.  $70^{\circ}33'7''$ , was in the vicinity of a 74 foot sounding found during this survey and prior survey H-9013 in addition to depths in the 60's just north of this location. The latter depths probably define the shoal and supersede the 78' in question.

#### K. COMPARISON WITH EXISTING CHARTS

Comparison was made with C&GS Charts 1207 and 1208. Agreement was generally good with C&GS 1207 and soundings were comparable even with respect to the shoals in the vicinity of Lat. 42° 09', Long. 70° 36'. The 120 foot curve agreed but the 60 foot depth curve which is irregular is much more well defined by this survey and should supersede the prior survey in adequacy after smooth plotting. *disagree with charted curve*

Comparison with C&GS 1208 in the southern portion of the survey indicated generally shoaler depths than the chart and there were no depth curves to check upon beyond those mentioned above.

#### L. ADEQUACY OF THE SURVEY

This survey is complete and adequate to supersede prior surveys with exception to the observation of presurvey review item #1 in section J.

#### M. AIDS TO NAVIGATION

There were no floating aids to navigation located within the limits of this survey.

#### N. STATISTICS

Total number of positions	1561
Total nautical miles of sounding lines	573.0
Total square nautical miles surveyed	33.0
Nansen casts	1
Bottom samples	15

#### O. RECOMMENDATIONS

No recommendations are made other than those in section J.

#### P. REFERENCES TO REPORTS

- 1-Seasons Report, NOAA Ship PEIRCE, 1970
- 2-Report on Electronic Control, OPR-473, NOAA Ship PEIRCE, 1970
- 3-Report On Corrections to Echo Soundings, OPR-473, NOAA Ship PEIRCE, 1970

Respectfully Submitted

*John O. Rolland*

John O. Rolland, Lt. NOAA

Approved and Forwarded

*Bruce I. Williams*

Bruce I. Williams

CDR NOAA

Commanding Officer, Ship PEIRCE

APPROVAL SHEET

FIELD NUMBER PE-20-2-70

Field work on this survey was under my immediate daily supervision. The boat sheet and all records have been reviewed and approved by me. It is believed this survey, with the exception made in section J, is complete and adequate to supersede prior surveys for charting.



Bruce I. Williams  
CDR., NOAA  
Commanding Officer  
Ship PEIRCE

3/11/75

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): Boston, Massachusetts

Period: September 4 - September 10, 1970

HYDROGRAPHIC SHEET: H-9152

OPR: 473

Locality: Southern part of Massachusetts Bay

Plane of reference (mean ~~lower~~ low water): 3.6 ft. Boston

Height of Mean High Water above Plane of Reference is 9.0 ft.

Remarks: Recommended zoning:

Range ratio:

Apply 0.95 to Boston hourly heights.

  
Chief, Tides Branch

ABSTRACT OF CORRECTIONS TO ECHO SOUNDINGS

Velocity corrections for this survey were determined from temperature and salinity observations. One nansen cast and one series of leadline comparisons were used to determine table #1.

Table 1

<u>Depth (to)</u>	<u>Corr.</u>
12.9	1.2
20.5	1.4
28.7	1.6
37.0	1.8
46.3	2.0
59.8	2.2
97.0	2.4
999.9	2.6

---



C

**Velocity Tape Printout**  
**PE-20-2-70 Ship PEIRCE**

000129 0 0012 0001 000 000000 000000  
000205 0 0014  
000287 0 0016  
000370 0 0018  
000463 0 0020  
000598 0 0022  
000970 0 0024  
999999 0 0026

ABSTRACT OF CORRECTIONS TO ELECTRONIC DISTANCE MEASUREMENTS

<u>DAY #</u>	<u>TIME</u> <u>FROM</u>	<u>CORR'N</u> <u>PAT. 1</u>	<u>CORR'N</u> <u>PAT. 2</u>	<u>REMARKS</u>
247	194130	0.08	0.05	Calibration day 247
248	000000	0.08	0.05	
250	120730	0.28	0.13	Calibration day 250
250	162300	2.28	0.13	
250	172900	0.28	0.13	
251	000130	0.28	0.13	
251	101830	1.28	0.13	
251	232600	0.28	0.13	
252	000100	0.28	0.13	
252	071300	-0.72	0.13	
252	080900	0.28	0.13	
252	095230	-0.72	0.13	
252	165200	0.28	0.13	
253	091500	0.28	0.13	

Note; this includes calibration and lane loss or gain while underway.  
The corrector tape logged from the above values contains some  
extra values inserted to correct erroneous P1 and P2 values  
logged on the smooth data tapes.

Corrector Tape  
PE-20-2-70 Ship PEIRCE

194130 6 1230 0001 247 000008 000005 0000 000 000  
195830 6 0635  
201930 6 0770  
202100 6 0620  
205830 6 0750  
000000 6 0760 0126 248 000008 000005 0000 000 000  
032800 6 0680  
131800 6 0000 1552 248 103031 002810 0000 000 000  
133000 6 0000 1554 248 000028 000013 0000 000 000  
134100 6 0000 1555 248 103066 000410 0000 000 000  
134900 6 0000 1556 248 000028 000013 0000 000 000  
120730 6 0570 0398 250 000028 000013 0000 000 000  
162300 6 0700 0519 250 000228 000013 0000 000 000  
172900 6 0500 0536 250 000028 000013 0000 000 000  
000130 6 0695 0717 251 000028 000013 0000 000 000  
013500 6 0590  
101830 6 0520 0973 251 000128 000013 0000 000 000  
232600 6 0610 1086 251 000028 000013 0000 000 000  
000100 6 0690 1103 252 000028 000013 0000 000 000  
015930 6 0775 1153 252 000028 001013 0000 000 000  
060330 6 0580  
071300 6 0800 1250 252 100072 000013 0000 000 000  
080900 6 0550 1264 252 000028 000013 0000 000 000  
084400 6 0600  
093945 6 0520  
095230 6 0645 1306 252 100072 000013 0000 000 000  
165200 6 0950 1430 252 000028 000013 0000 000 000  
091500 6 0000 1559 253 000028 000013 0000 000 000

### ABSTRACT OF TRA CORRECTORS

The TRA corrector is a combination of various correctors applied to soundings obtained by electronic means and is comprised of the following:

Transducer Draft Corrections	Initial Corrections
Phase Corrections	Fathometer Speed Error
Settlement and Squat	Instrument Error

For this survey only initial correctors are necessary. The draft, fathometer speed, and instrument error are taken care of by the velocity correction.

No correction is applied for phase error or settlement and squat.

Refer to the REPORT ON THE CORRECTIONS TO ECHO SOUNDINGS, OPR-473, Ship PEIRCE, 1970, for a discussion of methods and computations

### ABSTRACT OF INITIAL CORRECTIONS

<u>Day #</u>	<u>Time (from)</u>	<u>Corrector</u>
247	194130	0.0
248	000000	0.0
250	000000	0.0
251	000000	0.0
251	095430	-0.5
251	100530	0.0
252	000000	0.0
253	000000	0.0

TC/TI Tape Printout  
PE-20-2-70 Ship PEIRCE

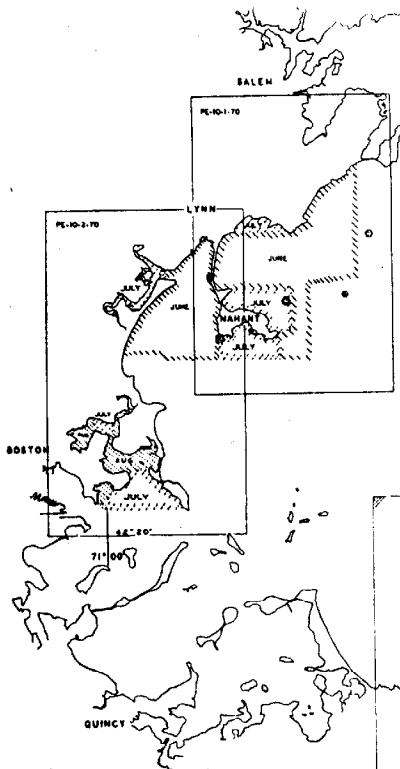
194130 0 0000 0001 247 000000 000000  
000000 0 0000 0001 248 000000 000000  
000000 0 0000 0001 250 000000 000000  
000000 0 0000 0001 251 000000 000000  
095430 0 1005  
100530 0 0000  
000000 0 0000 0001 252 000000 000000  
000000 0 0000 0001 253 000000 000000

ABSTRACT OF DAILY CONSECUTIVE POSITION NUMBERS PR-20-2-70

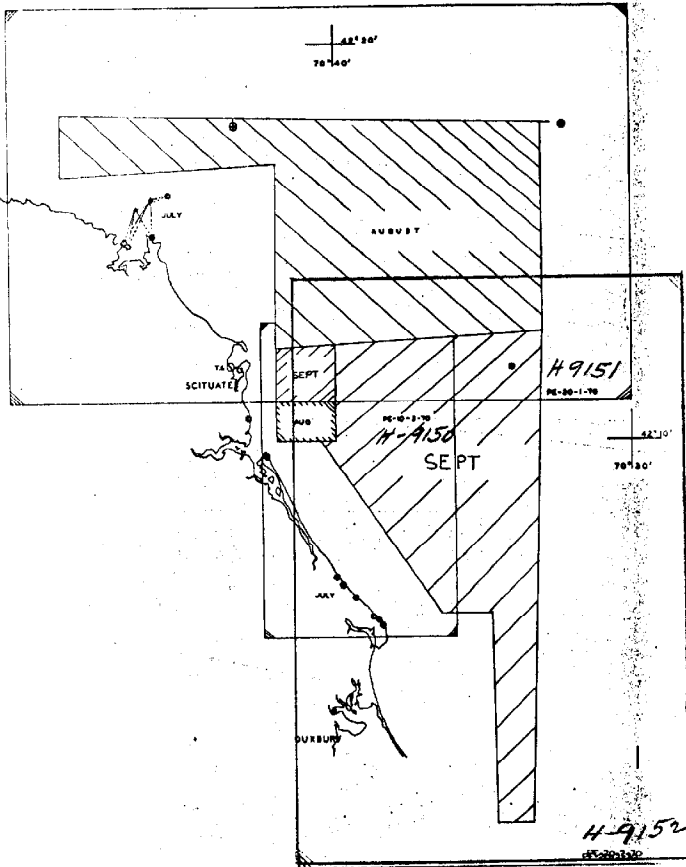
<u>Date</u>	<u>Day #</u>	<u>Position Numbers</u>	<u>Remarks</u>
Sept. 4	247	0001-0126	
5	248	0126-0397	Duplicate 126's. ✓ 126 & 126A on smooth pos. overlay
5	248	1546-1558	Numbers of bottom samples changed to avoid duplication. RGS
7	250	0398-0716	
8	251	0717-1102	
9	252	1103-1545	
10	253	1559-1560	

ABSTRACT OF HYDROGRAPHIC DATA LOCATED ON SHEET PE-20-2-70

<u>Pos. No.</u>	<u>Day #</u>	<u>Data located</u>
1546	248	B.S., Rk
1547	248	B.S., Wd
1548	248	B.S., Wd
1549	248	B.S., G
1550	248	B.S., P
1551	248	B.S., rky
1552	248	B.S., Wd
1553	248	B.S., P
1554	248	B.S., St
1555	248	B.S., crs br S
1556	248	B.S., fne br S
1557	248	B.S., P
1558	248	B.S., crs P
1559	253	B.S., P
1560	253	B.S., P



COAST & GEODETIC SURVEY — DON A. JONES, DIRECTOR  
 MONTHLY PROGRESS SKETCH — OPR 473  
 CAPE ANN TO CAPE COD  
 USC & GSS PEIRCE — CDR BRUCE I. WILLIAMS COMDG.  
 FIELD SEASON 1970  
 SCALE CHART 1207





FORM # 3 Fig. 7  
COMPUTER PARAMETERS FOR ELECTRONICALLY CONTROLLED SURVEYS

(RANGE - RANGE)

- (1) PROJECT No. OPR-473 (2) H- No. 9152 (3) FIELD No. 20-2-70
- (4) TYPE OF CONTROL: SHORAN, RAYDIST,  HI-FIX, RADAR  
FREQUENCY (FOR CONVERSION OF RAYDIST OR HI-FIX LANES TO METERS)
- (5) RANGE ONE (R1) Race Point LATITUDE 42° 03' 41.788  
STATION NAME Race Point LONGITUDE 70° 14' 37.064
- (6) RANGE TWO (R2) Eastern Point LATITUDE 42° 34' 49.9137  
STATION NAME Eastern Point LONGITUDE 70° 39' 48.1897
- (7) AZIMUTH FROM R1 TO R2 119° 09' 50.70
- (8) BASELINE LENGTH IN METERS 67229.56 M.

(9) LOCATION OF SURVEY WITH RESPECT TO ELECTRONIC BASELINE: CHECK ONE  
(TO DETERMINE: IMAGINE AN OBSERVER STANDING AT R1 AND LOOKING DIRECTLY  
AT R2 --- IF THE SURVEY AREA IS TO THE OBSERVER'S LEFT THEN A IS  
NEGATIVE; IF THE SURVEY AREA IS TO THE OBSERVER'S RIGHT THEN A IS  
POSITIVE.)

-A (MINUS)  +A (PLUS)

(10) IF SHORAN CORRECTIONS ARE APPLIED BY THE EQUATION,  $K(X) + C = D$ ,  
WHERE X IS SHORAN DISTANCE AND D IS TRUE DISTANCE, ENTER THE CONSTANT  
COEFFICIENTS OF THE EQUATIONS HERE:

K(R1) \_\_\_\_\_, C(R1) \_\_\_\_\_, K(R2) \_\_\_\_\_, C(R2) \_\_\_\_\_

(11) NUMBER OF VELOCITY TABLES TO BE USED:  
NONE,  ONE, MORE THAN ONE.

(12) \_\_\_\_\_ THIS FORM IS SUBMITTED ONLY AS AN AID IN PREPARING A BOAT  
SHEET PROJECTION.

THIS FORM APPLIES TO ALL DATA ON THIS SURVEY.

\_\_\_\_\_ THIS FORM APPLIES TO PART OF THE DATA ON THIS SURVEY -

TIME AND DATE LIMITATIONS: FROM \_\_\_\_\_ TO \_\_\_\_\_

POSITION NUMBER LIMITATIONS: FROM \_\_\_\_\_ TO \_\_\_\_\_

THIS IS FORM #3 SHEET # \_\_\_\_\_ OF \_\_\_\_\_ SHEETS FOR THIS SURVEY.

(13) OTHER REMARKS:

ATLANTIC MARINE CENTER

PROJECTION PARAMETERS

POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR-473 4. Requested By Verification Branch  
 2. Reg. No. H-9152 5. Ship or Office (DCC) AMC  
 3. Field No. PE-20-2-70 6. Date Required ASAP

7. Polyconic  Modified Transverse Mercator

8. Central Meridian of Projection 70° 37' 00"

9. Survey Scale: 1:20,000

10. Size of Sheet (check one):

36 x 54  36 x 60  Other  Specify 50 x 36

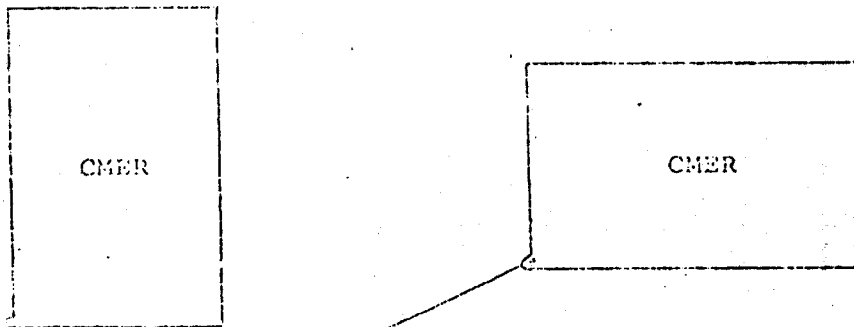
11. Sheet Orientation (check one):

NYX = 1

NYX =  $\beta$

N

N



12. Plotter Origin: S.W. Corner of Sheet (not necessarily a grid intersection)

Latitude 41° 59' 25"

Longitude 70° 43' 00"

13. G.P.'s of triangulation and/or signals attached

14. Material Desired: Tracing Paper  Mylar

Smooth Sheet  Other  Specify \_\_\_\_\_

15. Remarks: \_\_\_\_\_



11/11/74

REG =H 9152 NO OF CONTROL PARAMETER SETS = 1

CONTROL TYPE = 21

CMER = 70 37 0.000

S1LAT = 42 3 41.788

S1LON = 70 14 37.064

S2LAT = 42 34 49.914

S2LON = 70 39 48.189

Q = 1718.590

A = 1

PRINTED IN U.S.A.  
PS-110-11-17  
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H 9152 RECORD TO POSITION CROSS REFERENCE 11/11/74

FROM RECORD	TO RECORD	FROM POSITION	TO POSITION
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1. - 1591.

1 - 410

1592. - 6045.

398 - 1545

6046. - 6047.

1559 - 1560

FORM NO. 1013

12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1



11/11/74

H 9152 I + R STATISTICS

VESSEL	YR	DAY	STIME	ETIME	SCONT	ECONT
2830	70	247	194130	235930	1.	512.
2830	70	248	000000	141300	513.	1591.
2830	70	250	120730	235000	1592.	2843.
2830	70	251	000130	235930	2844.	4336.
2830	70	252	000100	214730	4337.	6045.
2830	70	253	091500	092500	6046.	6047.

HIGHEST EXCESS INDICATOR = 1

LAST RECORD NUMBER = 6047.

RECORD 103

0  
1  
2  
3  
4  
5



H 9152 POSITION TO RECORD CROSS REFERENCE 11/11/74

FROM POSITION	TO POSITION	FROM RECORD	TO RECORD
1	- 410	1.-	1591.
<i>Dup pos -</i> 398	- 1545	1592.-	6045.
1559	- 1560	6046.-	6047.

THERE ARE 1560 POSITION NUMBERS

PRINTED IN U.S.A.

JRM NO. 15113

12  
11  
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6  
5  
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3

Verifier: M.B. Hickson

July 29, 1975

Verification Note to EDP (AMC)  
Survey H-9152 (PE-20-2-70) OPR-473

This branch has completed the verification of the preliminary sounding overlay for this survey. Correction cards were punched by personnel of this office and will accompany this note. Corrections and notes are denoted in the sounding printout in orange pencil and in the verifier's checklist in black ink.

Changes to be made to this survey are listed in the correction deck listing that accompanies this note. Also there are several IRØ9 inserts to be made in this survey.

The sheet origin and size will remain the same.

Both the Distortion Points and Stamp #42 are requested to be plotted. Origins are as follows:

Distortion Point:

Lat. : 41° 59' 48" North  
Long.: 70° 41' 12" West

Stamp #42:

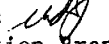
Lat. : 42° 00' 00" North  
Long.: 70° 32' 00" West

The Triangulation station BRANT 1938 is to be plotted on the smooth sheet. The G.P. of this station is:

Lat. : 42° 05' 37.768" North  
Long.: 70° 39' 13.361" West

All electronic control arcs are to be plotted on the smooth position overlay.

Please furnish this office with both Position and sounding smooth sheets (do not rotate soundings) and revised sounding printout.

William L. Jonns   
Chief, Verification Branch  
AMC

Verifier: William H. Guy

January 17, 1975

VERIFICATION NOTE TO EDP (AMC)  
Survey H-9152 PB-20-2-70 OPR-473

This office has completed the verification of the position overlay for this survey.

There is one duplicated position number (126).

Bottom sample position numbers 398 thru 410 were changed to 1546 thru 1558; this was done so there would not be duplicated position numbers. The field had changed this in the Descriptive Report. It was missed on the corrector tape and fathograms.

Distortion point origin  $41^{\circ} 59' 48''$ ,  $70^{\circ} 41' 12''$ .  $\checkmark$  m 34

Cards were keypunched by personnel from this office and accompany this note.

Positions 1154 thru 1249.3 (i.e. to pos. 1250, Rec. #4549 thru 4903) are to be plotted on the sounding overlay as they were replotted using 0.13 as the pattern two corrector.

After all corrections have been applied, please furnish this office with a sounding overlay and printout.

William L. Johns  
Chief, Verification Branch  
AMC



ATLANTIC MARINE CENTER  
APPROVAL SHEET  
FOR  
AUTOMATED SURVEY H-9152

- A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/has not been made. A new final sounding printout has/has not been made.

Date: Dec. 17, 1976

Signed: William J. Jorma

Title: Chief, Verification Branch

- B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic and AMC Manuals. Exceptions are listed in the verifier's report.

Date: 12-20-76

Signed: Robert A. Smith

Title: Chief, Processing Division

Verification Notes  
H-9152 (PE-20-2-70) OPR-473  
Category II Survey

This appears to be a good basic survey. Soundings are in good agreement at crossings.

Wide areas around offshore shoaler depths were not developed. The lack of sufficient hydrography in these areas prevent the proper delineation of the depth curves.

The charted 60 foot curve, Chart 13267 (1202), 16th Edition, October 11, 1975, reveals considerable differences. This survey junctioned well along the 60 foot curve with H-9150. It is recommended that the charted 60 foot curve be revised to agree with these surveys.

Norfolk, Virginia  
December 17, 1976

William L. Jonns  
Chief, Verification Branch  
AMC

**VERIFIER'S REPORT**  
**HYDROGRAPHIC SURVEY, H - 9152**

**INSTRUCTIONS** - This form serves to identify items of a check list in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

**CL - Check List Items:** should be checked as having been completed during the verification processes.

**R - Report Item:** This column refers to those items reported to the reviewer and is used to indicate the items discussed.

Part I - DESCRIPTIVE REPORT	CL	R	Part III - JUNCTIONS (Continued)	CL	R
<p><b>Note:</b> The verifier should first read the Descriptive Report for general information and problems.</p> <p>1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None</p>	X		<p>10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: -- Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are <b>SUPERSEDED</b>.</p>	NA	
<p>2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: -- None</p>	X		<p><b>Part IV - VOLUMES</b></p> <p>11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes.  Remarks Required: -- None</p>	X	
<p>3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None</p>	X				
<p><b>Part II - SHORELINE AND SIGNALS</b></p> <p>4. Source of shoreline signals Remarks Required: -- List all surveys</p> <p>a. Give earliest and latest dates of photographs</p> <p>b. Field inspection date</p> <p>c. Field Edit date</p> <p>d. Reviewed-Unreviewed</p>	NA		<p>12. Condition of sounding records was satisfactory except as follows:  Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following:</p> <p>(a) rocks</p> <p>(b) line turns</p> <p>(c) position values of beginning and ending of lines</p> <p>(d) bar check or velocity correctors</p> <p>(e) time recording</p> <p>(f) notes or markings on fathograms</p> <p>(g) was reduction of soundings accurately done?</p> <p>(h) was scanning accurate?</p> <p>(i) were peaks at uneven intervals missed?</p> <p>(j) were stamps completed?</p> <p>(k) references to adjacent features</p>	X	
<p>5. The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>	NA				
<p>6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 42 on the smooth sheet. Remarks Required: -- None</p>	X				
<p>7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still unidentified.</p>	NA		<p><b>Part V - MACHINE PLOTTING</b></p> <p>13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None</p>	X	
<p><b>Part III - JUNCTIONS</b></p> <p><b>Note:</b> Make a cursory comparison preliminary to inking soundings in area of overlap.</p> <p>8. All junctions of contemporary or overlapping sheets were compared and overlapping curves were made identical. Remarks Required: -- None</p>	X		<p>14. The plotting of all unsatisfactory crossings was verified. Remarks Required: -- None</p>	X	
<p>9. The notation in slanted lettering "JOINS H---- (19 )" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None</p>	X		<p>15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None</p>	NA	

Part V - PROTRACTING (Continued)	CL	R	Part VIII - AIDS TO NAVIGATION	CL	R
16. The protracting was satisfactory except as follows: Remarks Required: -- Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.			26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey.  Remarks Required: -- Conflicts of any nature listed.	NA	
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number.			27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification.  Remarks Required: -- None	NA	
<b>Part VI - SOUNDINGS</b> 18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None			<b>Part IX - BOAT SHEET</b> 28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None	X	
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.			29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.	NA	
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None			<b>Part X - GENERAL</b> 30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2). Remarks Required: -- None	X	
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None			31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None	X	
<b>Part VII - CURVES</b> 23. The depth curves have been inspected before inking. Remarks Required: -- By whom was the penciled curves inspected.			32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None	X	
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: a. From T-Sheet in dotted black lines b. From soundings in orange c. Approximate position of sketched curve is dashed orange d. Approximate position of shoal area not sounded in black dashed Remarks Required: -- None			33. The bottom characteristics are adequately shown. Remarks Required: -- None	X	
25. Depth curves were satisfactory except as follows: (This statement should not refer to the manner in which the curves were drawn). Remarks Required: -- Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.			<b>Part XI - NOTES TO THE REVIEWER</b> 34. Unresolved discrepancies and questionable soundings.	X	
Verified by  L.G. Cram			35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.		
			36. Supplemental information.	See Verification note	X
			Date		

GEOGRAPHIC NAMES

9152

Name on Survey											
	A	B	C	D	E	F	G	H	I	K	
											1
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**HYDROGRAPHIC SURVEY STATISTICS**  
**HYDROGRAPHIC SURVEY NO. H-9152**

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET & smooth PNO, excess overlays		1	BOAT SHEETS (paper)		1	
DESCRIPTIVE REPORT		1	OVERLAYS (preliminary)		4	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES	γ		smooth & 1 tide			Sawtooth records
CAHIERS	1-with printouts		γ			
VOLUMES						
BOXES						

T-SHEET PRINTS (*List*)

SPECIAL REPORTS (*List*)

**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				1561
POSITIONS CHECKED		156		
POSITIONS REVISED		15		
DEPTH SOUNDINGS REVISED		100		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		0		
JUNCTIONS		8		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		22		
SPECIAL ADJUSTMENTS				
ALL OTHER WORK		140		
<b>TOTALS</b>		170		
PRE-VERIFICATION BY W.H. Guy, M.B. Hickson	BEGINNING DATE 01/16/75	ENDING DATE 07/29/75		
VERIFICATION BY L.G. Cram	BEGINNING DATE 03/27/76	ENDING DATE 11/30/76		
REVIEW BY	BEGINNING DATE	ENDING DATE		

