

FE-254

Diagram No. 1212-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey ... Hydrographic Field Examination
Field No. R/H-05-04-83
Office No. FE-254

LOCALITY

State Connecticut
General Locality Long Island Sound
Locality Offshore--3 Miles South of
..... West Haven
.....
..... 19 83
.....
CHIEF OF PARTY
LCDR D.D. Winter

LIBRARY & ARCHIVES

DATE April 18, 1984

☆U.S. GOV. PRINTING OFFICE: 1980-766-230

FE-254

173
12371
1123712
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NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTER NO. FE-254
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HYDROGRAPHIC TITLE SHEET

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.	FIELD NO. R/H 05-04-83
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State CONNECTICUT

General locality LONG ISLAND SOUND

Locality ~~AWOIS # 3048~~ OFFSHORE -- 3 MILES SOUTH OF WEST HAVEN

Scale ~~1:5000~~ 1:20,000 Date of survey 23 AUGUST, 1983

Instructions dated 22 JULY, 1983 Project No. OPR-B660-RU/HE-83

Vessel NOAA SHIP RUDE(9040) AND LAUNCH 25(1290)

Chief of party LCDR D.D. WINTER

Surveyed by LCDR D.D. WINTER, LT N.G. MILLETT, LT E.M. CLARK, ENS T.G. CALLAHAN

Soundings taken by ~~echo-sounder, hand lead, tape~~ RAYTHEON DE-719B Pneumatic Depth Gage

Graphic record scaled by ENS T.G. CALLAHAN, G.L. ANDERSEN

Graphic record checked by ENS T.G. CALLAHAN, G.L. ANDERSEN

Protracted by _____ Automated plot by Xynetics 1201 Plotter(AMC)

Verification by C.D. MEADOR

Soundings in ~~FATHOMS~~ feet at MLW ~~MLW~~ FOR PREDICTED TIDES

REMARKS: ~~ALL TIMES RECORDED IN UTC~~ All times are local time. Telephone conversation with Lt. N.G. Millett on 3/7/84.

Notes in red were made during verification.

AWOIS 4/20/84 MGT

STANDARDS CK'S C. LOY

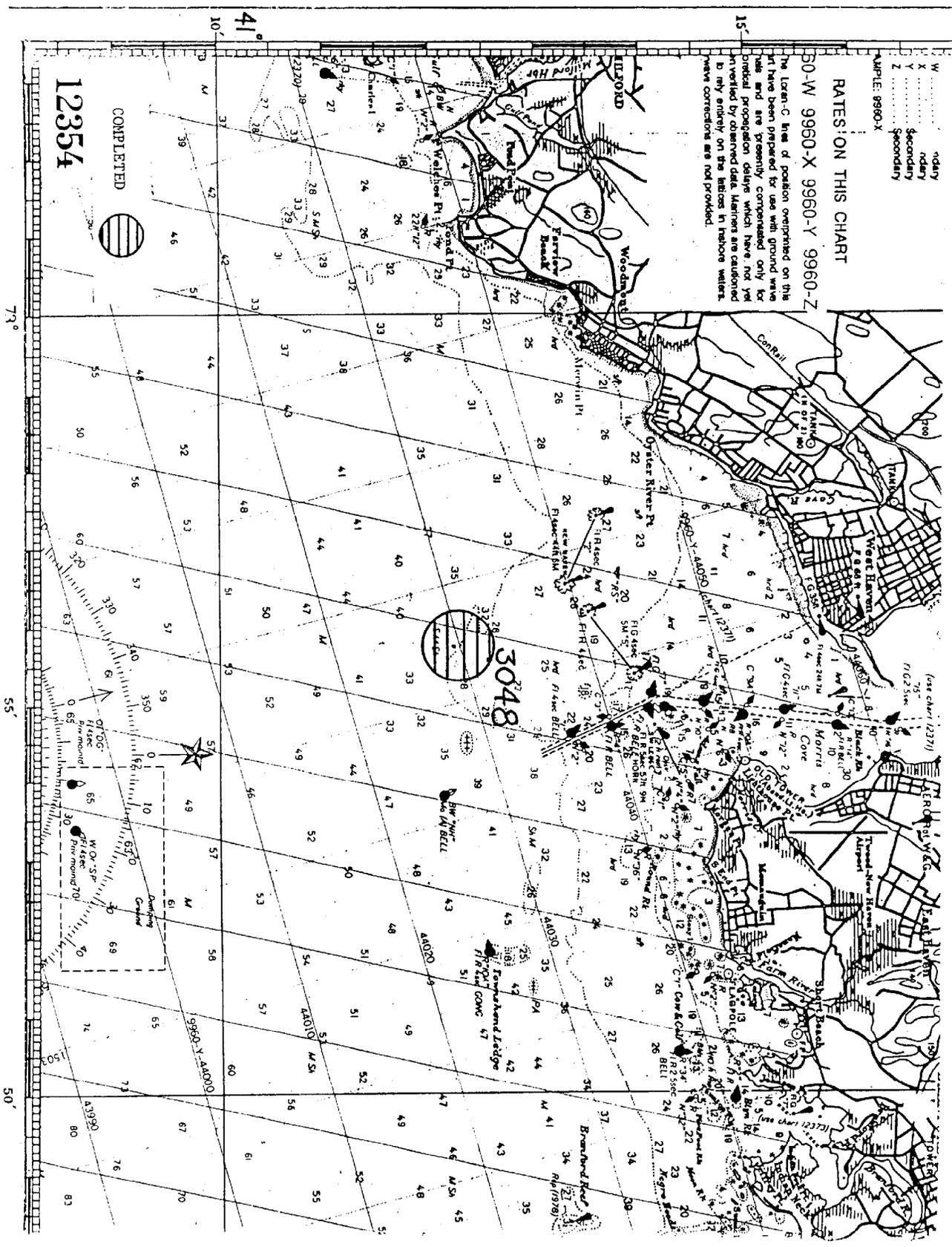
4-19-84

W Boundary
 X Primary
 Y Secondary
 Z Secondary
 AMPLE: 9960-X

RATES: ON THIS CHART

50-W 9960-X 9960-Y 9960-Z

The Loran C lines of position overprinted on this chart have been prepared for use with ground wave signals and are presently compensated only for critical propagation delays which have not yet been inventoried by observed data. Mariners are cautioned to rely entirely on the stations in inland waters. Wave corrections are not provided.



COMPLETED
 12354

3048

73°

55'

50'

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* Filed with the original survey records.

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY ~~N~~²-254 , R/H 05-04-83
1:5,000 SCALE, 1983
NOAA SHIPS RUDE & HECK
LCDR DONALD D. WINTER, COMDG.

A. Project Authority

This project was conducted in accordance with Hydrographic Project Instructions OPR-B660-RU/HE-83, Southern New England Coast, dated 17 June 1983. Two amendments to the project instructions were Change No. 1, dated 22 July, 1983 and Change No. 2, dated 8 December, 1983. The purpose of this project was to verify or disprove certain reported submerged wrecks along the south coast of New England, to provide clearance depths over selected wreck sites, and to provide wire-drag clearance of the Northville Industries Corporation oil tanker route.

B. Characteristics and Limits of Area Surveyed

This survey contains that area of a suspicious contact noted on the sonargram for item investigation of the AWOIS item No. 01827, during FE-241 (1982). This contact was renumbered as AWOIS item No. 03048 and was determined to be in the approximate position of 41-12-16.6N., 072-55-41.0W. A side scan investigation was conducted within a 250 meter radius of that position. AWOIS item #1827 is a dangerous submerged wreck (20 ft. cabin cruiser) charted in Lat. 41° 12' 20", Long. 72° 54' 30" from NM 7/66.

C. Survey Vessels

The side scan sonar work was accomplished by the NOAA Ship Rude (9040). Launch 1290 supported diving operations.

D. Hydrographic Sheets See sec. 1b of the Eval. Report

The hydrographic sheets used in this survey were made of mylar and were constructed with the Digital PDP 11/34 computer and Houston Instruments roll-bed plotter aboard the NOAA Ship Rude.

Field sheet R/H 05-04-83 was plotted at a scale of 1:5,000 and contains hand plots of the vessel positions during side scan sonar operations. This sheet also contains hand plots of the towing vessels track and contacts encountered during operations. The field records are being sent to the Atlantic Marine Center for verification and smooth plotting.

A slight discrepancy occurred in the notation of the latitude and longitude of the grids as plotted by the computer. The value of seconds of degree of arc were sometimes printed one unit less than the actual value for the respective line. Lines of latitude and longitude were plotted at intervals of 15 seconds at a scale of 1:5,000 which made any discrepancy obviously apparent. As an example, the plotter printed 72-10-29, instead of 72-10-30, adjacent to the 72-10-30 longitude line. All latitude and longitude lines are plotted with the correct values, even though the labels are incorrect. This problem was caused by a software

truncation error that could not be corrected in the field. ✓

E. Equipment and Techniques

(1) Survey Operations

The position of the contact was established by the Rude steering arcs of Station 02, FALKNER ISLAND LIGHTHOUSE, with line spacings of 100 meters. Crosslines were also run on 100 meter spacings on the R1 arcs from Station 01, NEW HAVEN LIGHTHOUSE OLD TOWER, 1833. ✓

All side scan sonar coverage was accomplished with the Klein systems provided by AMC. These systems consisted of a Model 521 recorder, a 100 KHz towfish, a K-Wing depressor and a towcable. ✓

The recorder aboard the Rude, serial number 088, did not have numerical settings on the gain control knobs. The sonagrams from this recorder were only annotated with the relative changes that were made to the gain settings during the day's operation. ✓

The recorder 088 also did not have as many paper take-up rollers, as did recorder 223. This caused the sonagram record produced by recorder 088 to contain numerous paper pull stretch marks. These stretch marks appeared as diagonal traces from the outer edge of the paper towards the center, as the paper came off the helix drum. All the sonagrams from this recorder were annotated as to this fact to avoid confusing these stretch marks with sand waves. ✓

Del Norte rates obtained on fixes were recorded with Eaton Model 7000+ serial printers during this survey. These printers worked fairly well considering the fact that they were not designed to be operated in a marine environment. The printers would often type out a line of meaningless characters or rates from the previous fix before the current fix was recorded. The printer records were annotated such that these meaningless characters and extraneous rates were lined out leaving the correct fix rates clearly displayed. ✓

A Raytheon model DE-719B echo sounder was operated and annotated concurrently during all side scan sonar operations. Unit S/N 5497 was used for all survey operations on this field sheet. ✓

Upon location of the suspicious contacts, the vessel's position plotted, towfish layback applied and the contacts' positions determined. A marker buoy was then dropped on the position while observing the Raytheon DE-719B. Although it is not anticipated that these soundings records will be used for charting purposes, the settlement and squat data for the Rude and Heck, obtained in Norfolk Harbor on 25 January 1983, is included in this report. No velocity corrections or settlement and squat determinations were actually conducted within or during this project. ✓

(2) Divings Operations

Three divers descended the marker buoy line and conducted a 50 foot circle search of the area with a 25 foot interval between divers, with one diver staying at the marker buoy weight. ✓

The first ~~obstruction~~ ^{submerged rock} was found and the marker weight and buoy moved to that position. The circle search was then resumed and two additional ~~obstructions~~ ^{submerged rocks} were encountered. No other ~~obstructions~~ ^{objects} other than the three listed were found during the search. The divers then used a Pneumofathometer to determine the least and maximum depths of the obstructions. Detached positions of the least depths recorded from the Del Norte DMU were taken by the launch.

All three ~~obstructions~~ are geometrically cut rock material similar to the material used in the breakwater located nearby. These items, the position and least depths are fully described in Appendix F.

F. Control Stations

Two electronic control stations were used for this survey. Station 01 was established at an elevation of 26.6m on the NEW HAVEN LIGHTHOUSE OLD TOWER (1833), latitude 41-14-55.931N; longitude 072-54-15.238W. Station 02 was FALKNER ISLAND LIGHTHOUSE (1882), latitude 41-12-42.701N and longitude 072-39-14.608W with an elevation of 28.6m. All stations are of Third-Order, Class I control accuracy or better. The station positions are based upon the North American Datum of 1927.

G. Calibration and Position Control

Vessel positioning for all work was accomplished with the Del Norte 520 series electronic positioning equipment operated at a frequency of 9400 MHz in the range-range mode. A listing of DMU and master units used by the vessels during this survey are listed in Appendix A. The remote installed at Station 01 was code 76, serial number 3004. Remote 74, serial number 3003 was installed at Station 02.

Two baseline calibrations were performed during this survey. All baseline calibrations were conducted in the immediate work area and entirely over water in accordance with AMC OPORDER 79. Baseline calibration distances were determined by the HP 3800A electronic distance measuring instrument, serial number 0987A00157. The following is a list of the baseline calibrations, as measured by the HP 3800A:

27 July, 1983	Belle Terre Beach to Port Jefferson W. Jetty Lt.	2601.1m
27 August, 1983	Belle Terre Beach to Port Jefferson W. Jetty Lt.	2601.1m

The opening and closing calibrations for this one day operation were conducted using 3-point sextant fixes with check angles as follows: left object 9, center object 7, right object 6, and check object 12. These objects are fully described in Appendix D. The daily mean correctors were within accuracy tolerances for a survey of this scale. Therefore, only the baseline calibration data should be applied to the raw position

data during final processing. See Appendix A. for daily calibration data.

The pneumofathometer was calibrated on the following dates:

14 June, 1983	Chesapeake Bay Bridge Tunnel	✓
28 August, 1983	Port Jefferson Harbor Entrance	

All depths determined by this survey have been corrected for instrument error, as determined in Appendix G.

H. Dates of Survey

This survey was carried out on 23 August, 1983, JD 235. ✓

I. Reduction and Processing of Data

All side scan sonar data was initially recorded in NOAA Form 77-44, Soundings Volumes. All header data, position numbers, time, and position control data were recorded in the appropriate columns in the volumes. The remarks column was used to record all line information, vessel rpm's, the length of towcable, measured from the water line to the towfish, vessel headings, observed contacts, and any other unusual or noteworthy remarks. The towfish layback was computed by adding the amount of towcable out the stern plus the stern to antenna distance. ✓

The Del Norte rates were hand plotted on the field sheet with a fix interval of 2 minutes. The sonargram was examined and annotated between fixes, to insure immediate recognition of the suspicious contact from the previous survey. When the contact position was established, the layback distance was taken into consideration and the corrected position plotted on the field sheet. ✓

The Del Norte rates for the least depth detached positions were later used to determine the latitude and longitude of the contact with the HP9815 computer and the Geodetic Package Program. ✓

J. Junction and Splits

This side scan sonar survey was an item investigation with no junction required. ✓

K. Comparison with Prior Survey See sec. 6 of the Eval. Report.

The prior survey of 1982, FE-241 was also a side scan sonar survey, and the difference in position of the contact determined from the sonar records and the 1983 diver determined position is 30 meters. The difference was attributed to the inaccuracies of determining the position of a contact using side scan sonar methods. ^{where the contact first appeared}

L. Comparison with Chart See sec. 7 of the Eval. Report.

Chart 12371 is the largest scale coverage of the area.

The area surveyed is covered by NOS charts: 12364 21st Ed., Oct. 3/81, page A; 12372 21st Ed., Sept. 18/82, page E; 12371 19th Ed., Oct. 2/82; 12354 25th Ed., July 31/82. The pneumofathometer soundings recorded at the position of the obstructions were within .4-2.5 feet of the surroundings charted depths. 29 ft. depth charted from H-9008(1968).

Recommendation: Chart an ^{submerged rock} obstruction with a least depth of ~~26.5~~^{27.0} feet based on predicted tides, at latitude 41-12-17.26N, longitude 072-55-41.38W.

It is recommended that a change to the before mentioned charts be made to indicate the three pieces of riprap material outside the breakwaters at New Haven, Connecticut at latitude 41-12-17.26 N., longitude 072-55-41.38W. Least depth over the material determined by divers as ~~26.5~~^{27.0} feet, using the predicted tides. A Notice to Mariners was sent out and a copy of the Notice is in Appendix H. of this report. See sec. 3 of the Eval. Report.

Although there was shoreline within the limits of ~~R/H 05-04-83~~^{FE-254}, the shoreline was not plotted on the field sheet. All landmarks inshore of the item, including the breakwaters and aides to navigation, were visually verified from offshore and found suitable for charting. See sec. 2b of the Eval. Report.

M. Adequacy of Survey See sec. 9 of the Eval. Report.

This survey completely covers the area described in section B. and is considered complete and adequate for charting.

N. Incomplete Items

There were no incomplete items left by this survey. Concur

O. Currents and Winds

In general, the surface and bottom tidal currents appeared to exhibit the same general characteristics and trends as observed in the vicinity of the Northville Oil Terminal. A complete description of these conditions is available in the Descriptive Report to Accompany Hydrographic Survey R/H 05-01-83, R/H 05-03-83, and R/H 10-02-83. These at present have no registry numbers.

P. Personnel

The officers participating in this survey were LCDR Donald D. Winter, LT Neal G. Millett, LT Edward M. Clark and ENS Thomas G. Callahan.

Q. General Notes

See the Coast Pilot Report and the Loran-C comparisons for OPR-B660-RU/HE-83 and the Descriptive Report for OPR-B660-RU/HE-82 for additional information on this survey.

The format of this report is a composite of the Descriptive Report formats contained in the Wire Drags and Hydrographic Manuals. This format is the optimum composite of the pertinent sections of the two reports and is more applicable

to the surveys conducted by the Rude and Heck. ✓
Specific recommendations for the disposition of this item
are contained in section L. Comparison with Chart. ✓

Respectively submitted,


Edward M. Clark, LT, NOAA

APPROVAL SHEET ✓

FE-254
~~R/H 05-04-83~~

Field operations contributing to the accomplishment of this survey were conducted under my supervision with frequent personal checks of progress and adequacy. This report and field sheets have been closely reviewed and are considered complete and adequate for charting.


Donald D. Winter

LCDR, NOAA

Commanding Officer

NOAA Ships RUDE & HECK

C. HORIZONTAL CONTROL ✓

No new stations were established for this survey. See Appendix D., Signal List for a complete listing of all stations used on this survey.

D. SIGNAL LIST

PROJECT:

B660-Ru/He-83

SIGNALS/STATIONS

~~Horton Point Lt.~~

~~ID NBR 1
LAT 415507.828
LON 722645.981
ELEV'N 31.00 M
FILE 1~~

~~Tank 8~~

~~ID NBR 2
LAT 415847.362
LON 723849.172
ELEV'N 55.00 M
FILE 2~~

~~Northville Oil Terminal, E. Dolphin~~

~~ID NBR 3
LAT 410003.898
LON 723644.971
FILE 3~~

Station 01 Lighthouse
New Haven Lt. Hse.

Old Tower, 1833

ID NBR 4
LAT 411455.931
LON 725415.238
ELEV'N 26.60 M
FILE 4

Station 02

Falkner Is. Lt. Lighthouse, 1882

ID NBR 5
LAT 411242.701
LON 723914.608
ELEV'N 29.60 M
FILE 5

New Haven West Brkwr
West End Light Lt, 1931

ID NBR 6
LAT 411331.939
LON 725723.754
FILE 6

New Haven Lt. Light, 1933

ID NBR 7
LAT 411315.430
LON 725633.422
FILE 7

New Haven Middle Brkwr
East End Lt, 1931

ID NBR 8
LAT 411352.659
LON 725524.882
FILE 8

New Haven Middle Brkwr
West End Lt, 1931

ID NBR 9
LAT 411327.229
LON 725611.308
FILE 9

~~Southwest Ledge Lt.~~

~~ID NBR 10
LAT 411403.681
LON 725445.178
FILE 10~~

~~Saybrook Brkwr Lt. Hse.~~

~~ID NBR 11
LAT 411547.185
LON 722835.611
ELEV'N 17.70 M
FILE 11~~

~~Duck Is. North Brkwr Lt.~~

~~ID NBR 12
LAT 411536.441
LON 722831.536
FILE 12~~

~~Duck Is. West Brkwr Lt.~~

~~ID NBR 13
LAT 411522.266
LON 722908.296
FILE 13~~

~~Kelsey Point Brkwr~~

~~ID NBR 14
LAT 411436.323
LON 723030.849
FILE 14~~

F. DIVING REPORTS

DIVING OPERATIONS

Date: August 23, 1983 Unit: NOAA Ship's Purlo & Heck

Divemaster: Johnny R. CARRAWAY Diver-in-charge: Johnny R. CARRAWAY

Purpose of dive: Investigate underwater obstruction outside of Seal Haven, Canal. backwater.

Equipment: standard scuba, pneumo-hose, pop float & search reel
Planned depth: 35 feet Planned duration: 30-60 min.

Divers	IN Pressure	Out Pressure	△ Pressure	In Time	Out Time	△ Time	Depth	Comments
CARRAWAY	2850 psi	900 psi	1950 psi	1041	1112	31 min.	35 ft.	
" 2k	3000 psi	1350 psi	1650 psi	1041	1112	31 min.	35 ft.	
WINTER	2800 psi	1300 psi	1500 psi	1041	1112	31 min.	35 ft.	

Post dive comments: the reported obstruction was detected with side-scan-sonar and a marker float was set out. Divers made a fatho-search with the launch, reset the marker over fatho spikes. Divers descended on marker line made circle search and located 3 rocks, least depths and position were obtained.

Johnny R. Carraway
Divemaster Signature

Johnny R. Carraway
Diver-in-Charge Signature

ITEM INVESTIGATION

DATE: August 23, 1983

SHIP/LAUNCH: USCGC Ship's Deck
LAUNCH 20

LOCATION: 1/2 mile outside of New Haven, Conn. Breakwater

DIVE MASTER: Johnny Cardaway

DIVERS: Johnny Cardaway

Ed Clark

Don Winter

TIMES

IN WATER 1040

UNDER WATER 1041

ON SURFACE 1112

IN BOAT 1113

MAXIMUM DEPTH 35 feet

DIVE DURATION 31 min.

PNEUMOFATHOMETER NO. _____

ITEM # 1
POSITION _____
LEAST DEPTH _____

TIME DEPTH

1. 1057 33 ft.

2. 1058 33 ft.

3. _____

BOTTOM

TIME DEPTH

1. 1059 35 ft.

2. 1100 35 ft.

3. _____

ITEM # 2
POSITION _____
LEAST DEPTH _____

TIME DEPTH

1. 1107 33 ft.

2. 1107 33 ft.

3. _____

BOTTOM

TIME DEPTH

1. 1108 35 ft.

2. 1108 35 ft.

3. _____

ITEM # 3
POSITION _____
LEAST DEPTH _____

TIME DEPTH

1. 1109 34 ft.

2. 1110 34 ft.

3. _____

BOTTOM

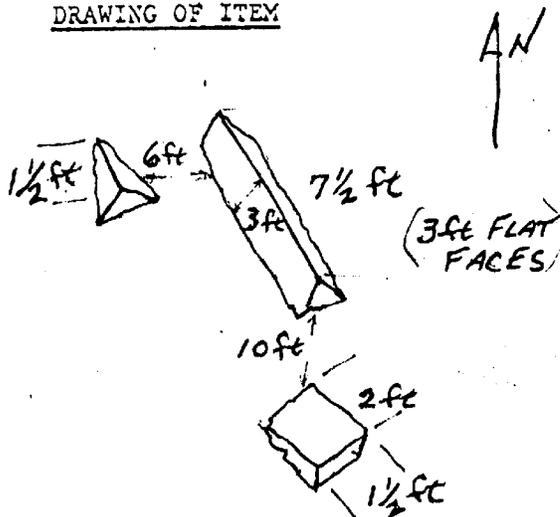
TIME DEPTH

1. 1111 35 ft.

2. 1111 35 ft.

3. _____

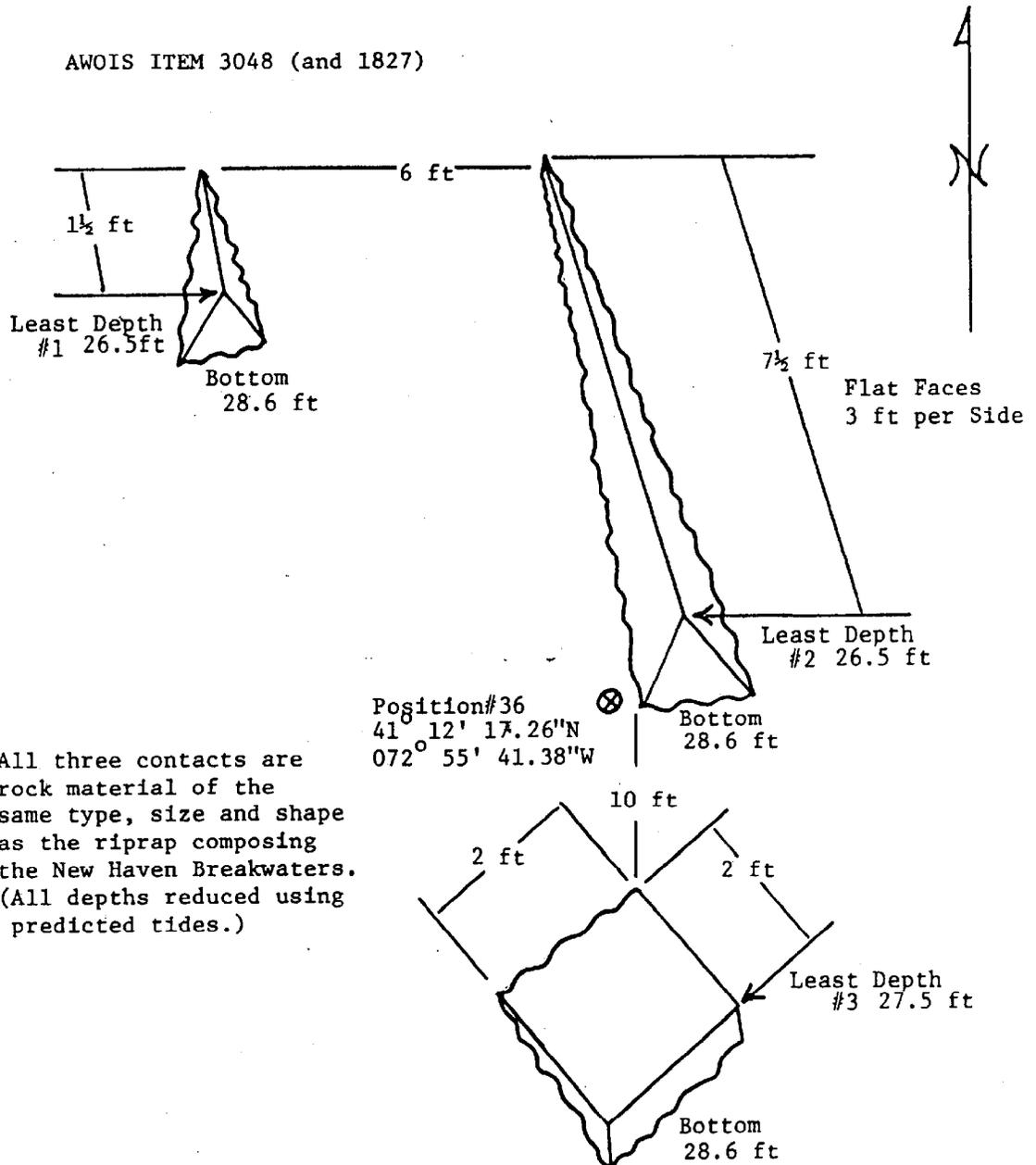
DRAWING OF ITEM



DESCRIPTION OF ITEM

All three items were rocks which appeared to be of the same type as the nearby breakwater.

AWOIS ITEM 3048 (and 1827)



All three contacts are rock material of the same type, size and shape as the riprap composing the New Haven Breakwaters. (All depths reduced using predicted tides.)

H. LOCAL NOTICE TO MARINERS REPORT



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
NOAA Ships RUDE and HECK
439 West York Street
Norfolk, Virginia 23510

30 August, 1983

To: Commander, Third Coast Guard District
Governors Island
New York 10004

Donald D. Winter
From: LCDR Donald D. Winter
Commanding Officer

Subject: Notice To Mariners

Recent survey operations by the NOAA Ships RUDE and HECK in the vicinity of New Haven, Connecticut, have identified, using NOAA divers, three pieces of riprap material outside the breakwaters at latitude $41^{\circ} 12' 17.26''\text{N}$, longitude $072^{\circ} 55' 41.38''\text{W}$. Least depth over the material was 26.5 feet, using predicted tides.

cc: N/MO1
N/CG241



I. ~~SMOOTH TIDE REQUEST~~ - FIELD TIDE NOTE

FIELD TIDE NOTE

Field tide reductions were based on predicted tides from Bridgeport, Connecticut, corrected for AWOIS # 3048 in accordance with section 5.9 of the Project Instructions. These correctors were generated onboard with the ship's PDP 11/34 computer and predicted tide tapes for 1983. These tide tapes were supplied to the ships by MOA 231.

All operating tide stations were checked during the course of this project and were found to be operating properly.

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center: Atlantic

OPR: B660

HYDROGRAPHIC SHEET: FE - 254, (RH - 5 - 4 - 83)

Locality: Offshore West Haven, Connecticut

Time Period: August 23, 24, 1983

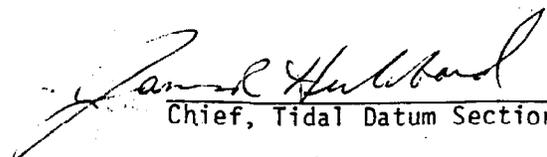
Tide Station Used: 846-7150, Bridgeport, Connecticut

Plane Of Reference (Mean Lower Low Water): 2.05 Ft.

Height Of Mean High Water Above Plane Of Reference: 6.8 Ft.

Remarks: Recommended Zoning:

For item (Awois #3048), apply -10 minute time correction and x0.92 range ratio.


Chief, Tidal Datum Section

HYDROGRAPHIC SURVEY STATISTICS

FE-254

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION			AMOUNT
SMOOTH SHEET		ONE INSERT IN D.R.	SMOOTH OVERLAYS: POS., ARC, EXCESS			
DESCRIPTIVE REPORT		1	FIELD SHEETS AND OTHER OVERLAYS			1
DESCRIP-TION	DEPTH/POS RECORDS	HORIZ. CONT. RECORDS	SONAR-GRAMS	PRINTOUTS	ABSTRACTS/SOURCE DOCUMENTS	
ACCORDIAN FILES						
ENVELOPES						
VOLUMES						
CAHIERS						
BOXES				1		

SHORELINE DATA

SHORELINE MAPS(List): N/A

PHOTOBATHYMETRIC MAPS(List): N/A

NOTES TO THE HYDROGRAPHER(List): N/A

SPECIAL REPORTS(List): N/A

NAUTICAL CHARTS(List): 12371

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS		
	VERIFICATION	EVALUATION	TOTALS
POSITIONS ON SHEET			1
POSITIONS REVISED	0	0	0
SOUNDINGS REVISED	0	0	0
CONTROL STATIONS REVISED	0	0	0
	TIME - HOURS		
	VERIFICATION	EVALUATION	TOTALS
PRE-PROCESSING EXAMINATION	0	4	4
VERIFICATION OF CONTROL	0	1	1
VERIFICATION OF POSITIONS	0	1	1
VERIFICATION OF SOUNDINGS	0	1	1
VERIFICATION OF JUNCTIONS	0	0	0
APPLICATION OF PHOTOBATHYMETRY	0	0	0
SHORELINE APPLICATION/VERIFICATION	0	0	0
COMPILATION OF SMOOTH SHEET	0	2	2
COMPARISON WITH PRIOR SURVEYS AND CHARTS	0	1	1
EVALUATION OF SIDESCAN SONAR RECORDS	0	1	1
EVALUATION OF WIRE DRAGS AND SWEEPS	0	0	0
EVALUATION REPORT	0	2	2
OTHER	0	0	0
TOTALS	0	13	13
Pre-processing Examination by C.D. MEADOR	Beginning Date 1/25/84	Ending Date 1/26/84	
Verification of Field Data by C.D. MEADOR	Time(Hours) 5	Ending Date 3/7/84	
Verification Check by C.D. MEADOR	Time(Hours) 1	Ending Date 3/8/84	
Evaluation and Analysis by C.D. MEADOR	Time(Hours) 4	Ending Date 3/8/84	
Inspection by R.D. SANOCKI	Time(Hours) 1	Ending Date 3/8/84	

ATLANTIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO.: FE-254

FIELD NO.: R/H-05-04-83

Connecticut, Long Island Sound, Offshore -- 3 miles south of West Haven

SURVEYED: August 23, 1983

SCALE: 1:20,000

PROJECT: OPR-B660-RU/HE-8

SOUNDINGS: Pneumatic Depth Gauge

CONTROL: Del Norte (Range/Range)

Chief of Party D. D. Winter

Surveyed by N. G. Millett
..... E. M. Clark
..... T. G. Callahan

Automated Plot by..... Xynetics 1201 Plotter (AMC)

1. INTRODUCTION

- a. No unusual problems were encountered during verification.
- b. The field data for this field examination was collected at a scale of 1:5,000. It was processed during verification at a scale of 1:20,000 as required by section 7.3 of the Project Instructions.
- c. Notes in the Descriptive Report were made in red during verification.

2. CONTROL AND SHORELINE

- a. The control is adequately described in sections F and G of the Descriptive Report.
- b. This is an offshore field examination and no shoreline is shown on the present field examination smooth sheet.

3. HYDROGRAPHY

The only hydrography on this field examination is three Pneumatic Depth Gauge least depth soundings on three submerged rocks. Because of the proximity of these submerged rocks to each other, only the shoalest least depth is shown on the present field examination smooth sheet.

4. CONDITION OF SURVEY

The smooth sheet, hydrographic records and reports comply with the Hydrographic Manual except as follows:

a. The Field Tide Note is not in the format required by section 5.3.5.B of the Hydrographic Manual.

b. The Descriptive Report for this survey was clearly written and comprehensive in content.

5. JUNCTIONS

This is an item investigation with no junctional requirements.

6. COMPARISON WITH PRIOR SURVEYS

The prior survey, FE-241 (1982) 1:20,000, mentioned in section K of the Descriptive Report is at present unverified. The data for this FE, however, was thoroughly reviewed during its Preprocessing Examination.

The discussion in section K is adequate and needs no amplification in this Evaluation Report.

7. COMPARISON WITH CHART

12371 (19th Edition, October 2, 1982)

a. Hydrography

Nothing is charted in the location of the submerged rocks indicating a danger to navigation.

A 27 RK with the danger curve should be charted in Latitude $41^{\circ}12'17.26''$, Longitude $72^{\circ}55'41.38''$.

b. Aids to Navigation

There are no fixed or floating aids to navigation within the limits of the present field examination.

8. COMPLIANCE WITH INSTRUCTIONS

This field examination adequately complies with the Project Instructions.

9. ADDITIONAL FIELD WORK

This is an excellent field examination and no additional field work is recommended.

Charles D. Meador
Charles D. Meador
Chief, Evaluation and Analysis Group
Verification of Field Data
Evaluation and Analysis

INSPECTION REPORT
FE-254

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the magnetic tape record for this survey. Final control, position, and sounding printouts of the survey have been made. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected



R. D. Sanocki
Chief, Verification Section
Hydrographic Surveys Branch



Karl Wm. Kieninger, CDR, NOAA
Chief, Hydrographic Surveys Branch

Approved 8 March 1984



Wesley V. Hull, RADM, NOAA
Director, Atlantic Marine Center

72° 56'

72° 55'

41° 13'

27Rk

41° 12'

FE-254
INVESTIGATION OF AWOIS ITEM NO. 3048
1:20,000 SCALE
SOUNDING IN FEET AT MLLW
POLYCONIC PROJECTION
NORTH AMERICAN DATUM OF 1927

41° 11'

72° 56'

72° 55'

