

H11736

<p>NOAA FORM 76-35A</p> <p>U.S. DEPARTMENT OF COMMERCE          NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION          NATIONAL OCEAN SURVEY</p> <p><b>DESCRIPTIVE REPORT</b></p>	
<i>Type of Survey:</i>	<b>Navigable Area</b>
<i>Registry Number:</i>	<b>H11736</b>
<b>LOCALITY</b>	
<i>State:</i>	<b>Massachusetts</b>
<i>General Locality:</i>	<b>Boston Harbor</b>
<i>Sub-locality:</i>	<b>Boston Inner Harbor</b>
<p><b>2007</b></p> <p>CHIEF OF PARTY  <b>LT(jg) Matthew Jaskoski, NOAA</b></p>	
DATE	LIBRARY & ARCHIVES

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:  <h2 style="text-align: center; margin: 0;">H11736</h2>
<h1 style="margin: 0;">HYDROGRAPHIC TITLE SHEET</h1>		
INSTRUCTIONS:    The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.		
State:	<b>Massachusetts</b>	
General Locality:	<b>Boston Harbor</b>	
Sub-Locality:	<b>Boston Inner Harbor</b>	
Scale:	<b>1:5,000</b>	Date(s) of Survey:
		<b>06/13/07 to 09/14/07</b> <span style="color: red;"><b>Addendum</b></span> <b>08/07/2008</b>
Instructions Dated:	<b>07/11/07</b>	Project Number:
		<b>OPR-A397-NRT5-07</b>
Change No.1 Dated:	<b>N/A</b>	
Change No.2 Dated:	<b>N/A</b>	
Vessel:	<b>NOAA NRT-5, S3002</b>	
Chief of Party:	<b>LT(jg) Matthew Jaskoski, NOAA</b>	
Surveyed by:	<b>NOAA Navigation Response Team 5 Personnel</b>	
Soundings by:	<b>Kongsberg Simrad EM 3000 multibeam sonar</b>  <b>Odom Echotrac CV/200</b>	
Graphic record checked by:	<b>N/A</b>	
Protracted by:	<b>N/A</b>	Automated Plot:
		<b>N/A</b>
Verification by:	<b>Atlantic Hydrographic Branch Personnel</b>	
Soundings in:	<b>Meters at MLLW <span style="color: red;">(H-Cell units are in feet at MLLW)</span></b>	
Remarks: <b>1) All Times are UTC.</b> <b>2) This is a Basic Navigable Area Hydrographic Survey.</b> <b>3) Projection is <span style="color: red;">NAD83, UTM Zone 19N</span> .</b> <span style="color: red;"><b>Bold, Re, Italic notes in the DR were made during office processing</b></span>		

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**DESCRIPTIVE REPORT**  
to accompany  
HYDROGRAPHIC SURVEY H11736

Scale of Survey: 1:5,000  
Year of Survey: 2007  
NOAA Navigation Response Team 5  
LT(jg) Matthew Jaskoski, OIC

**A. AREA SURVEYED**

This hydrographic survey was conducted in accordance with \*Hydrographic Survey Letter Instructions for project OPR-A397-NRT5-07, H11736 Boston, MA. The original instructions are dated July 11, 2007. *\*Filled with original field records.*

This Descriptive Report pertains to an area of approximately 2.05 SNM, of Boston’s Inner Harbor from Castle Island in the south to Chelsea River Terminal in the north. The assigned registry number for this sheet is H11736, as prescribed in the Letter Instructions.

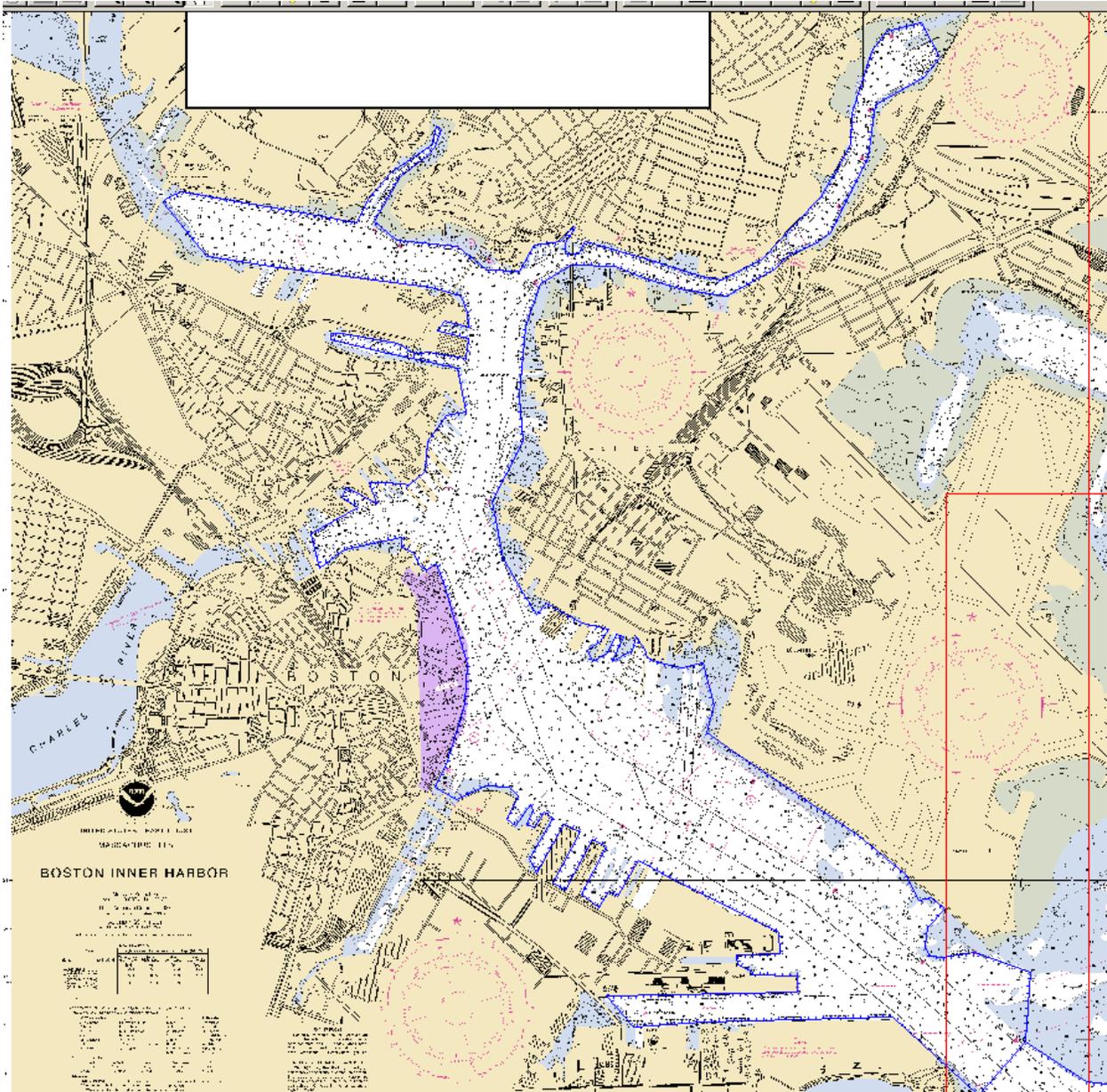
The Port of Boston is the largest seaport in the New England area and is ranked 31<sup>st</sup> on the 175 ports list by the United States Army Corps of Engineers. For this reason, it is important to provide updated and accurate bathymetric surveys and object detection in Boston Harbor and its approaches, for safe navigation. This project is in support of updating the National Ocean Service (NOS) nautical charts.

For complete survey limits, see figure A-1 on the following page.

Linear nautical miles of single beam only sounding lines - mainscheme only	76.8
Linear nautical miles of multibeam only sounding lines - mainscheme only	23.0
Linear nautical miles of side scan sonar only lines - mainscheme only	76.8
Linear nautical miles of any combination of the above techniques	176.6
Linear nautical miles of crosslines from single beam and multibeam combined	11.9
Linear nautical miles of developments other than mainscheme lines	6.3
Linear nautical miles of shoreline/nearshore investigation	0.0
Number of bottom samples collected	0.0
Number of items investigated that required additional time/effort in the field beyond the above survey operations	0
 Total square nautical miles	 2.05

Dates of acquisition: June 13, 2007 to September 14, 2007

Figure A-1: Outline of survey area



## **B. DATA ACQUISITION AND PROCESSING**

### **B.1 EQUIPMENT**

Data were acquired by NOAA NRT-5 S3002. NOAA Survey Vessel S3002 is a 9.12-meter aluminum SeaArk outboard driven vessel with an average multibeam transducer draft of 1.3 meters.

NOAA S3002 acquired both bathymetry and imagery data. Side scan sonar data were acquired with a towed Klein 3000 sonar system. Bathymetry data were acquired with both an Odom Echotrac C/V 200 and a Kongsberg Simrad EM 3000 multibeam echosounder (MBES). Positioning and attitude were determined with a TSS POS/MV 320 (version 4) GPS aided inertial navigation system

No unusual vessel configurations or problems were encountered. Refer to the *\*2007 Data Acquisition and Processing Report (DAPR)* for detailed equipment and vessel configuration information. *\*Submitted with H-Cell Deliverables*

### **B.2 QUALITY CONTROL**

#### **B.2.1 Side Scan Sonar Quality Control**

Daily confidence checks were made by observing the outer ranges of the side scan sonar images. A good check consisted of distinguishing linear contacts across the entire range of the side scan trace. No unusual problems were encountered.

200% SSS bottom coverage was collected for this survey project at 75 m range scale. A mosaic was created at 1 meter resolution for submission (Table B-2).

#### **B.2.2 Multibeam Echosounder Quality Control**

Multibeam echosounder data were acquired at 100% coverage for SSS contact development, and in areas deemed navigationally significant by the hydrographer. Near shore hydrography was limited to areas deemed safely navigable by the hydrographer, with due consideration given to areas where there was a high potential of damage to the vessel and sonars. Private anchorage "A" located near India Wharf, Boston was not surveyed due to a dense population of moored small boats. There were no faults with the MBES system which affected data integrity. For detailed discussion of MBES system calibrations, data acquisition, and data processing refer to this project's DAPR.

### B.2.3 Total Propagated Error

Total Propagated Error (TPE) parameters for sound speed and tide data for H11736 are shown in table B-1. Total tide error was provided by CO-Ops as 0.13, the 1- $\sigma$  value applied in post-processing was 0.065. Sound speed TPE values were used in accordance with HSTP guidelines regarding frequency of surface and water column sound speed measurements.

Table B-1. Total Propagated Error parameters.

Total Propagated Error Values			
Tide Values		Sound Speed Values	
Measured	Zoning	Measured	Surface
0.00	0.065	4.0	0.2

### B.2.4 Fieldsheets and Navigation Surfaces

Caris HIPS Uncertainty Weighted surface was created for all bathymetry data. Surfaces were created at 5m resolution for VBES and 0.75m resolution for MBES data. Based on Caris generated QC reports see sec B.2.5, beams 1-2 and 126-127 were filtered out of the processed data, and are not included in the base surfaces. Table B-2 lists all surfaces submitted with this survey. The CUBE surface finalized weighted grid is included in the digital preliminary smooth sheet. *Concur with clarification, surfaces were recomputed by the Atlantic Hydrographic Branch. See the evaluation report for further information.*

### B.2.5 Single Beam Quality Control

There were no unusual events associated with the collection of the Single Beam data for this project. Refer to this project’s \*DAPR for detailed discussion of VBES system calibrations, data acquisition, and data processing. *\*Filed with original field records.*

Table B-2: H11736 bathymetry surface, and Side Scan mosaic resolutions.

H11736 Bathymetry surfaces and SSS mosaic			
Fieldsheet	Surface/Mosaic Name	Grid Type	Resolution
H11736	H11736_MBES_BASE_75cm	Uncertainty Weighted	0.75m
H11736	H11736_MBES_BASE_75cm_Final	Uncertainty Weighted	0.75m
H11736	H11736_VBES_BASE_5m	Uncertainty Weighted	5.00m
H11736	H11736_VBES_BASE_5m_Final	Uncertainty Weighted	5.00m
H11736	H11736_1m	SSS Mosaic	1.00m

### **B.2.6 Crosslines**

Approximately 11.9 linear NM of crosslines were acquired, this is 11% of the combined MBES and VBES mainscheme bathymetry linear NM. A total of 3.0 linear NM of MBES crosslines were run; this was approximately 13% of the total linear NM of MBES mainscheme lines run. A visual examination of approximately 10% of crossline-mainsheme common areas showed general agreement between crosslines and mainscheme lines to within 1-2 feet. With the exception of the outermost beams (beams 1-3 and 126-127) all beams met 90% order oneness based on the Caris generated quality control report (fig B-1) outer beams were filtered out of the dataset in post-processing. Please refer to the separates section of this report for Caris generated QC tables. A total of 8.9 linear NM of VBES crosslines were run; this was approximately 12% of the total linear NM of VBES mainscheme lines run. Visual comparison junction areas showed general agreement to within 1-2 feet between crosslines and mainscheme VBES lines. For a list of all crosslines acquired for this project, tabulated by DN and line file name, please refer to the processing logs located in the separates section of this report. *Concur*

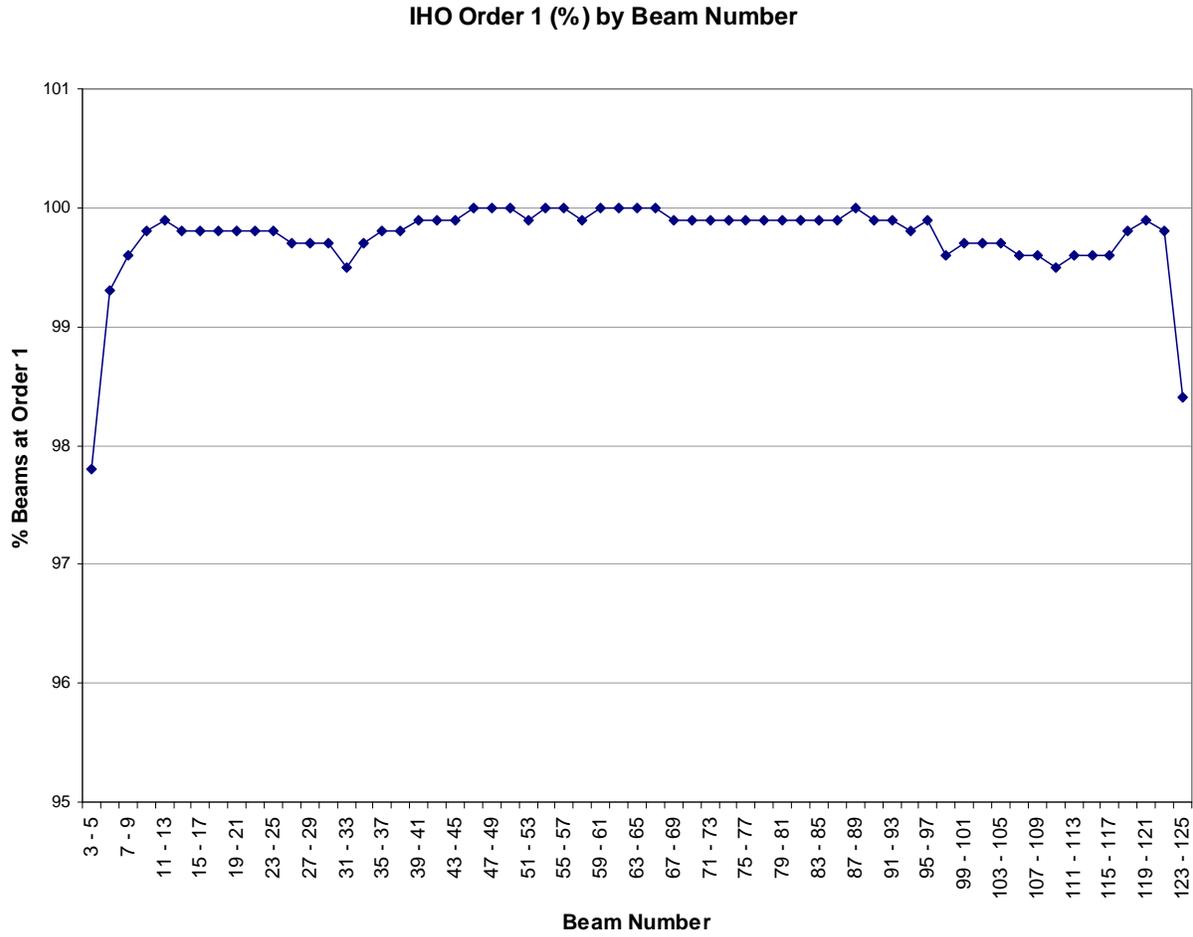
### **B.2.7 Junctions**

Survey H11736 junctions with both contemporary survey H11737, and prior surveys H10990, and H10991. Visual examination of junction areas showed agreement between bathymetry data to within 1-2 feet. *Concur*

## **B.3 CORRECTIONS TO ECHO SOUNDING**

All methods or instruments used were as described in the project \*DAPR. All sound velocity casts are included in the digital preliminary smooth sheet. *\*Filed with original field records.*

Figure B-1: Caris QC report, IHO order oneness v Beam Number; rejected beams 1-2, and 126-127 not included.



## **C. VERTICAL AND HORIZONTAL CONTROL**

### **C.1 VERTICAL CONTROL**

The tidal datum for this project is Mean Lower Low Water (MLLW). The operating National Water Level Observation Network (NWLON) station at Boston (844-3970) served as datum control for the survey area. No installation or leveling was performed by NRT-5 personnel.

A Request for Approved Tides was sent to N/OPS1 on September 24, 2007 (Appendix III). Verified tides from the N/OPS1 CO-OPS website were downloaded and applied to all sounding data. *See evaluation report for vertical control used in the addendum survey.*

### **C.2 HORIZONTAL CONTROL**

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using UTM zone 19.

Sounding positional control was determined using the Global Positioning System (GPS) corrected by U.S. Coast Guard differential GPS (DGPS) beacon stations. The DGPS beacon used for this survey was Acushnet, MA. No horizontal control stations were established for this survey.

Horizontal dilution of precision (HDOP) was monitored during acquisition, and did not exceed 4.00. Adequate satellite coverage was maintained throughout the survey period. *See evaluation report for horizontal control used in the addendum survey.*

## D. RESULTS AND RECOMMENDATIONS

### D.1 CHART COMPARISON

The charts affected by this survey are:

<i>Chart Number</i>	<i>Edition</i>	<i>Edition Date</i>	<i>Raster (.kap) Date</i>
13272	49th	2004-October	6/22/2007
13270	62nd	2006-June	6/22/2007
13269	10th	2007-February	6/22/2007
13267	34th	2007-May	6/22/2007

<i>ENC Cell Name</i>	<i>Edition</i>	<i>Update Application Date</i>	<i>Issue Date</i>
US5MA11M	7th	2007-04-04	2007-06-19

#### D.1.1 General Agreement with Charted soundings

Sounding data generally agreed with charted depths to within 1-2 feet, any significant differences from charted depths are addressed in Appendices II . *Concur.*

#### D.1.2 AWOIS Items and Significant Contacts

There were 18 AWOIS items within the limits of survey H11736, 17 of which were full investigation. Three AWOIS items (12451, 12452 and 12442) were submitted as DToNs to be updated with current bathymetry data. These items are further addressed in Appendix I of this report as well as in the digital preliminary smooth sheet. Additionally, three AWOIS items (10210, 10214 and 10237) were recommended by the hydrographer for removal. Those AWOIS items not submitted as DToNs are further addressed in Appendix II of this report as well as in the digital preliminary smooth sheet. *Concur.*

#### D.1.3 Dangers to Navigation

There were 9 DToNs submitted for H11736. Two DToNs were submitted to MCD on 26 July 2007. Two other DToNs were submitted to MCD on 1 Aug 2007. A third set of 5 DToNs were submitted on 28 September 2007. These 5 items were originally considered non-dangerous due to their location and the nature of traffic in the area, however significant differences from charted depths in the area warranted DToN submission . For a detailed DToN report see Appendix I.

#### **D.1.4 Charted Features**

Hydrographer recommended changes to charted items are listed in Appendix II of this report as well as in the digital preliminary smooth sheet. All charted items not specifically addressed in Appendix II are recommended to be retained as charted by the hydrographer. *Concur.*

#### **D.1.5 Charting Recommendations**

Hydrographer recommendations for discreet items are included in Appendix II of this report as well as in the digital preliminary smooth sheet. Survey H11736 is complete and adequate to supersede charted soundings in their common areas. *Concur.*

### **D.2 ADDITIONAL RESULTS**

#### **D.2.1 Aids to Navigation**

Charted AToN 490 “Reserved Channel Oil Barrier Light” was noted not to be in its charted location. This light was observed to be located on a charted dol (*dolphin*) in the area. The hydrographer recommends the light be charted to reflect current data. This item is addressed further in Appendix II of this report as well as in the digital preliminary smooth sheet. This item was not submitted as a DToN as it was fulfilling its intended purpose of demarking the oil barrier. The USCG was however informed both verbally and later via electronic-mail, of the AToN’s correct position (see the supplemental correspondence section in Appendix V of this report). *Concur.*

#### **D.2.2 Bridges and Overhead Cables**

There are five bridges in the H11736 survey area. Positioning data was not adversely effected while crossing under the overhead objects and the hydrographer has no charting recommendations. *Concur.*

#### **D.2.3 Submarine Cables and Pipelines**

There are six charted submarine cable and pipeline areas located on survey H11736; three in the Chelsea River, one in the Mystic River, one running from South Boston and East Boston, and one and one located in the vicinity of the South Boston Reserve Channel and Castle Island. No exposed cables were positioned during this survey, nor were any images of these items acquired on SSS. In addition, there are four charted tunnels in the survey area. Bathymetry data gathered over these tunnels showed general agreement with charted soundings to within 1-2 feet and agreement with the project depth of the channel. *Concur.*

## **E. APPROVAL SHEET**

**OPR-A397  
Boston Harbor  
Massachusetts**

**Boston Inner Harbor  
Survey Registry No. H11736**

Field operations for this survey were conducted under my daily supervision with frequent checks of progress and adequacy. All field sheets, bathymetry models, this Descriptive Report, and all accompanying records and data are approved.

Submitted in association with this descriptive report has been a series of reports and data:

OPR-A397-NRT5-07 horizontal and vertical control report (submitted with this report)  
2007 Data Acquisition and Processing Report (submitted with this report)

This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.

Respectfully,

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LT(jg) Matthew Jaskoski, NOAA  
OIC NRT-5

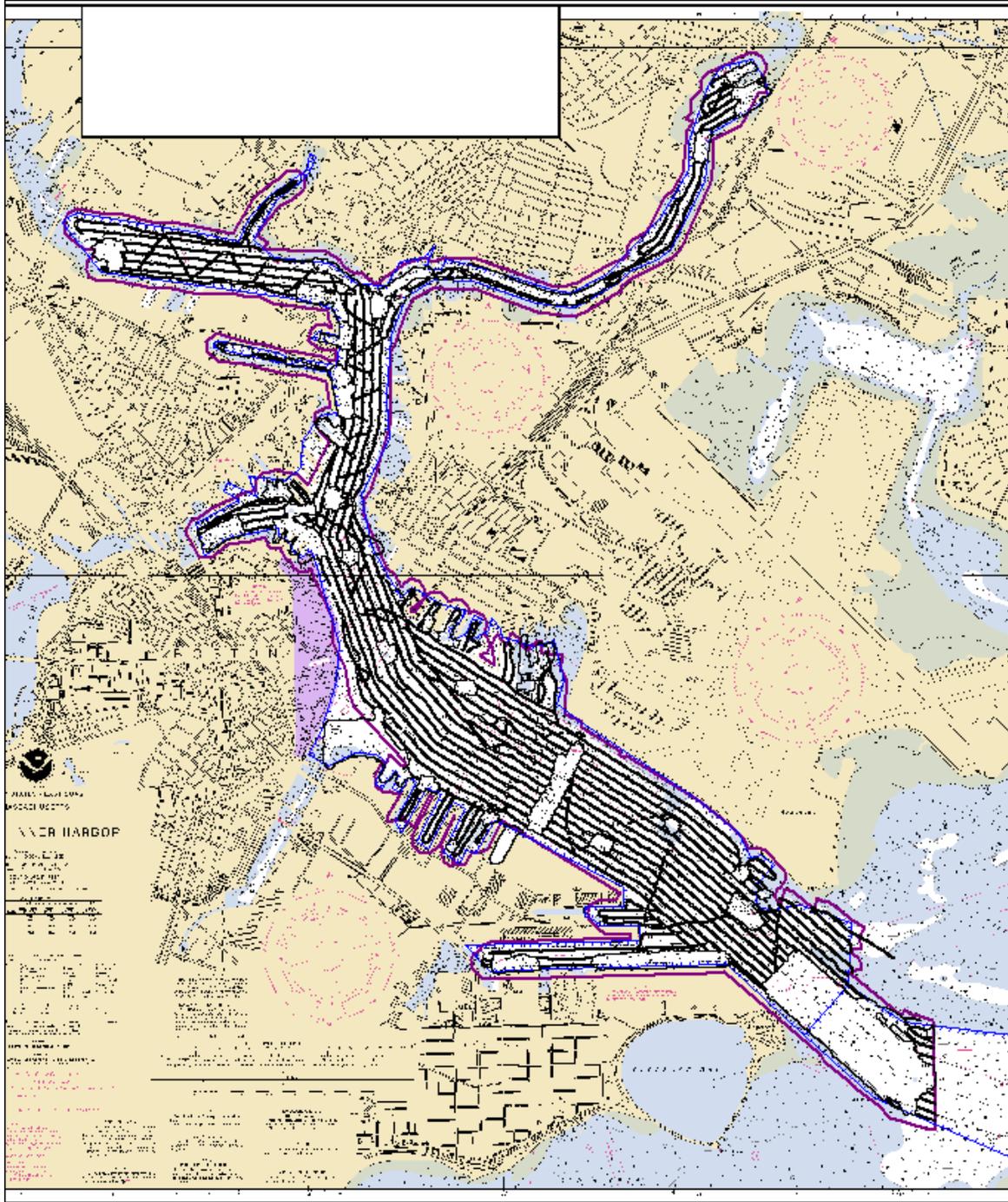
**APPENDIX I**  
**DANGERS TO NAVIGATION REPORT**

## **APPENDIX II**

### **SURVEY FEATURES REPORT**

### APPENDIX III

### PROGRESS SKETCH



**APPENDIX IV**

**TIDES AND WATER LEVELS**

**APPENDIX V**  
**SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCES**

**V.1. COAST PILOT REPORT, NOAA FORM 77-6**

No corrections or additions recommended.

**V.2. BOTTOM SAMPLE, NOAA FORM 75-44**

No bottom samples were taken.

**V.3. AIDS TO NAVIGATION, NOAA FORM 76-40**

Charted AToN 490 “Reserved Channel Oil Barrier Light” was noted not to be in its charted location. This light was observed to be located on a charted dol in the area. The hydrographer recommends the light be charted to reflect current data. This item is addressed further in Appendix II of this report as well as in the digital preliminary smooth sheet. This item was not submitted as a DToN as it was fulfilling its intended purpose of demarking the oil barrier. The USCG was however informed both verbally and in writing, of the AToN’s correct position, see supplemental correspondence.

# H11736 Potential Obstruction Investigation

**Registry Number:** H11736  
**State:** Massachusetts  
**Locality:** Boston Harbor  
**Sub-locality:** Boston Inner Harbor  
**Project Number:** OPR-A397-NRT5-07  
**Survey Dates:** June 12, 2007 - September 23, 2008 (Addm)

## Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
13272	50th	08/01/2008	1:10,000 (13272_1)	USCG LNM: 12/04/2007 (03/11/2008) CHS NTM: None (01/25/2008) NGA NTM: None (03/22/2008)
13270	62nd	06/01/2006	1:25,000 (13270_1)	[L]NTM: ?
13274	26th	04/01/2005	1:40,000 (13274_5)	[L]NTM: ?
13267	32nd	12/01/2004	1:80,000 (13267_1)	[L]NTM: ?
13260	39th	06/01/2003	1:378,838 (13260_1)	[L]NTM: ?
13200	34th	12/01/2005	1:400,000 (13200_1)	[L]NTM: ?
13009	32nd	07/01/2006	1:500,000 (13009_1)	[L]NTM: ?
13006	33rd	04/01/2006	1:675,000 (13006_1)	[L]NTM: ?
13003	48th	10/01/2004	1:1,200,000 (13003_1)	[L]NTM: ?

\* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS 12451	Obstruction	6.34 m	42° 22' 42.5" N	071° 02' 51.7" W	12451
1.2	AWOIS 12452	Obstruction	6.52 m	42° 22' 45.6" N	071° 02' 52.6" W	12452
1.3	Barge Wreck - Little Mystic R.	Wreck	3.41 m	42° 22' 51.6" N	071° 03' 20.4" W	10212
1.4	Barge Wreck Charlestown Pier 48	Wreck	3.99 m	42° 22' 54.9" N	071° 02' 56.0" W	---
1.5	AWOIS 12442	Wreck	5.47 m	42° 20' 30.3" N	071° 01' 52.5" W	12442
1.6	Wreck on the edge of Chelsea Creek Channel	Wreck	10.08 m	42° 23' 03.9" N	071° 01' 37.4" W	---
1.7	AWOIS 10208 - PATTY JEAN	Wreck	1.59 m	42° 21' 43.9" N	071° 01' 48.9" W	10208

1.8	Barge Wreck Near AWOIS 10207	Wreck	4.28 m	42° 21' 39.3" N	071° 01' 49.2" W	---
1.9	AWOIS 14036	Obstruction	4.08 m	42° 22' 10.1" N	071° 03' 24.9" W	14036

**1 - DR\_DToN**

**1.1) AWOIS 12451****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #12451**

**Search Position:** 42° 22' 43.1" N, 071° 02' 51.6" W  
**Historical Depth:** 8.53 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 28 FEET OBTAINED IN LAT. 42-22-43.12N, LONG. 71-02-51.58W. EVALUATOR RECOMMENDS CHARTING A 28 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

**Survey Summary**

**Survey Position:** 42° 22' 42.5" N, 071° 02' 51.7" W  
**Least Depth:** 6.34 m (= 20.81 ft = 3.469 fm = 3 fm 2.81 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.186$  m  
**Timestamp:** 2007-192.16:59:14.855 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 202\_1658  
**Profile/Beam:** 410/48  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The navigable area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. The object is an OBSTN located within the search radius of AWOIS 12451.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/202_1658	410/48	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615134600	0001	1.67	232.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0013	14.15	186.0	Secondary
AWOIS	AWOIS # 12451	18.87	188.4	Secondary
ChartGPs - ENC US5MA11M	Danger 22	23.09	189.3	Secondary (grouped)

h11736/3002sss500k/2007-166/sonar_data070615132700	0012	40.34	147.0	Secondary (grouped)
h11736/s3002_mbes/2007-192/204_1703	9/14	41.34	145.5	Secondary
h11736/s3002_mbes/2007-192/204_1703	86/31	49.23	166.0	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

21ft (13272\_1, 13270\_1, 13267\_1)

3 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** QUASOU - 6:least depth known

SORDAT - 20070711

SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.344 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. Revise the charted 28-foot dangerous obstruction to reflect survey data.

## Feature Images



*Figure 1.1.1*

**1.2) AWOIS 12452****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #12452**

**Search Position:** 42° 22' 45.5" N, 071° 02' 52.7" W  
**Historical Depth:** 7.01 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 23 FEET OBTAINED IN LAT. 42-22-45.43N, LONG. 71-02-52.68W. EVALUATOR RECOMMENDS CHARTING A 23 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

**Survey Summary**

**Survey Position:** 42° 22' 45.6" N, 071° 02' 52.6" W  
**Least Depth:** 6.52 m (= 21.39 ft = 3.565 fm = 3 fm 3.39 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.964$  m ; TVU (TPEv)  $\pm 0.188$  m  
**Timestamp:** 2007-192.17:04:33.876 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 204\_1703  
**Profile/Beam:** 654/24  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The navigable area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Several contacts noted in SSS trace, LD obtained with MBES. OBSTN located within the search radius of AWOIS 12452.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/204_1703	654/24	0.00	000.0	Primary
AWOIS	AWOIS # 12452	1.77	029.9	Secondary
ChartGPs - ENC US5MA11M	Danger 23	1.94	191.6	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615132700	0022	2.43	223.1	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0007	3.27	272.3	Secondary

h11736/3002sss500k/2007-166/sonar_data070615132700	0014	22.51	104.3	Secondary
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## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

21ft (13272\_1, 13270\_1, 13267\_1)

3 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** QUASOU - 6:least depth known

SORDAT - 20070711

SORIND - US,US,survy,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.519 m

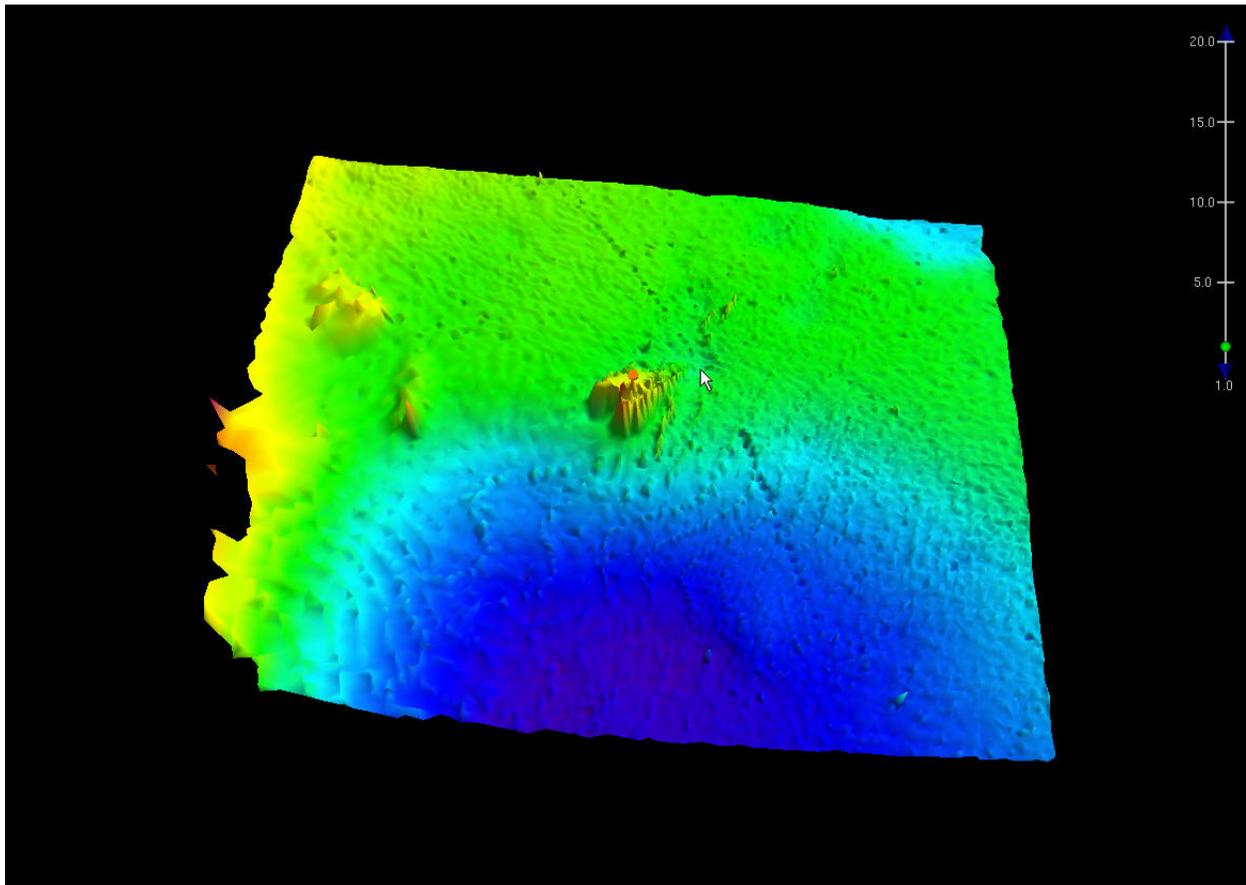
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. Update charted obstruction to least depth of 21 ft.

### Feature Images



*Figure 1.2.1*



*Figure 1.2.2*

### 1.3) Barge Wreck - Little Mystic R.

## DANGER TO NAVIGATION

### Primary Feature for AWOIS Item #10212

**Search Position:** 42° 22' 51.5" N, 071° 03' 17.2" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD,VS, S2  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM39/1971(9/22/71)-- 1 ST CGD; VISIBLE WK (PA), POSITION SCALED FROM CHART IN LAT 42/22/51.50N, LONG 71/03/17.20W (NAD83). COE ADVISES THAT A SUNKEN WORK BARGE EXISTS IN LITTLE MYSTIC CHANNEL. IT LIES ADJACENT TO THE NORTH BULKHEAD APPROX MIDWAY BETWEEN MYSTIC RIVER BRIDGE AND THE UPSTREAM CHANNEL LIMIT. ONE CORNER OF BARGE VISIBLE AT LOW WATER ONLY. (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV)

### Survey Summary

**Survey Position:** 42° 22' 51.6" N, 071° 03' 20.4" W  
**Least Depth:** 3.41 m (= 11.20 ft = 1.866 fm = 1 fm 5.20 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.182$  m  
**Timestamp:** 2007-192.16:37:43.492 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 213\_1636  
**Profile/Beam:** 760/103  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. The object appears to be the wreckage of a barge near AWOIS 10212 and matches the description of that AWOIS item.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/213_1636	760/103	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615132700	0004	15.84	046.4	Secondary

h11736/3002sss500k/2007-166/sonar_data070615132700	0006	18.10	303.9	Secondary
ChartGPs - ENC US5MA11M	Danger 173	71.47	272.3	Secondary (grouped)
AWOIS	AWOIS # 10212	73.96	271.3	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck.

### Cartographically-Rounded Depth (Affected Charts):

11ft (13272\_1, 13270\_1, 13267\_1)

1 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 SORDAT - 20070711  
 SORIND - US,US,survy,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 3.413 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The charted 11-ft dangerous wreck was charted as a result of a field-submitted DToN report. Retain charted dangerous wreck at this location, and delete the charted visible wreck PA associated with AWOIS 10212.

## Feature Images



*Figure 1.3.1*

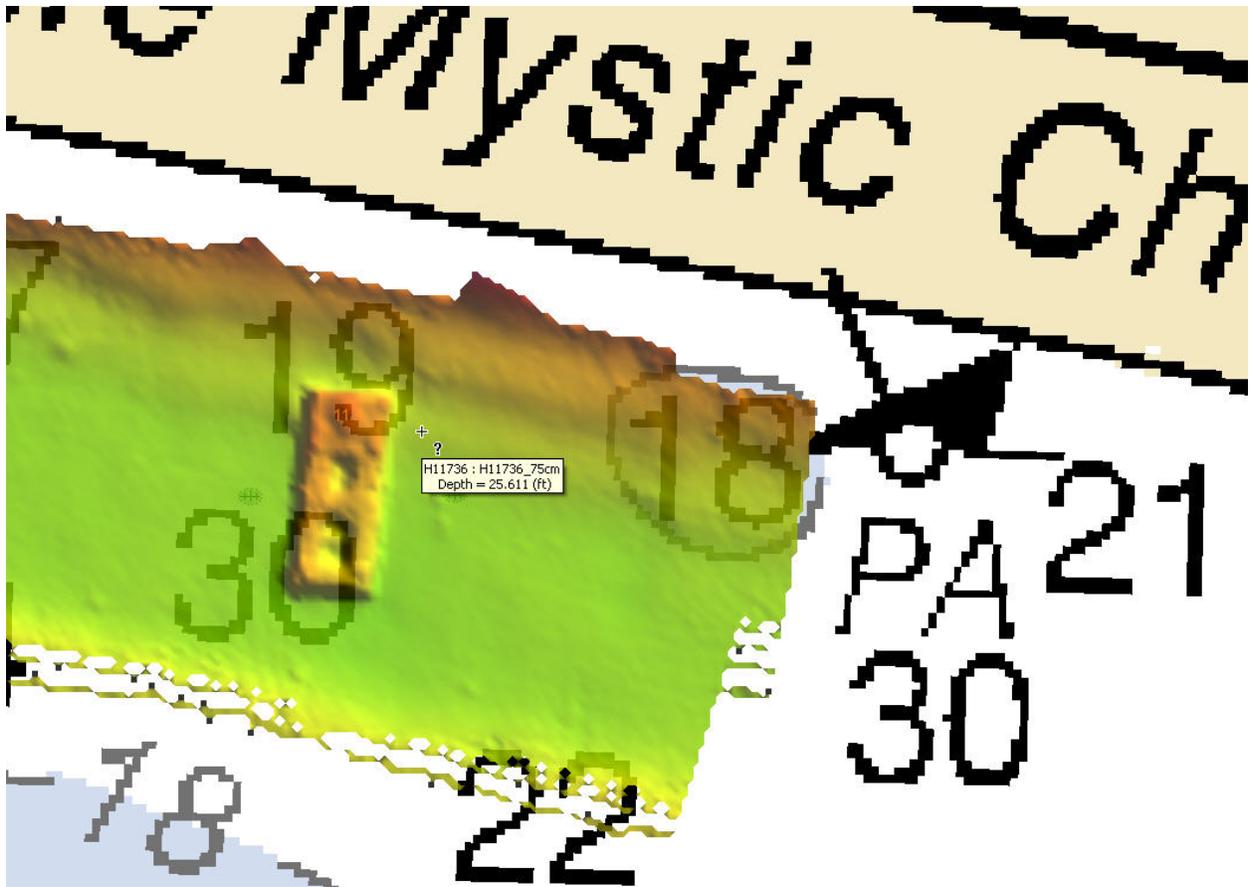


Figure 1.3.2

## 1.4) Barge Wreck Charlestown Pier 48

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 42° 22' 54.9" N, 071° 02' 56.0" W  
**Least Depth:** 3.99 m (= 13.08 ft = 2.180 fm = 2 fm 1.08 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.963$  m ; **TVU (TPEv)**  $\pm 0.200$  m  
**Timestamp:** 2007-192.16:21:18.821 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 220\_1619  
**Profile/Beam:** 843/122  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. Object is part of a charted wreck (charted LD 17ft.) near a charted 23 ft sounding.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/220_1619	843/122	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615134800	0003	47.27	334.8	Secondary

#### Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck LD and position as surveyed.

#### Cartographically-Rounded Depth (Affected Charts):

13ft (13272\_1, 13270\_1, 13267\_1)

2fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

#### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 SORDAT - 20070711  
 SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.986 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. Chart the feature as a dangerous wreck, shown by an area feature indicating the shape and orientation of the wreck because the feature would extend beyond the limits of a regular danger circle.

### Feature Images

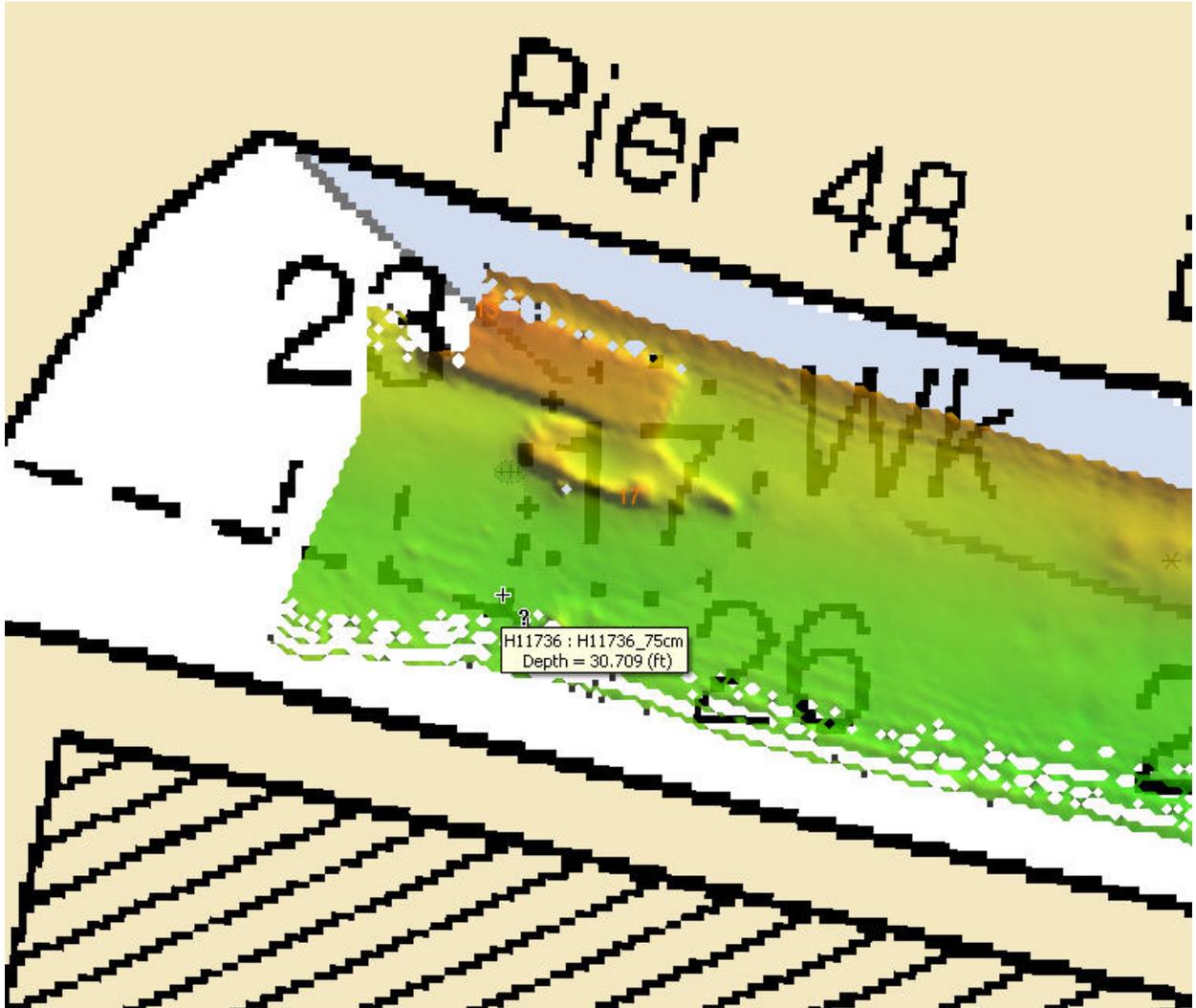


Figure 1.4.1

**1.5) AWOIS 12442****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #12442**

**Search Position:** 42° 20' 30.6" N, 071° 01' 54.2" W  
**Historical Depth:** 9.45 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT. SWMB LD OF 31 FEET (9.56 METERS) IN LAT. 42-20-30.64N, LONG. 71-01-54.16W. EVALUATOR RECOMMENDS CHARTING A 31 WK AS SURVEYED. (ENT 5/25/04, SJV)

**Survey Summary**

**Survey Position:** 42° 20' 30.3" N, 071° 01' 52.5" W  
**Least Depth:** 5.47 m (= 17.95 ft = 2.991 fm = 2 fm 5.95 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.967$  m ; **TVU (TPEv)**  $\pm 0.221$  m  
**Timestamp:** 2007-197.17:05:21.567 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 191\_1705  
**Profile/Beam:** 141/9  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The navigable area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. The object is a wreck located within the search radius of AWOIS 12442.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/191_1705	141/9	0.00	000.0	Primary
h11736/3002sss500k/2007-165/sonar_data070614173400	0003	17.82	104.9	Secondary
AWOIS	AWOIS # 12442	38.78	105.7	Secondary
ChartGPs - ENC US5MA11M	Danger 159	49.02	094.5	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends a representative sounding be charted.

### Cartographically-Rounded Depth (Affected Charts):

18ft (13272\_1, 13270\_1, 13267\_1)

3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 1:non-dangerous wreck  
CONVIS - 2:not visual conspicuous  
SORDAT - 20070716  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 5.470 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

## Office Notes

Do not concur. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. The object is within the search radius of AWOIS 12442, a charted Wk with a least depth of 31 feet. Revise the charted dangerous wreck to reflect the surveyed least depth and position.

### Feature Images

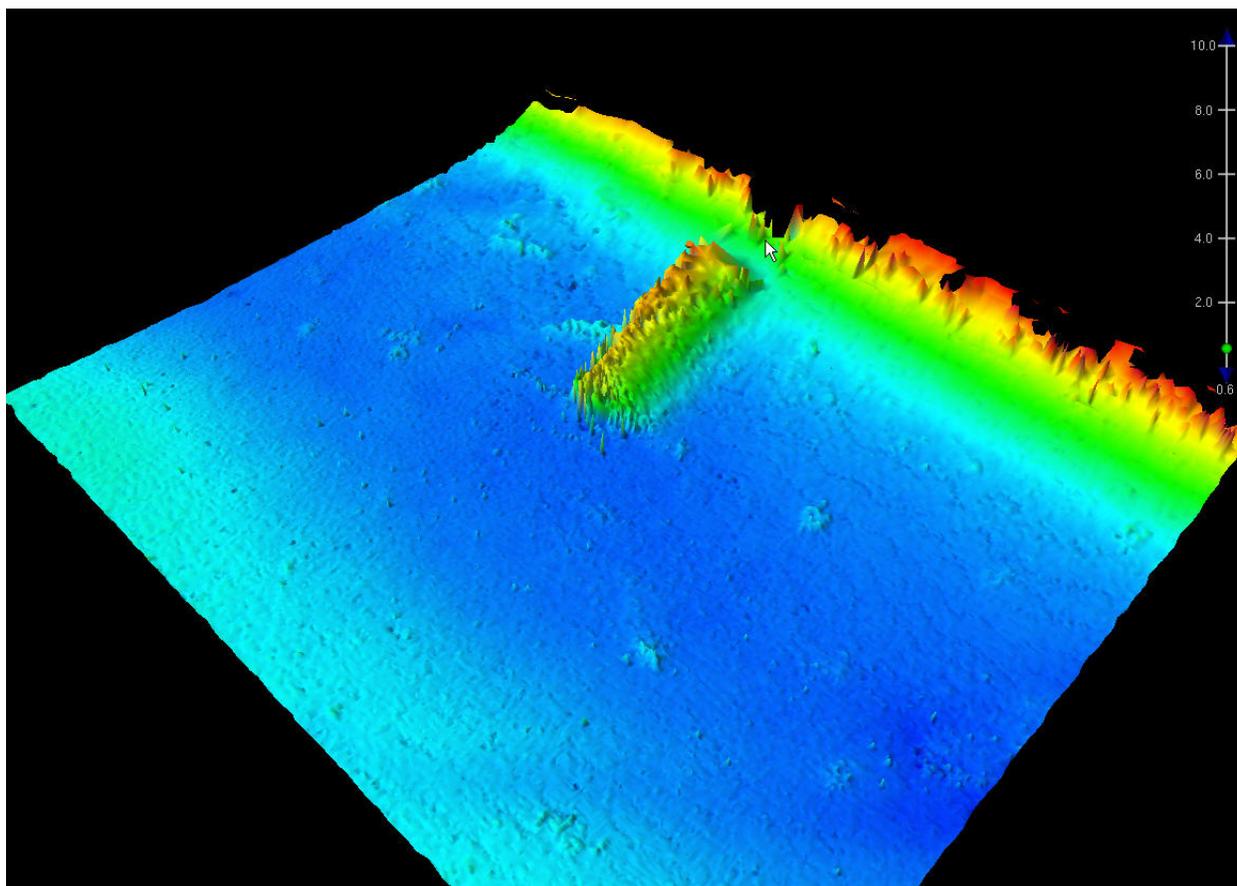


Figure 1.5.1



*Figure 1.5.2*

## 1.6) Wreck on the edge of Chelsea Creek Channel

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 42° 23' 03.9" N, 071° 01' 37.4" W  
**Least Depth:** 10.08 m (= 33.08 ft = 5.514 fm = 5 fm 3.08 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.189$  m  
**Timestamp:** 2007-199.12:35:12.026 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 025\_1231  
**Profile/Beam:** 1874/77  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

Object is a wreck on the edge of a narrow channel.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/025_1231	1874/77	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613155000	0001	13.49	097.4	Secondary

#### Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck.

#### Cartographically-Rounded Depth (Affected Charts):

33ft (13272\_1, 13270\_1, 13274\_5, 13267\_1)

5 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

#### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 SORDAT - 20070718  
 SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 10.084 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## **Office Notes**

Concur. Retain wreck as charted. The wreck was charted as a result of a field-submitted DToN letter.

### Feature Images

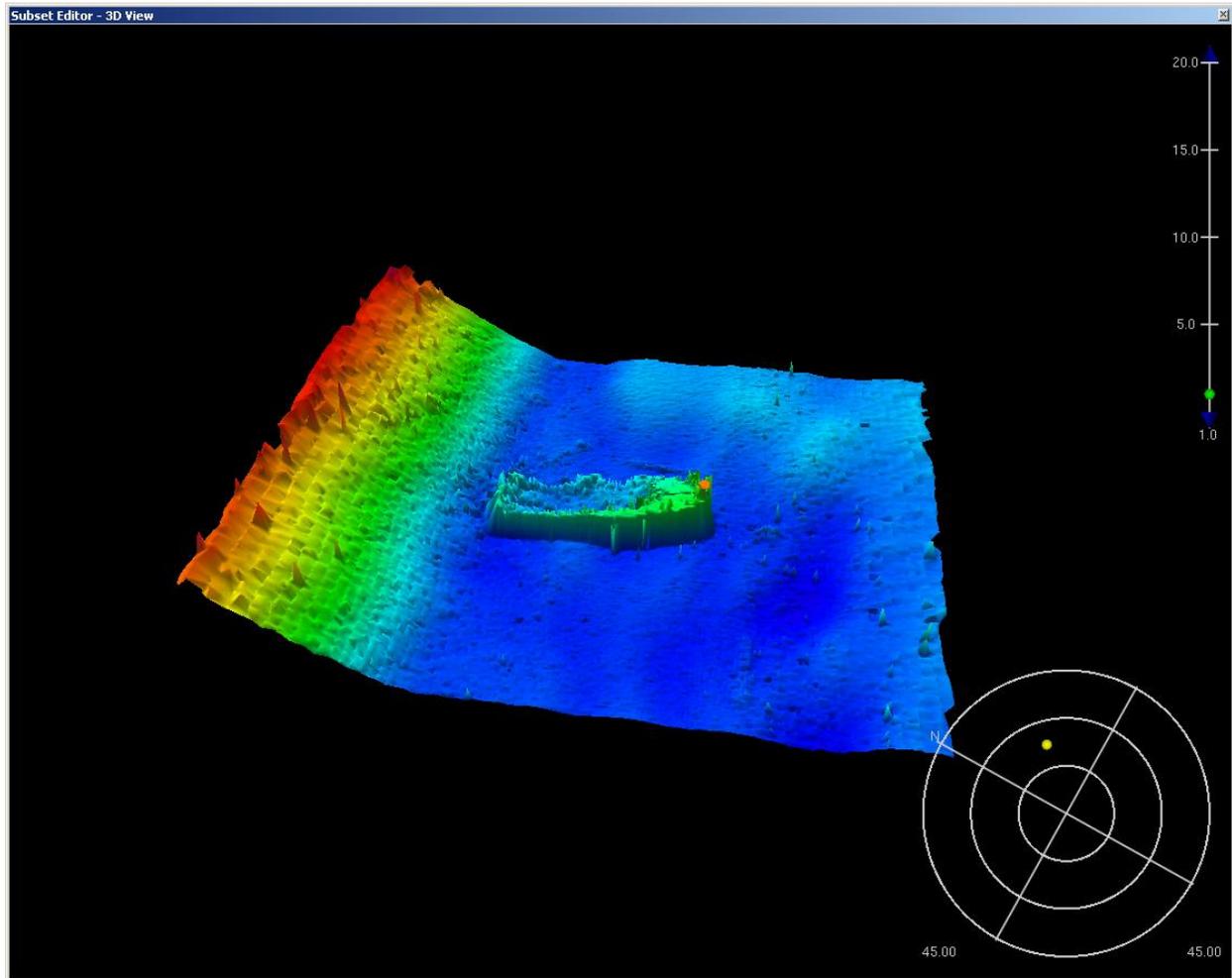


Figure 1.6.1

**1.7) AWOIS 10208 - PATTY JEAN****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #10208**

**Search Position:** 42° 21' 43.4" N, 071° 01' 48.7" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, MB, DI  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ LNM47/1975(11/19/75)-- 1 ST CGD; PATTY JEAN, STEEL HULLED F/V, DANG. WRECK (PA), POSITION GIVEN IN LAT 42/21/42.0N, LONG 71/01/51.0W (NAD27). (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/2/03, SJV) ■ H10990/01-- OPR-A397-WH; WRECK LOCATED BY SIDE SCAN SONAR. SWMB LD OF 10 FEET (3.12 METERS) IN LAT. 42-21-43.35N, LONG. 71-01-48.68W. EVALUATOR RECOMMENDS DELETING THE CHARTED DANGEROUS SUNKEN WRECK AND CHARTING A 10 WK AS SURVEYED. (UP 5/5/04,SJV)

**Survey Summary**

**Survey Position:** 42° 21' 43.9" N, 071° 01' 48.9" W  
**Least Depth:** 1.59 m (= 5.22 ft = 0.870 fm = 0 fm 5.22 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.960$  m ; TVU (TPEv)  $\pm 0.178$  m  
**Timestamp:** 2007-199.14:55:35.892 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 080\_1455  
**Profile/Beam:** 168/120  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The area was covered with 100% Simrad EM3000 MBES. The object is a wreck located within the search radius of AWOIS 10208

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/080_1455	168/120	0.00	000.0	Primary
h11736/s3002_mbes/2007-199/080_1455	168/118	0.45	161.6	Secondary (grouped)
h11736/s3002_mbes/2007-199/080_1455	158/43	2.97	322.5	Secondary (grouped)

AWOIS	AWOIS # 10208	18.06	341.8	Secondary
ChartGPs - ENC US5MA11M	Danger 182	19.54	010.2	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends the item be updated to reflect current bathymetry data.

### Cartographically-Rounded Depth (Affected Charts):

5ft (13272\_1, 13270\_1, 13267\_1)

0 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** QUASOU - 6:least depth known

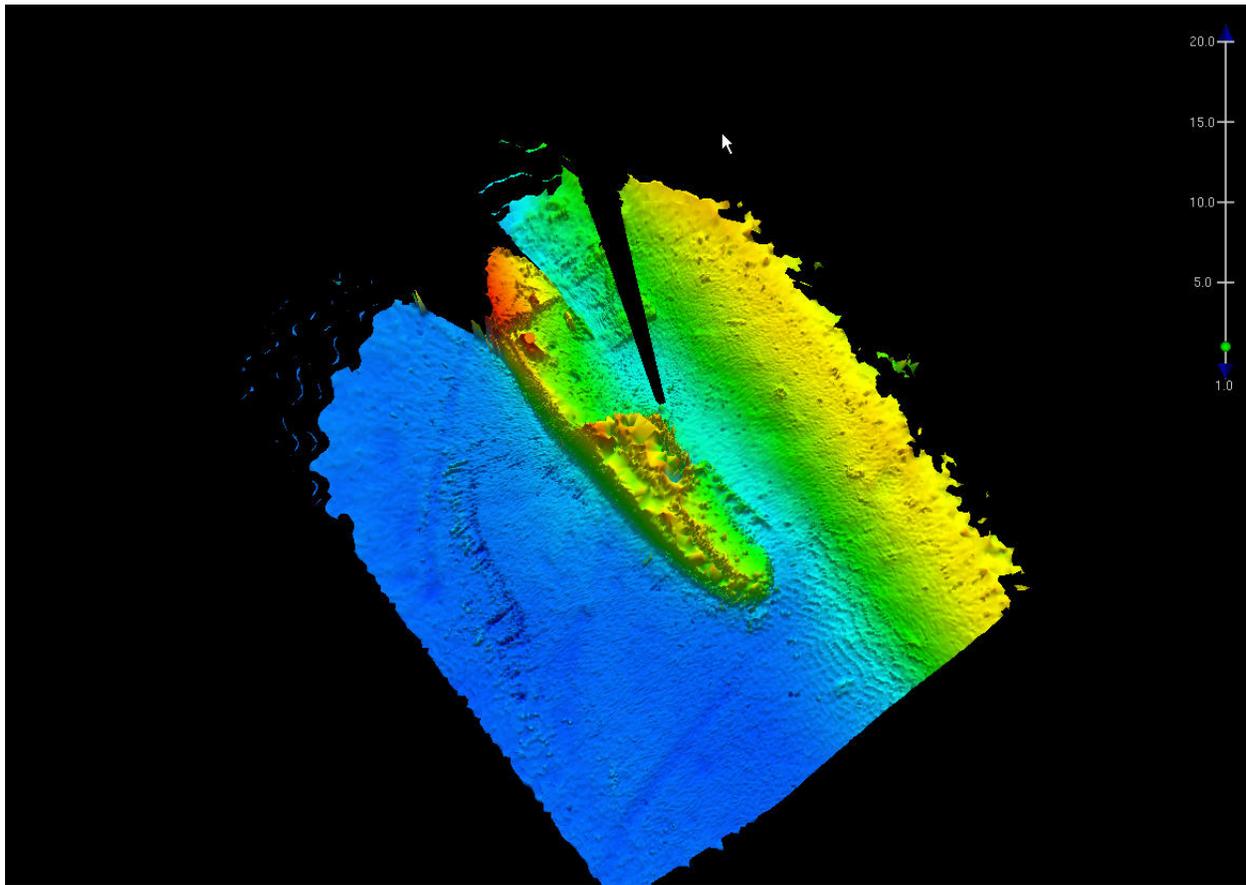
TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 1.591 m

## Office Notes

Concur with clarification. The wreck extends beyond the limits of the charted wreck danger curve. Chart the actual outline of the wreck to indicate the orientation and shape of the wreck, annotated with the least depth and 'Wk'.

### Feature Images



*Figure 1.7.1*

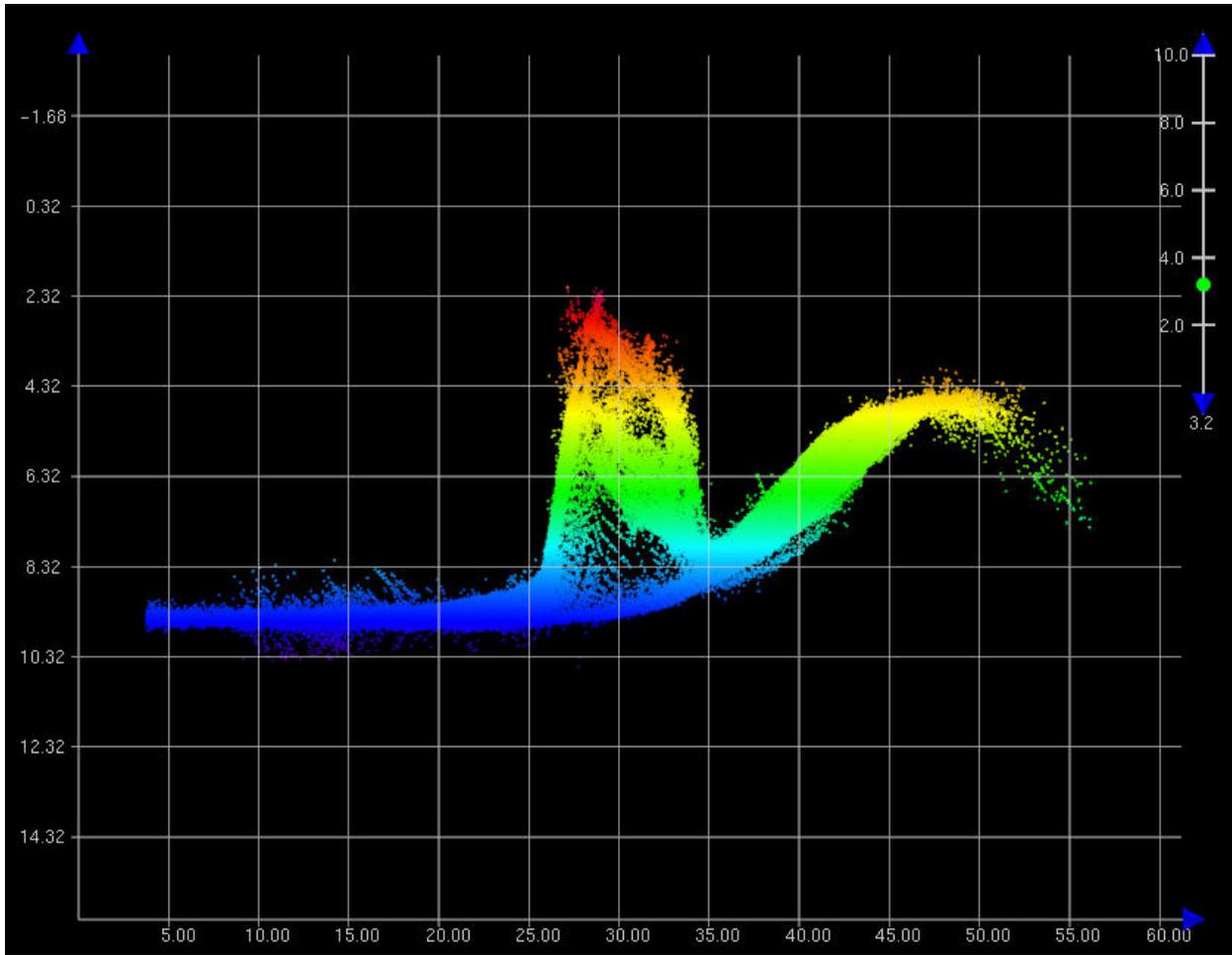


Figure 1.7.2

## 1.8) Barge Wreck Near AWOIS 10207

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 42° 21' 39.3" N, 071° 01' 49.2" W  
**Least Depth:** 4.28 m (= 14.06 ft = 2.343 fm = 2 fm 2.06 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.185$  m  
**Timestamp:** 2007-199.14:53:35.003 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 081\_1453  
**Profile/Beam:** 302/114  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. Object appears to be the wreckage of two barges near the charted wreckage of a tug. The wreckage lies outside the charted wreck danger circle and near a charted 30' sounding.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/081_1453	302/114	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615120200	0005	9.25	104.3	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120200	0006	9.53	058.9	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120200	0001	14.76	053.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615115900	0005	23.18	024.8	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120600	0005	26.40	042.6	Secondary

#### Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck.

#### Cartographically-Rounded Depth (Affected Charts):

14ft (13272\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
SORDAT - 20070718  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 4.284 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The wreck was charted as a result of a field-submitted DToN letter. The wrecks extend beyond the limits of the charted wreck danger curve. Chart the actual extents of the wrecks as an area feature, annotated with the least depth and 'Wks'

## Feature Images



*Figure 1.8.1*

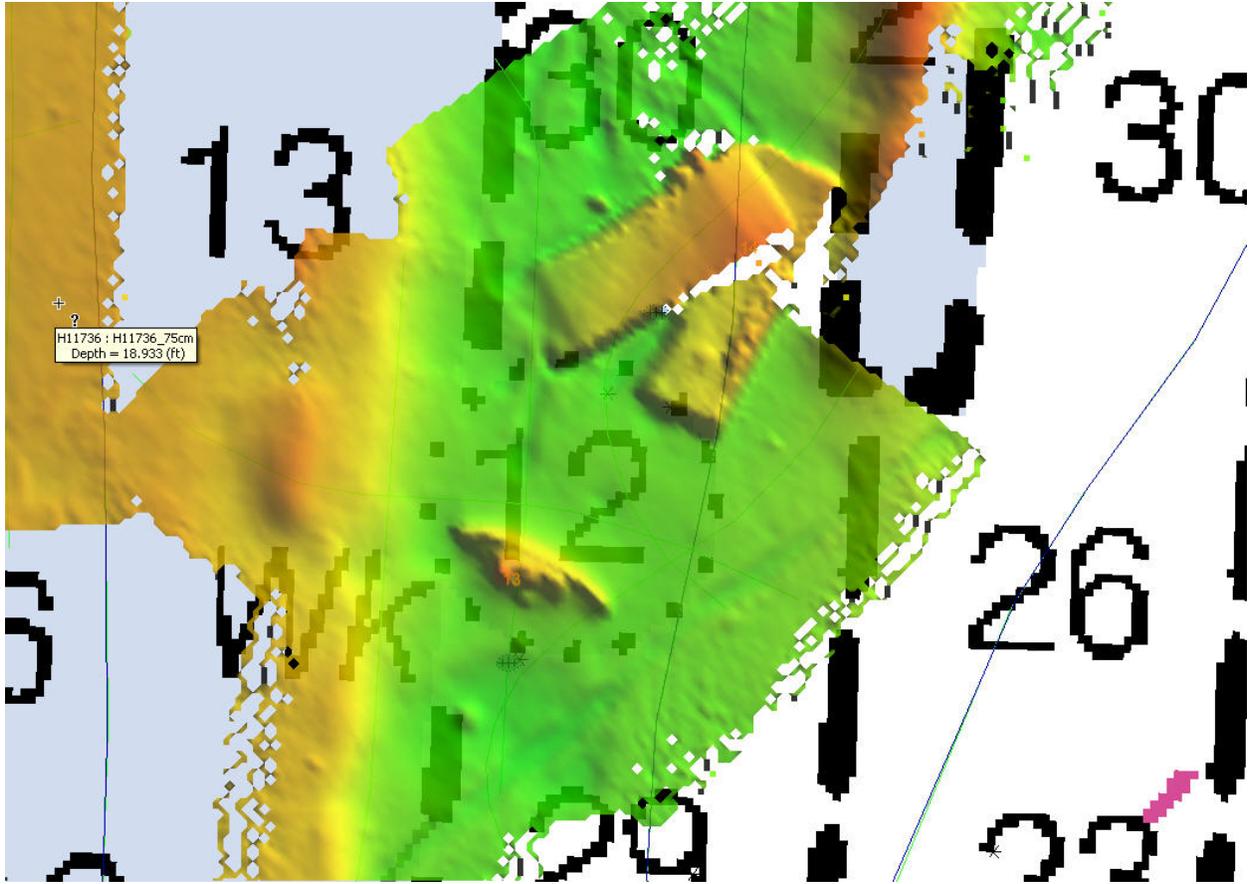


Figure 1.8.2

**1.9) AWOIS 14036****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #14036**

**Search Position:** 42° 22' 09.0" N, 071° 03' 28.2" W  
**Historical Depth:** [None]  
**Search Radius:** 60  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

**History Notes:**

LNM 30/04-- USCG; AN OBSTRUCTION WAS ADDED TO THE CHART AT 42/22/09 - 71/03/28.2.  
 (ENTERED CEH 6/2007)

**Survey Summary**

**Survey Position:** 42° 22' 10.1" N, 071° 03' 24.9" W  
**Least Depth:** 4.08 m (= 13.38 ft = 2.229 fm = 2 fm 1.38 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.183$  m  
**Timestamp:** 2007-199.15:30:46.175 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 115\_1530  
**Profile/Beam:** 457/25  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The object appears to be a submerged pile(s) or mast.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/115_1530	457/25	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615124700	0002	9.28	237.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615124100	0001	24.48	134.2	Secondary
AWOIS	AWOIS # 14036	82.45	065.0	Secondary (grouped)
ChartGPs - ENC US5MA11M	Danger 19	82.45	065.2	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends AWOIS 14036 be moved to surveyed position and surveyed depth be added to OBSTN circle.

### Cartographically-Rounded Depth (Affected Charts):

13ft (13272\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** QUASOU - 6:least depth known

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.077 m

WATLEV - 3:always under water/submerged

## Office Notes

The feature was charted as the result of a field-submitted DToN letter. Retain as charted.

### Feature Images

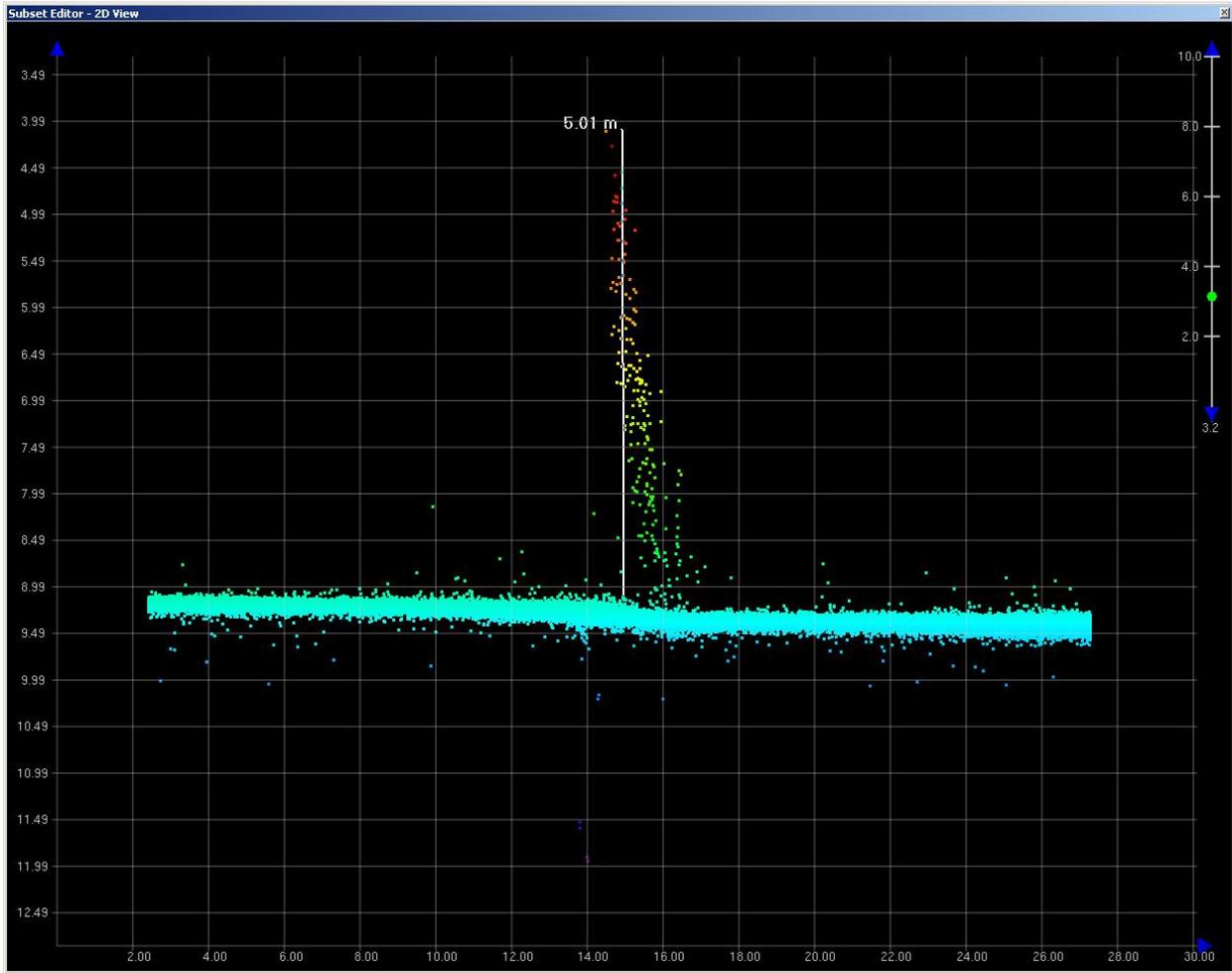


Figure 1.9.1

# H11736 Feature Report

**Registry Number:** H11736  
**State:** Massachusetts  
**Locality:** Boston Harbor  
**Sub-locality:** Boston Inner Harbor  
**Project Number:** OPR-A397-NRT5-07  
**Survey Dates:** June 12, 2007 - September 23, 2008 (Addm)

## Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
13272	50th	08/01/2008	1:10,000 (13272_1)	USCG LNM: 12/04/2007 (03/11/2008) CHS NTM: None (01/25/2008) NGA NTM: None (03/22/2008)
13270	62nd	06/01/2006	1:25,000 (13270_1)	[L]NTM: ?
13274	26th	04/01/2005	1:40,000 (13274_5)	[L]NTM: ?
13267	32nd	12/01/2004	1:80,000 (13267_1)	[L]NTM: ?
13260	39th	06/01/2003	1:378,838 (13260_1)	[L]NTM: ?
13200	34th	12/01/2005	1:400,000 (13200_1)	[L]NTM: ?
13009	32nd	07/01/2006	1:500,000 (13009_1)	[L]NTM: ?
13006	33rd	04/01/2006	1:675,000 (13006_1)	[L]NTM: ?
13003	48th	10/01/2004	1:1,200,000 (13003_1)	[L]NTM: ?

\* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	charted	Pile	8.61 m	42° 23' 49.4" N	071° 00' 45.8" W	---
1.2	AToN 490 - Oil Barrier Light	Lighted structure	[None]	42° 20' 30.1" N	071° 02' 04.7" W	---
1.3	charted rock	Rock	[None]	42° 23' 35.3" N	071° 00' 57.2" W	---
1.4	Pier Ruins- Obstruction	SSS	[None]	42° 23' 09.1" N	071° 02' 29.3" W	---
1.5	charted rectangular obstruction	Obstruction	[None]	42° 21' 14.7" N	071° 02' 37.5" W	---
1.6	ruins extension	Obstruction	4.75 m	42° 22' 48.7" N	071° 03' 04.8" W	---
1.7	ruins extension	Rock	6.41 m	42° 22' 31.7" N	071° 02' 52.7" W	---

1.8	601/4 Charted Wreck Southie Peir 4	Wreck	0.86 m	42° 21' 12.9" N	071° 02' 31.7" W	---
1.9	Submerged debris	Obstruction	[None]	42° 22' 34.2" N	071° 02' 34.6" W	---
1.10	charted rock	Rock	-0.60 m	42° 23' 40.3" N	071° 00' 57.0" W	---
1.11	charted Dolphin - Delete	GP	[None]	42° 23' 51.8" N	071° 00' 42.5" W	---
1.12	251/25 Charlestown Navy Yard Ruins 1	Shoal	8.42 m	42° 22' 19.3" N	071° 03' 08.5" W	---
1.13	191/103 Charlestown Navy Yard Ruins 2	Shoal	7.98 m	42° 22' 18.9" N	071° 03' 11.8" W	---
1.14	372/20 Charted Ruins Southie Pier 7	Shoal	7.19 m	42° 21' 04.9" N	071° 02' 06.5" W	---
1.15	charted irregular danger curve & blue tint	GP	[None]	42° 23' 49.7" N	071° 00' 45.9" W	---
2.1	pier ruins	SSS	[None]	42° 23' 49.4" N	071° 00' 45.9" W	---
2.2	uncharted obstruction, depth unknown	Obstruction	[None]	42° 23' 15.5" N	071° 01' 13.9" W	---
2.3	uncharted obstruction, depth unknown	Obstruction	[None]	42° 20' 59.6" N	071° 02' 07.1" W	---
2.4	uncharted foul area	SSS	[None]	42° 21' 16.8" N	071° 02' 37.1" W	---
2.5	uncharted obstruction	Obstruction	[None]	42° 21' 42.2" N	071° 01' 47.2" W	---
2.6	uncharted obstruction	Obstruction	5.13 m	42° 22' 52.2" N	071° 03' 23.6" W	---
2.7	uncharted wreck	Wreck	6.82 m	42° 22' 51.5" N	071° 03' 23.5" W	---
2.8	uncharted wreck	Wreck	6.13 m	42° 23' 11.1" N	071° 02' 55.1" W	---
2.9	uncharted obstruction	Obstruction	8.92 m	42° 22' 15.0" N	071° 03' 00.1" W	---
2.10	uncharted obstruction	Obstruction	7.32 m	42° 21' 18.9" N	071° 02' 38.7" W	---
2.11	uncharted obstruction	Obstruction	8.49 m	42° 21' 46.6" N	071° 02' 18.2" W	---
2.12	uncharted obstruction	Obstruction	4.22 m	42° 21' 35.3" N	071° 01' 53.2" W	---
2.13	uncharted obstruction	Obstruction	6.24 m	42° 20' 57.0" N	071° 02' 00.4" W	---
2.14	uncharted obstruction	Obstruction	10.64 m	42° 21' 11.8" N	071° 02' 24.2" W	---
2.15	uncharted wreck	Wreck	4.98 m	42° 21' 19.4" N	071° 02' 47.2" W	---
2.16	uncharted obstruction	Obstruction	4.34 m	42° 21' 18.7" N	071° 02' 49.8" W	---
2.17	uncharted obstruction	Obstruction	4.02 m	42° 20' 19.5" N	071° 00' 00.2" W	---
2.18	uncharted obstruction	Obstruction	7.71 m	42° 22' 07.0" N	071° 03' 31.8" W	---
2.19	uncharted 19-ft OBSTRN	Obstruction	5.82 m	42° 23' 51.2" N	071° 00' 42.3" W	---
2.20	uncharted 19-ft OBSTRN	Obstruction	5.74 m	42° 23' 50.0" N	071° 00' 43.2" W	---
2.21	uncharted obstruction below project depth	Shoal	11.13 m	42° 20' 14.7" N	071° 00' 09.5" W	---
2.22	uncharted obstruction, depth unknown	Obstruction	[None]	42° 23' 05.9" N	071° 02' 05.9" W	---
2.23	uncharted obstruction, depth unknown	Obstruction	[None]	42° 21' 00.8" N	071° 02' 10.6" W	---
2.24	uncharted obstruction, depth unknown	Obstruction	[None]	42° 21' 52.5" N	071° 02' 22.4" W	---
2.25	uncharted 23-ft obstruction	Obstruction	7.24 m	42° 23' 11.2" N	071° 04' 00.1" W	---
2.26	uncharted obstruction	Obstruction	7.53 m	42° 21' 01.4" N	071° 02' 06.6" W	---
2.27	uncharted 19-ft obstruction	Obstruction	5.89 m	42° 21' 04.8" N	071° 02' 09.5" W	---
2.28	uncharted 19-ft obstruction	Obstruction	5.89 m	42° 20' 57.8" N	071° 02' 13.1" W	---

2.29	uncharted 22-ft obstruction	Obstruction	6.67 m	42° 20' 58.2" N	071° 02' 12.3" W	---
2.30	uncharted 20-ft obstruction	Obstruction	6.24 m	42° 20' 59.0" N	071° 02' 12.2" W	---
2.31	uncharted obstructions	Obstruction	4.93 m	42° 21' 40.1" N	071° 01' 57.2" W	---
2.32	uncharted obstruction	Obstruction	7.49 m	42° 21' 48.3" N	071° 02' 10.7" W	---
2.33	uncharted 27-ft obstruction	Obstruction	8.42 m	42° 21' 47.2" N	071° 02' 11.3" W	---
2.34	uncharted obstruction	Obstruction	8.37 m	42° 21' 47.1" N	071° 02' 17.7" W	---
2.35	uncharted 29-ft obstruction	Obstruction	8.81 m	42° 21' 46.4" N	071° 02' 17.5" W	---
2.36	uncharted 25-ft obstruction	Obstruction	7.66 m	42° 21' 52.6" N	071° 02' 23.3" W	---
2.37	uncharted 26-ft obstruction	Obstruction	8.12 m	42° 21' 51.2" N	071° 02' 22.3" W	---
2.38	uncharted 24-t obstruction	Obstruction	7.38 m	42° 22' 10.4" N	071° 03' 32.6" W	---
2.39	uncharted 17-ft obstruction	Obstruction	5.34 m	42° 22' 35.6" N	071° 02' 55.0" W	---
2.40	uncharted 17-ft wreck	Wreck	5.41 m	42° 22' 48.4" N	071° 03' 05.9" W	---
2.41	uncharted 33-ft obstruction	Obstruction	10.21 m	42° 23' 08.8" N	071° 01' 23.9" W	---
3.1	AWOIS 12440	Wreck	9.68 m	42° 22' 14.7" N	071° 03' 04.9" W	12440
3.2	AWOIS 12450	Obstruction	7.81 m	42° 22' 39.0" N	071° 02' 51.1" W	12450
3.3	AWOIS 10213	Wreck	5.19 m	42° 22' 54.2" N	071° 02' 55.1" W	10213
3.4	AWOIS 12557	Obstruction	5.46 m	42° 22' 53.9" N	071° 02' 51.2" W	12557
3.5	AWOIS 12454	Obstruction	4.93 m	42° 22' 06.5" N	071° 02' 40.2" W	12454
3.6	AWOIS 14033	Wreck	7.08 m	42° 21' 43.4" N	071° 01' 46.3" W	14033
3.7	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
3.8	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
3.9	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
3.10	AWOIS 12443	Shoal	12.38 m	42° 21' 42.0" N	071° 02' 36.1" W	12443
3.11	AWOIS 12439	Wreck	3.14 m	42° 22' 08.3" N	071° 03' 11.0" W	12439
3.12	AWOIS 10207	Wreck	3.84 m	42° 21' 37.9" N	071° 01' 50.6" W	10207
3.13	AWOIS 14035	Wreck	2.49 m	42° 21' 47.8" N	071° 02' 16.2" W	14035
4.1	AWOIS 12451	Obstruction	6.34 m	42° 22' 42.5" N	071° 02' 51.7" W	12451
4.2	AWOIS 12452	Obstruction	6.52 m	42° 22' 45.6" N	071° 02' 52.6" W	12452
4.3	Barge Wreck - Little Mystic R.	Wreck	3.41 m	42° 22' 51.6" N	071° 03' 20.4" W	10212
4.4	Barge Wreck Charlestown Pier 48	Wreck	3.99 m	42° 22' 54.9" N	071° 02' 56.0" W	---
4.5	AWOIS 12442	Wreck	5.47 m	42° 20' 30.3" N	071° 01' 52.5" W	12442
4.6	Wreck on the edge of Chelsea Creek Channel	Wreck	10.08 m	42° 23' 03.9" N	071° 01' 37.4" W	---
4.7	AWOIS 10208 - PATTY JEAN	Wreck	1.59 m	42° 21' 43.9" N	071° 01' 48.9" W	10208
4.8	Barge Wreck Near AWOIS 10207	Wreck	4.28 m	42° 21' 39.3" N	071° 01' 49.2" W	---
4.9	AWOIS 14036	Obstruction	4.08 m	42° 22' 10.1" N	071° 03' 24.9" W	14036

# **1 - Charted Features**

## 1.1) charted

### Survey Summary

**Survey Position:** 42° 23' 49.4" N, 071° 00' 45.8" W  
**Least Depth:** 8.61 m (= 28.26 ft = 4.710 fm = 4 fm 4.26 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.963$  m ; **TVU (TPEv)**  $\pm 0.191$  m  
**Timestamp:** 2007-199.11:55:24.506 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 033\_1155  
**Profile/Beam:** 176/27  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

Area covered with 200% Klien 3000 SSS and 100% Simrad EM3000 MBES. The contact is the ruins of a pier with partially exposed piles - Dol

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/033_1155	176/27	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 37	5.60	017.2	Secondary (grouped)

### Hydrographer Recommendations

Retain as charted.

#### Cartographically-Rounded Depth (Affected Charts):

28ft (13272\_1, 13270\_1, 13274\_5, 13267\_1)

4  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Pile (PILPNT)  
**Attributes:** CATPLE - 4:tripodal  
 CONDTN - 2:ruined  
 CONVIS - 1:visual conspicuous  
 SORDAT - 20070718  
 SORIND - US,US,survey,H11736

## Office Notes

Do not concur. The area is to be charted as pier ruins. Delete the charted submerged pile and associated text.



## 1.2) AToN 490 - Oil Barrier Light

### Survey Summary

**Survey Position:** 42° 20' 30.1" N, 071° 02' 04.7" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2007-197.17:16:26.000 (07/16/2007)  
**DP Dataset:** vesselconfig / 3002\_vbes / 2007-193 / 07162007  
**Profile/Beam:** 28/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

AToN 490 appears to be inaccurately charted, the actual location of the light is on a charted DoI. No remnants of a lighted tower or structure were noted at the current charted location of the light in the SSS trace. The item was not submitted as a DToN as it was fulfilling its intended purpose of demarking the oil barrier. The USCG was however informed of the AToN's correct position, see supplemental correspondence.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
vesselconfig/3002_vbes/2007-193/07162007	28/1	0.00	000.0	Primary
h11736/3002sss500k/2007-165/sonar_data070614173400	0004	18.77	131.9	Secondary
ChartGPs - ENC US5MA11M	AToN 490	80.07	226.5	Secondary (grouped)

### Hydrographer Recommendations

The hydrographer recommends that charted AToN 409 be relocated to charted DoI.

### S-57 Data

**Geo object 1:** Light (LIGHTS)  
**Attributes:** COLOUR - 6:yellow  
 LITCHR - 2:flashing  
 SORDAT - 20070716  
 STATUS - 8:private

## Office Notes

Concur. Chart this AtoN on top of currently charted dolphin.

## Feature Images



*Figure 1.2.1*

### 1.3) charted rock

#### Survey Summary

**Survey Position:** 42° 23' 35.3" N, 071° 00' 57.2" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2007-298.12:12:20 (10/25/2007)  
**Survey Line:** h11736 / 3002sss500k / 2007-164 / sonar\_data070613150600  
**Contact/Point:** 0005/1  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

Charted rock

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-164/sonar_data070613150600	0005	0.00	000.0	Primary

#### Hydrographer Recommendations

Retain as charted

#### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** QUASOU - 2:depth unknown  
 SORDAT - 20071025  
 SORIND - US,US,survey,H11736  
 TECSOU - 2:found by side scan sonar  
 VERDAT - 12:Mean lower low water  
 WATLEV - 4:covers and uncovers

#### Office Notes

Concur with clarification. A cluster of rocks was observed in the SSS data in the vicinity of the charted rock and another, proximal charted rock. No bathymetry data were acquired over the rocks. Retain the rock as charted.

## 1.4) Pier Ruins- Obstruction

### Survey Summary

**Survey Position:** 42° 23' 09.1" N, 071° 02' 29.3" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-214.01:23:57 (08/01/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-164 / sonar\_data070613160400  
**Contact/Point:** 0002/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

This obstruction was found during office processing. Object does not have associated bathymetric data but SSS imagery shows that this object could pose a hazard to surface navigation.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-164/sonar_data070613160400	0002	0.00	000.0	Primary

### Hydrographer Recommendations

Extend charted pier ruins to include this obstruction.

### S-57 Data

**Geo object 1:** Shoreline Construction (SLCONS)  
**Attributes:** CATSLC - 4:pier (jetty)  
 CONDTN - 2:ruined

### Office Notes

Concur.

## 1.5) charted rectangular obstruction

### Survey Summary

**Survey Position:** 42° 21' 14.7" N, 071° 02' 37.5" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-267.07:00:22 (09/23/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-166 / sonar\_data070615114400  
**Contact/Point:** 0009/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The contact is the remains of a sunken wreck.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-166/sonar_data070615114400	0009	0.00	000.0	Primary
h11736/s3002_mbes/2007-197/142_1854	1727/4	1.30	237.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615114400	0010	1.32	235.1	Secondary (grouped)
h11736/s3002_mbes/2007-197/142_1854	1715/6	1.46	258.1	Secondary
h11736/3002sss500k/2007-166/sonar_data070615114400	0003	2.87	353.5	Secondary (grouped)
h11736/s3002_mbes/2007-197/143_1856	399/4	3.91	331.7	Secondary
h11736/3002sss500k/2007-166/sonar_data070615114400	0001	4.10	234.1	Secondary (grouped)
h11736/s3002_mbes/2007-197/143_1856	395/4	4.74	327.2	Secondary

### Hydrographer Recommendations

The hydrographer recommends the OBSTN be moved to surveyed position.

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

## Office Notes

Concur with clarification. Revise the danger rectangle to reflect the surveyed position of the wreck, which is outlined by this linear feature. Add 12-foot least depth and wk notation showing this is a wreck.

### Feature Images

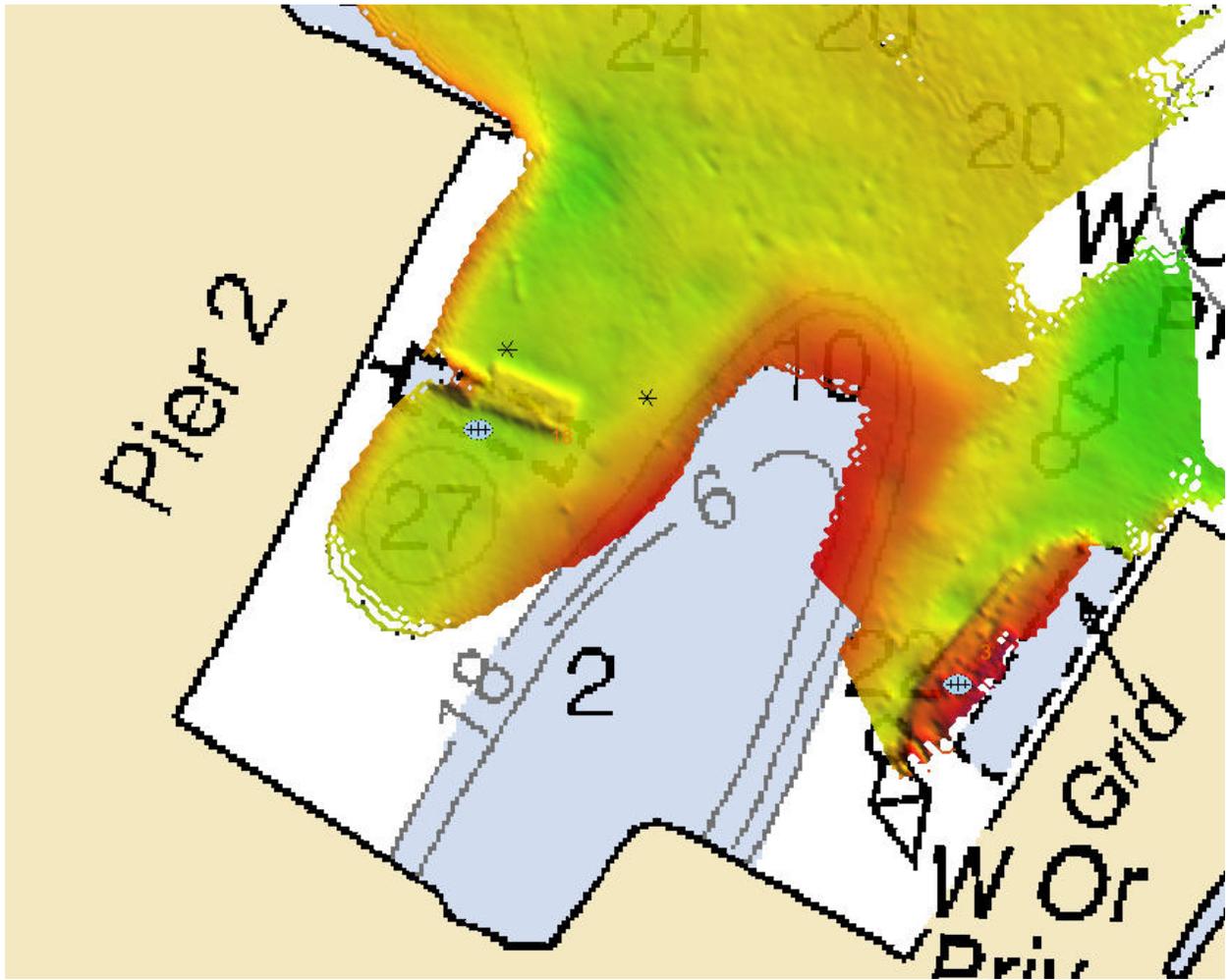


Figure 1.5.1

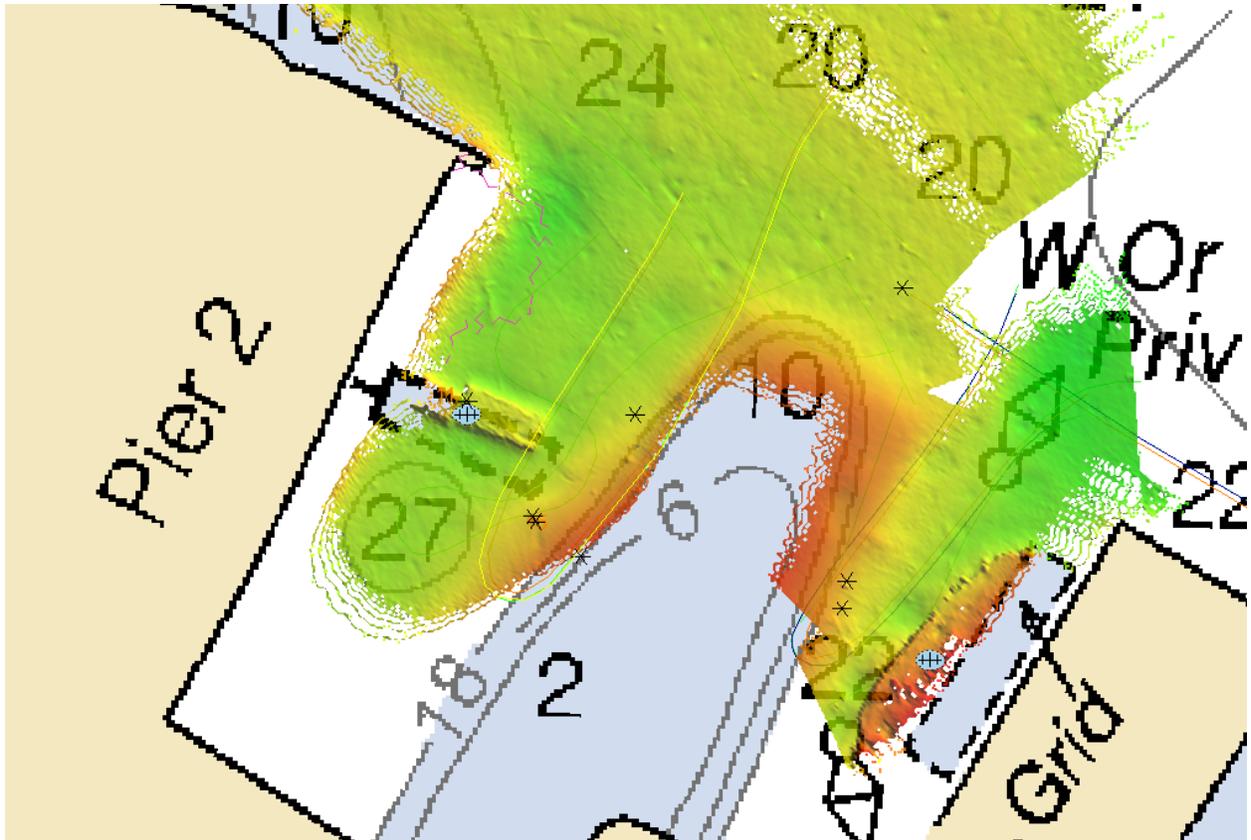


Figure 1.5.2

## 1.6) ruins extension

### Survey Summary

**Survey Position:** 42° 22' 48.7" N, 071° 03' 04.8" W  
**Least Depth:** 4.75 m (= 15.57 ft = 2.596 fm = 2 fm 3.57 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.963$  m ; **TVU (TPEv)**  $\pm 0.201$  m  
**Timestamp:** 2007-192.16:31:30.039 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 207\_1630  
**Profile/Beam:** 386/121  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is two OBSTNs located near the river bank and a floating pier.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/207_1630	386/121	0.00	000.0	Primary
h11736/s3002_mbes/2007-192/208_1629	297/19	0.58	310.8	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0027	1.79	131.9	Secondary
h11736/s3002_mbes/2007-192/207_1630	278/122	10.32	287.2	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615132700	0003	10.37	294.8	Secondary
h11736/s3002_mbes/2007-192/208_1629	373/37	11.29	290.4	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0008	20.00	235.9	Secondary

### Hydrographer Recommendations

The hydrographer recommends a representative sounding be charted.

#### Cartographically-Rounded Depth (Affected Charts):

15ft (13272\_1, 13270\_1, 13267\_1)

2 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

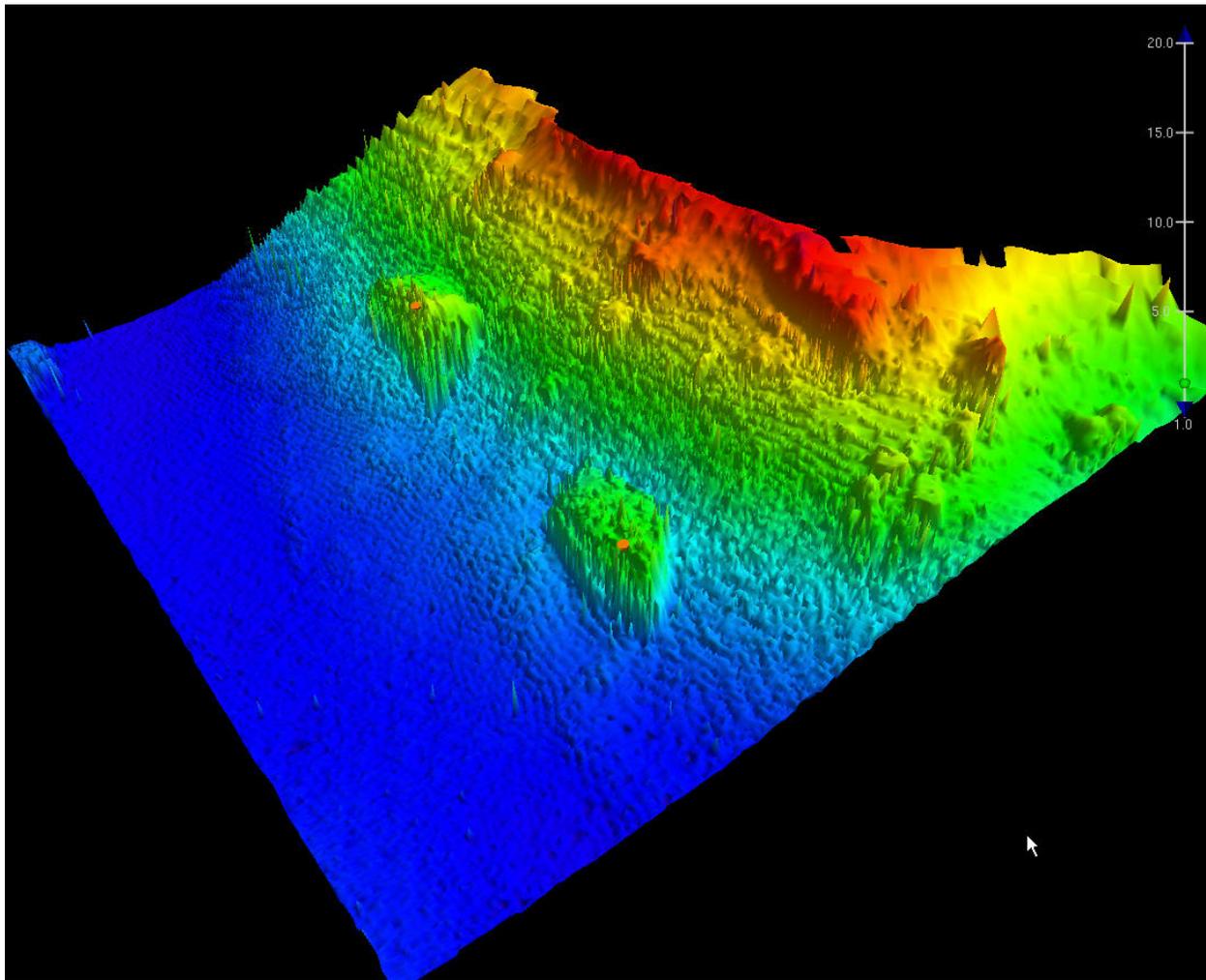
**Geo object 1:** Shoreline Construction (SLCONS)

**Attributes:** CONDTN - 2:ruined

## Office Notes

Do not concur. The feature is the shoalest of two significant objects on the edge of a narrow, conjested navigable area immediately to the south of charted ruins. Extend proximal charted ruins to include the two obstructions at 42°22'48.673" , -071°03'04.781" and 42°22'48.546" , -071°03'04.321".

### Feature Images



*Figure 1.6.1*

## 1.7) ruins extension

### Survey Summary

**Survey Position:** 42° 22' 31.7" N, 071° 02' 52.7" W  
**Least Depth:** 6.41 m (= 21.01 ft = 3.502 fm = 3 fm 3.01 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.186$  m  
**Timestamp:** 2007-192.17:11:40.147 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 264\_1711  
**Profile/Beam:** 358/86  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The contact is the charted ruins.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/264_1711	358/86	0.00	000.0	Primary
h11736/s3002_mbes/2007-192/264_1711	360/86	0.40	326.6	Secondary (grouped)
h11736/s3002_mbes/2007-192/264_1711	360/87	0.43	341.9	Secondary (grouped)
h11736/s3002_mbes/2007-192/264_1711	300/32	9.14	205.3	Secondary (grouped)
h11736/3002sss500k/2007-164/sonar_data070613180800	0001	17.69	172.4	Secondary

### Hydrographer Recommendations

Retain as charted

#### Cartographically-Rounded Depth (Affected Charts):

21ft (13272\_1, 13270\_1, 13267\_1)

3 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Shoreline Construction (SLCONS)

**Attributes:** CATSLC - 4:pier (jetty)

CONDTN - 2:ruined

## Office Notes

Concur with clarification. The observed ruins extend beyond the limits of the charted ruins. Extend the southwest corner of the charted ruins to encompass the current feature.

## 1.8) 601/4 Charted Wreck Southie Peir 4

### Survey Summary

**Survey Position:** 42° 21' 12.9" N, 071° 02' 31.7" W  
**Least Depth:** 0.86 m (= 2.82 ft = 0.470 fm = 0 fm 2.82 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.201$  m  
**Timestamp:** 2007-197.18:29:45.938 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 144\_1828  
**Profile/Beam:** 601/4  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is the remains of a charted wreck.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/144_1828	601/4	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615114200	0001	10.35	036.6	Secondary

### Hydrographer Recommendations

The hydrographer recommends the wreck symbol be moved to surveyed position.

#### Cartographically-Rounded Depth (Affected Charts):

3ft (13272\_1, 13270\_1, 13267\_1)

0 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 QUASOU - 6:least depth known  
 SORDAT - 20070716  
 SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 0.860 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. Delete the charted rectangular obstruction area and associated "Grid" text, and add a dangerous wreck area, drawn as to indicate the general shape and orientation of the wreck. Also add least depth and wk notation.

Feature Images

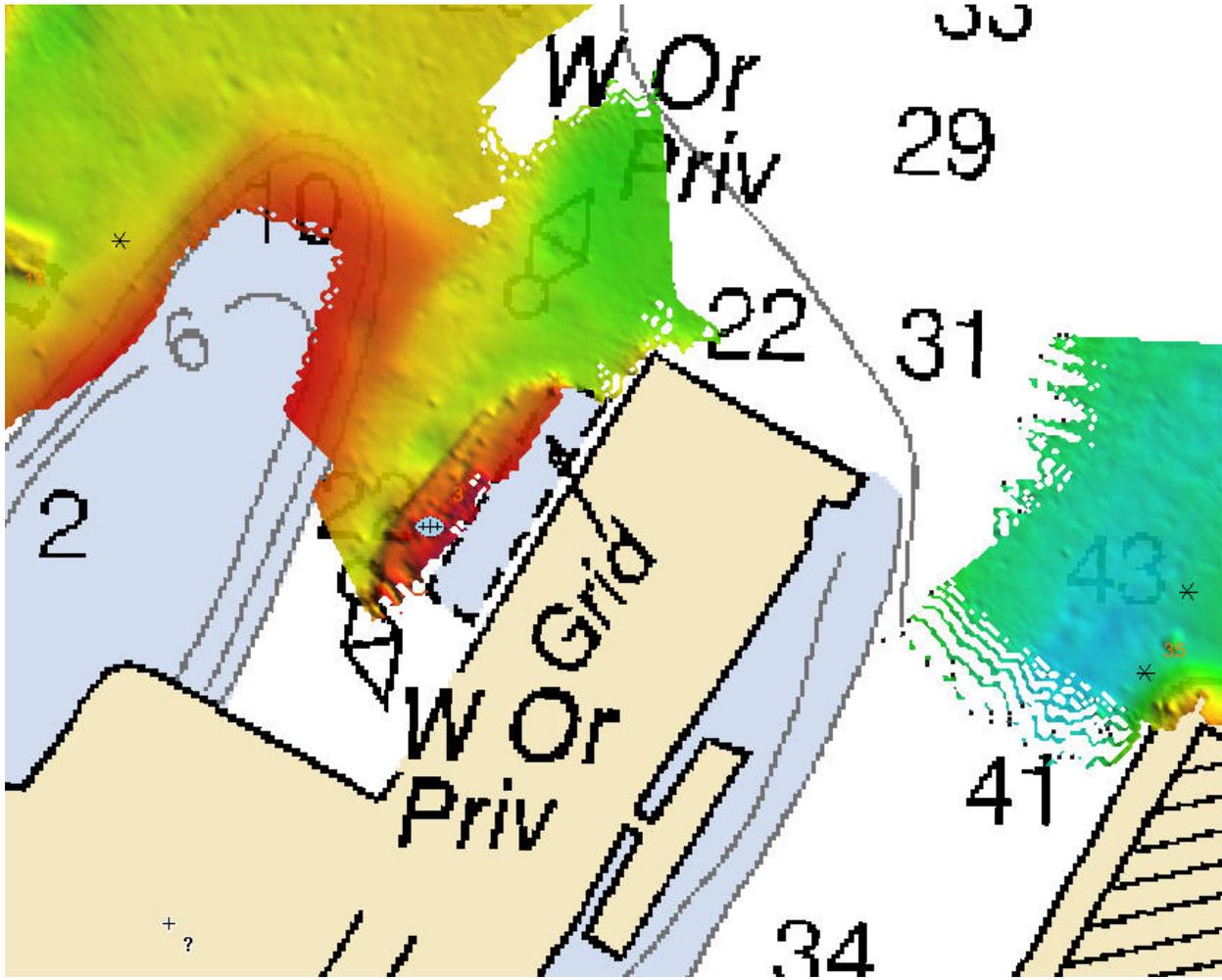
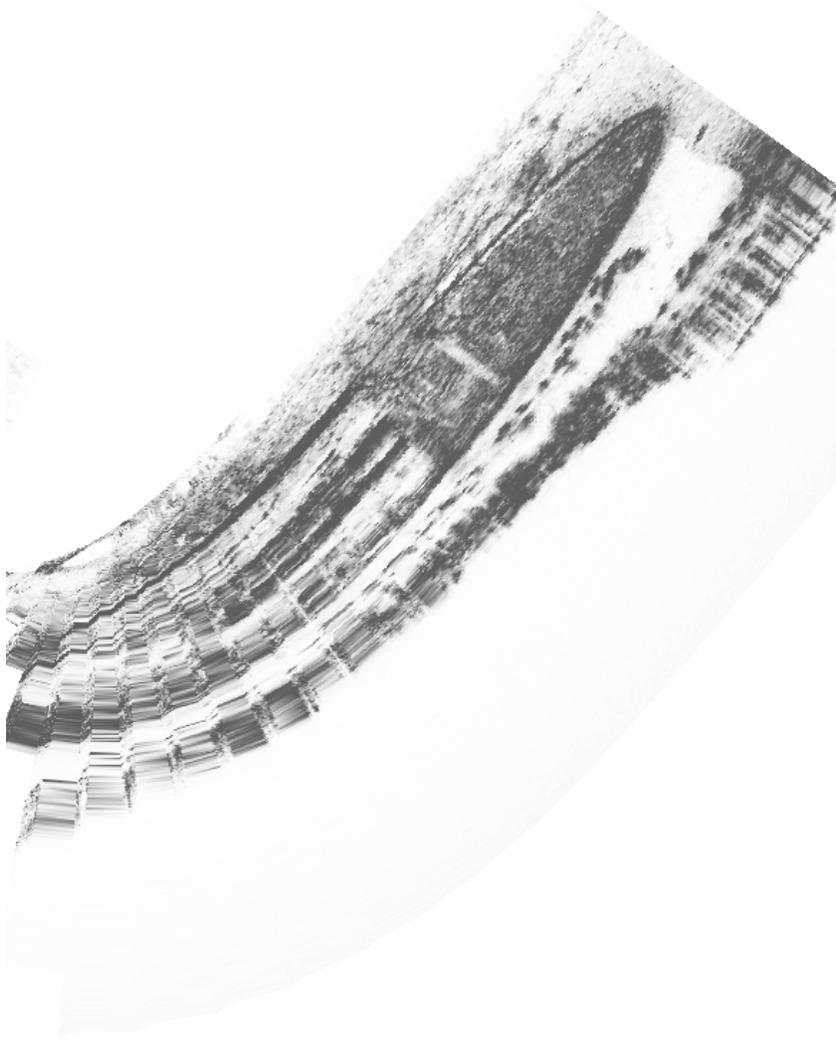


Figure 1.8.1



*Figure 1.8.2*

## 1.9) Submerged debris

### Survey Summary

**Survey Position:** 42° 22' 34.2" N, 071° 02' 34.6" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** [None]  
**GP Dataset:** ChartGPs - ENC US5MA11M  
**GP No.:** Danger 26  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - ENC US5MA11M	Danger 26	0.00	000.0	Primary

### Hydrographer Recommendations

Retain as charted

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 SORDAT - 20030609  
 SORIND - US,US,graph,GC10525  
 WATLEV - 4:covers and uncovers

### Office Notes

Concur with clarification. The feature is an obstruction area that is contained in ENC US5MA11M but not RNC 13272. Defer to MCD for charting recommendation.

## 1.10) charted rock

### Survey Summary

**Survey Position:** 42° 23' 40.3" N, 071° 00' 57.0" W  
**Least Depth:** -0.60 m (= -1.97 ft = -0.328 fm = 0 fm 4.03 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** [None]  
**GP Dataset:** ChartGPs - ENC US5MA11M  
**GP No.:** Danger 151  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

Object not noted in SSS trace.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - ENC US5MA11M	Danger 151	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613150600	0007	3.02	258.5	Secondary (grouped)

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

-2ft (13272\_1, 13270\_1, 13274\_5, 13267\_1)

0 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)

**Attributes:** QUASOU - 6:least depth known

SORDAT - 20010310

SORIND - US,US,graph,chart 13272

VALSOU - -0.600 m

WATLEV - 4:covers and uncovers

## Office Notes

A rock was not observed in the SSS data in the general vicinity of the charted rock, but the position was covered with only 100% SSS. Retain as charted.

## 1.11) charted Dolphin - Delete

### Survey Summary

**Survey Position:** 42° 23' 51.8" N, 071° 00' 42.5" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** [None]  
**GP Dataset:** ChartGPs - ENC US5MA11M  
**GP No.:** AToN 400  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - ENC US5MA11M	AToN 400	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613152700	0005	2.56	227.5	Secondary (grouped)
h11736/3002sss500k/2007-164/sonar_data070613152300	0002	3.60	216.2	Secondary (grouped)

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

### Office Notes

The feature is a charted dolphin. The feature is not observed in the survey data. Delete the charted dolphin.

### Feature Images

[Image file h:/compilation/h11736\_a397-nrt5/ahb\_h11736/pss/images/aton 400\_sc.png does not exist.]

## 1.12) 251/25 Charlestown Navy Yard Ruins 1

### Survey Summary

**Survey Position:** 42° 22' 19.3" N, 071° 03' 08.5" W  
**Least Depth:** 8.42 m (= 27.62 ft = 4.604 fm = 4 fm 3.62 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.965$  m ; **TVU (TPEv)**  $\pm 0.192$  m  
**Timestamp:** 2007-192.17:33:34.566 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 265\_1733  
**Profile/Beam:** 251/25  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is the charted ruins of a pier.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/265_1733	251/25	0.00	000.0	Primary
h11736/s3002_mbes/2007-192/267_1734	169/18	9.43	242.3	Secondary
h11736/3002sss500k/2007-166/sonar_data070615131200	0003	11.40	089.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615131200	0002	32.07	127.1	Secondary
h11736/s3002_mbes/2007-192/265_1733	415/58	33.62	153.0	Secondary (grouped)

### Hydrographer Recommendations

Retain as charted.

#### Cartographically-Rounded Depth (Affected Charts):

27ft (13272\_1, 13270\_1, 13267\_1)

4 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Shoreline Construction (SLCONS)  
**Attributes:** CATSLC - 4:pier (jetty)  
 CONDTN - 2:ruined

### Office Notes

Do not concur. The observed ruins extend ~10 meters beyond the end of charted ruins. Modify the general trend of the charted ruins to encompass the current feature position.

### Feature Images

[Image file h:/compilation/h11736\_a397-nrt5/ahb\_h11736/pss/images/sonar\_da0002\_m.tif does not exist.]

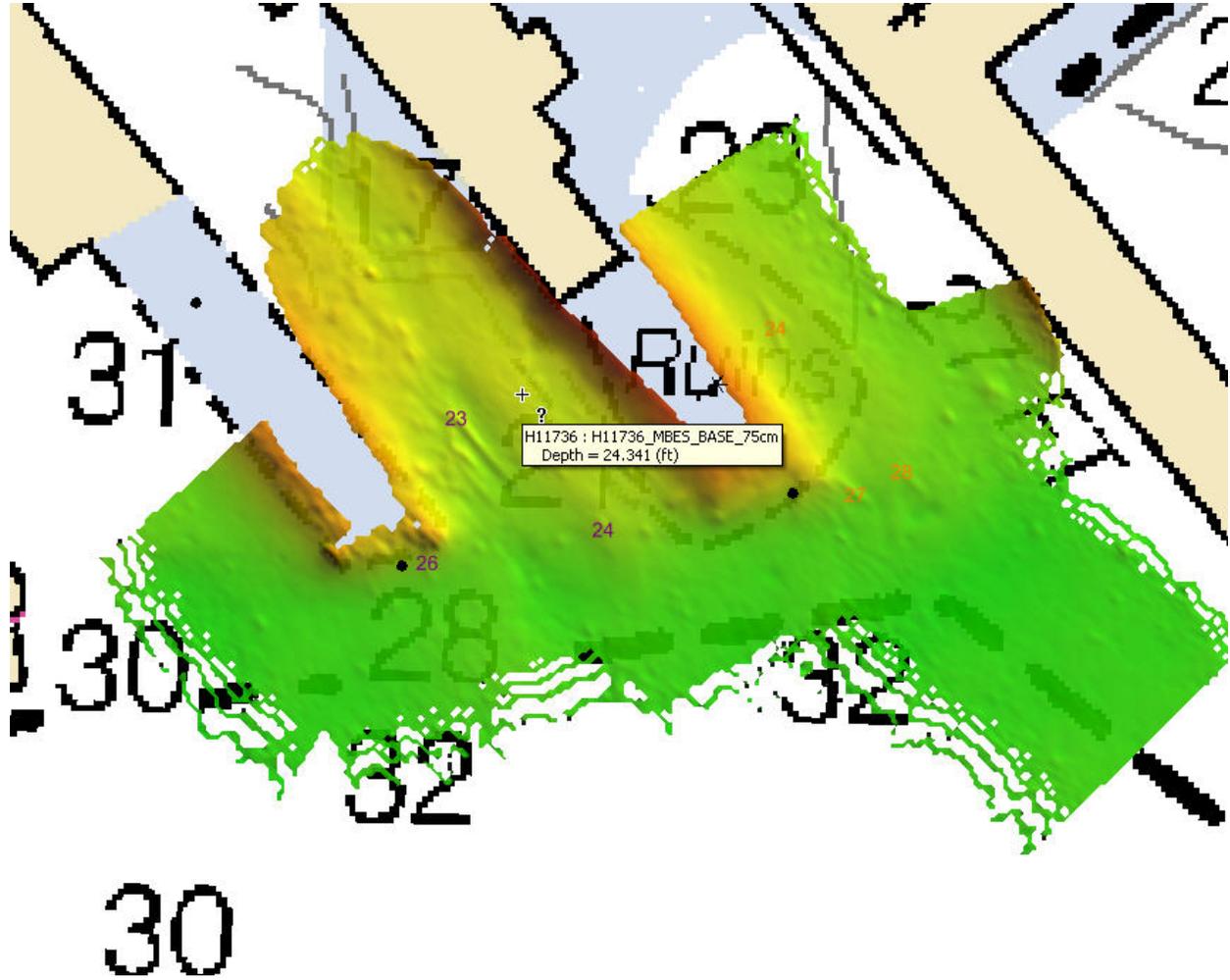


Figure 1.12.1

## 1.13) 191/103 Charlestown Navy Yard Ruins 2

### Survey Summary

**Survey Position:** 42° 22' 18.9" N, 071° 03' 11.8" W  
**Least Depth:** 7.98 m (= 26.18 ft = 4.363 fm = 4 fm 2.18 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.963$  m ; **TVU (TPEv)**  $\pm 0.190$  m  
**Timestamp:** 2007-192.17:38:42.080 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 270\_1738  
**Profile/Beam:** 191/103  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is the charted ruins of a pier.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/270_1738	191/103	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615131200	0001	4.64	079.4	Secondary
h11736/s3002_mbes/2007-192/270_1738	209/123	8.30	123.4	Secondary (grouped)
h11736/s3002_mbes/2007-192/268_1736	571/36	26.86	190.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615131200	0004	63.18	136.8	Secondary (grouped)

### Hydrographer Recommendations

Retain as charted

#### Cartographically-Rounded Depth (Affected Charts):

26ft (13272\_1, 13270\_1, 13267\_1)

4 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Shoreline Construction (SLCONS)

**Attributes:** CATSLC - 4:pier (jetty)

CONDTN - 2:ruined

SORDAT - 20070711

SORIND - US,U,survey,H11736

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. The feature represents the southeasternmost extend of observed ruins, which matches the chart. Retain ruins as charted.

## Feature Images



*Figure 1.13.1*

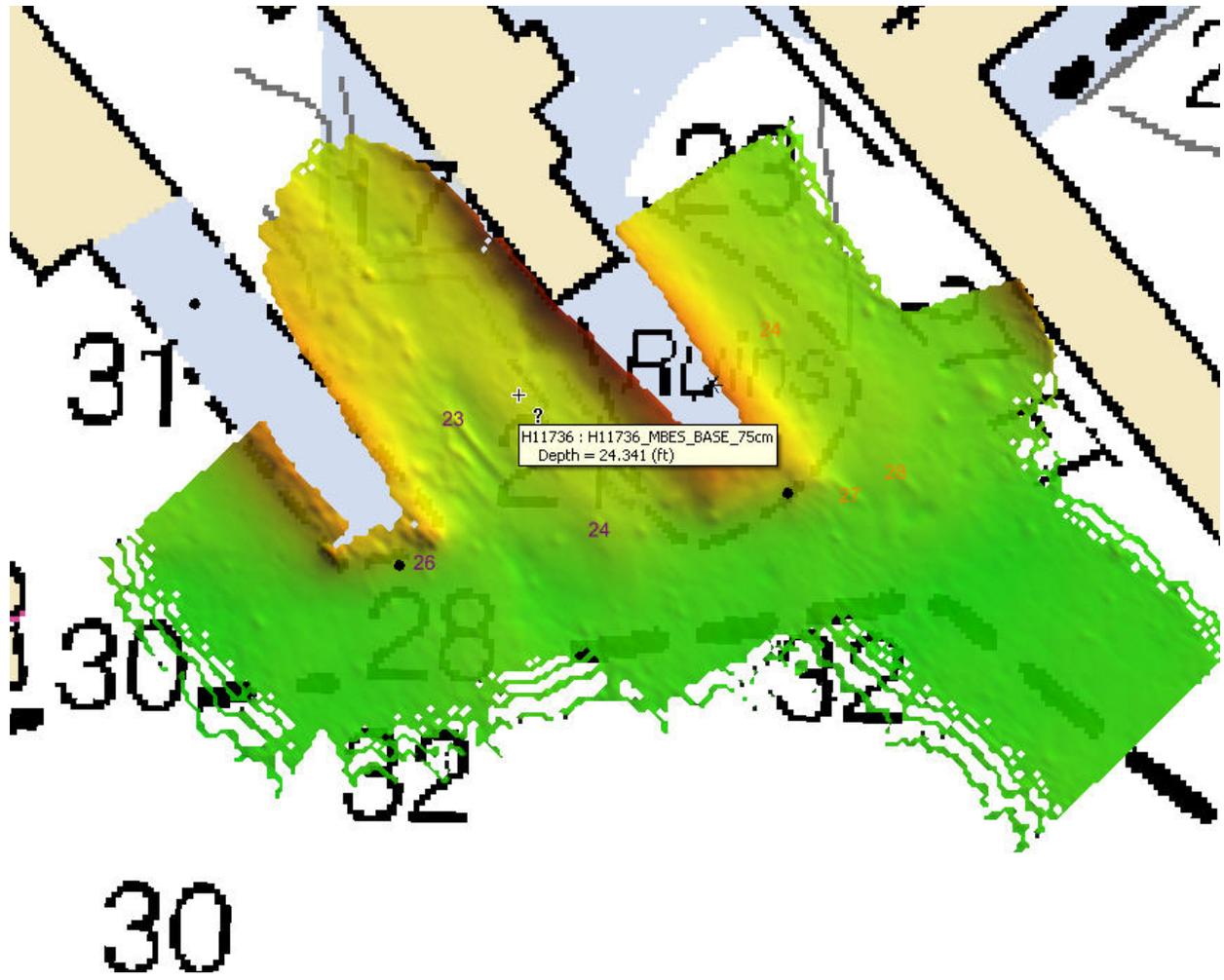


Figure 1.13.2

## 1.14) 372/20 Charted Ruins Southie Pier 7

### Survey Summary

**Survey Position:** 42° 21' 04.9" N, 071° 02' 06.5" W  
**Least Depth:** 7.19 m (= 23.59 ft = 3.931 fm = 3 fm 5.59 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.966$  m ; **TVU (TPEv)**  $\pm 0.200$  m  
**Timestamp:** 2007-197.18:15:51.159 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 217\_1815  
**Profile/Beam:** 372/20  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS. The contact is the charted ruins of a pier.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/217_1815	372/20	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615111200	0012	35.01	294.0	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615111200	0016	84.17	009.1	Secondary (grouped)

### Hydrographer Recommendations

Retain as Charted

#### Cartographically-Rounded Depth (Affected Charts):

23ft (13272\_1, 13270\_1, 13267\_1)

3  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Shoreline Construction (SLCONS)  
**Attributes:** CATSLC - 4:pier (jetty)  
 CONDTN - 2:ruined  
 SORDAT - 20070716  
 SORIND - US,US,survey,H11736  
 WATLEV - 3:always under water/submerged

## Office Notes

Do not concur. A number of significant features are positioned outside, but near to, the southeastern-facing edge of the charted ruins immediately to the west of Pier 6. Most of the features appear to be structurally related to the ruined pier. Rather than chart numerous individual dangerous obstructions in close proximity to the charted ruins and each other, extend the boundary of the charted ruins so that the northeast corner is at 42°21'4.54" N, 071°2'4.73" W (See attached image).

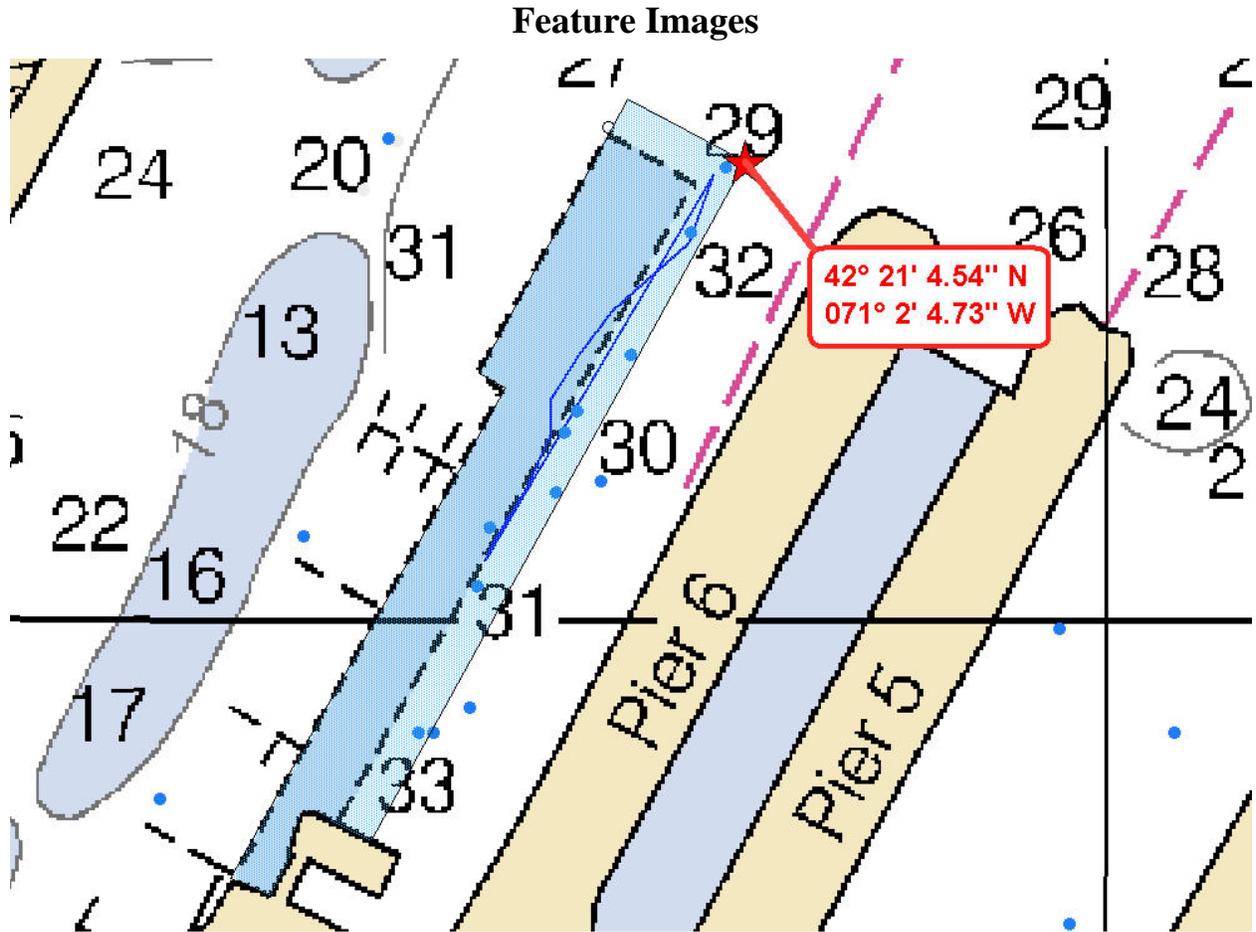


Figure 1.14.1

## 1.15) charted irregular danger curve blue tint

### Survey Summary

**Survey Position:** 42° 23' 49.7" N, 071° 00' 45.9" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-117.14:31:52 (04/26/2008)  
**GP Dataset:** ChartGPs - Digitized  
**GP No.:** 1  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
ChartGPs - Digitized	1	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

### Office Notes

Delete the partial, irregularly shaped, blue-tinted danger curve. The area is to be charted as ruins. See also the feature report for the feature "pier ruins".

## **2 - New Features**

## 2.1) pier ruins

### Survey Summary

**Survey Position:** 42° 23' 49.4" N, 071° 00' 45.9" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-117.05:07:53 (04/26/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-164 / sonar\_data070613152700  
**Contact/Point:** 0004/1  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-164/sonar_data070613152700	0004	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613152700	0001	2.04	347.6	Secondary (grouped)
h11736/3002sss500k/2007-164/sonar_data070613152300	0001	4.36	085.8	Secondary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Shoreline Construction (SLCONS)  
**Attributes:** CATSLC - 4:pier ( jetty)  
 CONDTN - 2:ruined

### Office Notes

The linear SSS contact outlines an area of pier ruins (including visible dolphins), which encompasses two charted submerged piles and a portion of a charted pier. An aerial image shows that the portion of the charted pier not contained within the surveyed area is also ruined. Delete the two charted submerged piles (and associated text) and the charted pier, and chart the current area as pier ruins. Also chart the portion of the charted pier not covered by the current feature as pier ruins.

## 2.2) uncharted obstruction, depth unknown

### Survey Summary

**Survey Position:** 42° 23' 15.5" N, 071° 01' 13.9" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-214.07:43:27 (08/01/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-164 / sonar\_data070613153300  
**Contact/Point:** 0005/1  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-164/sonar_data070613153300	0005	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 TECSOU - 2:found by side scan sonar  
 WATLEV - 3:always under water/submerged

### Office Notes

Feature detected with 200% SSS, but not developed with bathy data. Chart a dangerous obstruction, depth unknown.

## 2.3) uncharted obstruction, depth unknown

### Survey Summary

**Survey Position:** 42° 20' 59.6" N, 071° 02' 07.1" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-213.05:11:31 (07/31/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-166 / sonar\_data070615111200  
**Contact/Point:** 0005/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-166/sonar_data070615111200	0005	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 TECSOU - 2:found by side scan sonar

### Office Notes

The marginally significant feature was detected with 200% SSS but not developed with bathymetry. Chart the feature as a dangerous obstruction, depth unknown.

## 2.4) uncharted foul area

### Survey Summary

**Survey Position:** 42° 21' 16.8" N, 071° 02' 37.1" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-267.06:36:42 (09/23/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-166 / sonar\_data070615114400  
**Contact/Point:** 0008/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

Remarks:

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-166/sonar_data070615114400	0008	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Shoreline Construction (SLCONS)  
**Attributes:** CONDTN - 2:ruined

### Office Notes

The line feature outlines a foul area detected with SSS. Chart a foul area as outlined by the featue.

## Feature Images



*Figure 2.4.1*

## 2.5) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 42.2" N, 071° 01' 47.2" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2007-209.10:46:55 (07/28/2007)  
**Survey Line:** h11736 / 3002sss500k / 2007-166 / sonar\_data070615115900  
**Contact/Point:** 0003/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS. Contact noted near charted ruins. Bathy data not gathered do to a moored vessel overtop of the contact.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-166/sonar_data070615115900	0003	0.00	000.0	Primary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 SORDAT - 20070728  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 WATLEV - 3:always under water/submerged

### Office Notes

Feature was detected with 200% SSS but not developed with bathymetry data. The image quality of one of the lines is severely degraded. Chart the feature as a dangerous obstruction, depth unknown.

## 2.6) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 22' 52.2" N, 071° 03' 23.6" W  
**Least Depth:** 5.13 m (= 16.84 ft = 2.807 fm = 2 fm 4.84 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.964$  m ; TVU (TPEv)  $\pm 0.195$  m  
**Timestamp:** 2007-192.16:40:29.225 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 212\_1639  
**Profile/Beam:** 707/119  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace developed with MBES. The object appears to be a OBSTN. Based on the nature of traffic in the area, this object was not submitted as a DToN.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/212_1639	707/119	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615132700	0019	1.73	339.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0016	8.00	087.3	Secondary
h11736/s3002_mbes/2007-192/215_1646	194/12	15.42	092.7	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN, LD and position as surveyed.

#### Cartographically-Rounded Depth (Affected Charts):

17ft (13272\_1, 13270\_1, 13267\_1)

2 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070711  
 SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 5.134 m

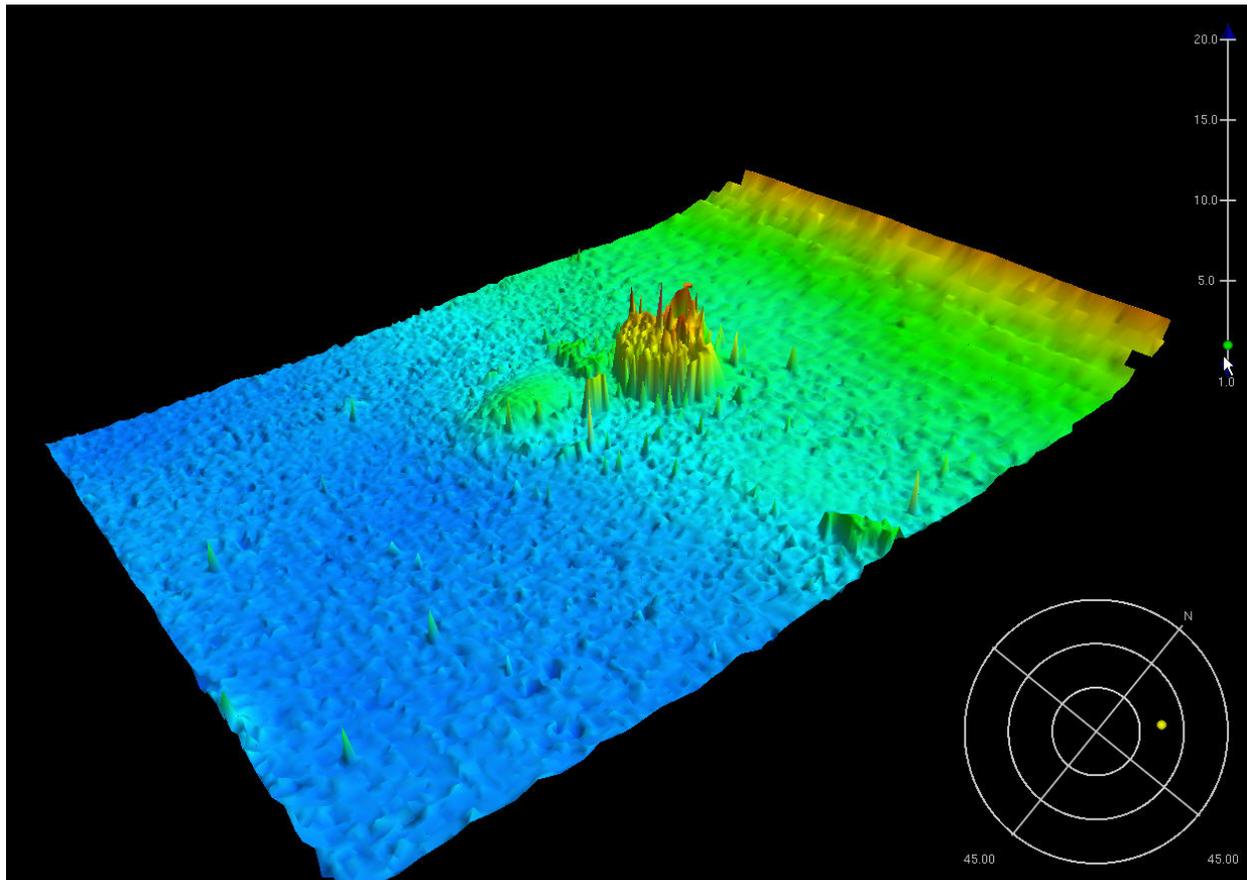
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## **Office Notes**

Concur.

### Feature Images



*Figure 2.6.1*

## 2.7) uncharted wreck

### Survey Summary

**Survey Position:** 42° 22' 51.5" N, 071° 03' 23.5" W  
**Least Depth:** 6.82 m (= 22.36 ft = 3.726 fm = 3 fm 4.36 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.965$  m ; **TVU (TPEv)**  $\pm 0.207$  m  
**Timestamp:** 2007-192.16:46:53.141 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 215\_1646  
**Profile/Beam:** 67/119  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is a small wreck.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/215_1646	67/119	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615132700	0005	11.66	089.7	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as a non-dangerous wreck, LD and position as surveyed.

#### Cartographically-Rounded Depth (Affected Charts):

22ft (13272\_1, 13270\_1, 13267\_1)

3  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 1:non-dangerous wreck  
 SORDAT - 20070711  
 SORIND - US,US,survy,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 6.815 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## **Office Notes**

Concur with clarification. Chart the feature as a dangerous wreck.

## 2.8) uncharted wreck

### Survey Summary

**Survey Position:** 42° 23' 11.1" N, 071° 02' 55.1" W  
**Least Depth:** 6.13 m (= 20.10 ft = 3.350 fm = 3 fm 2.10 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.967$  m ; **TVU (TPEv)**  $\pm 0.200$  m  
**Timestamp:** 2007-192.15:21:12.933 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 396\_1520  
**Profile/Beam:** 283/14  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is a wreck, LD in agreement with charted depths.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/396_1520	283/14	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613135800	0002	11.14	106.7	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as a non-dangerous wreck.

#### Cartographically-Rounded Depth (Affected Charts):

20ft (13272\_1, 13270\_1, 13267\_1)

3 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 1:non-dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 SORDAT - 20070711  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.126 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. Chart the feature as a dangerous wreck.

### Feature Images

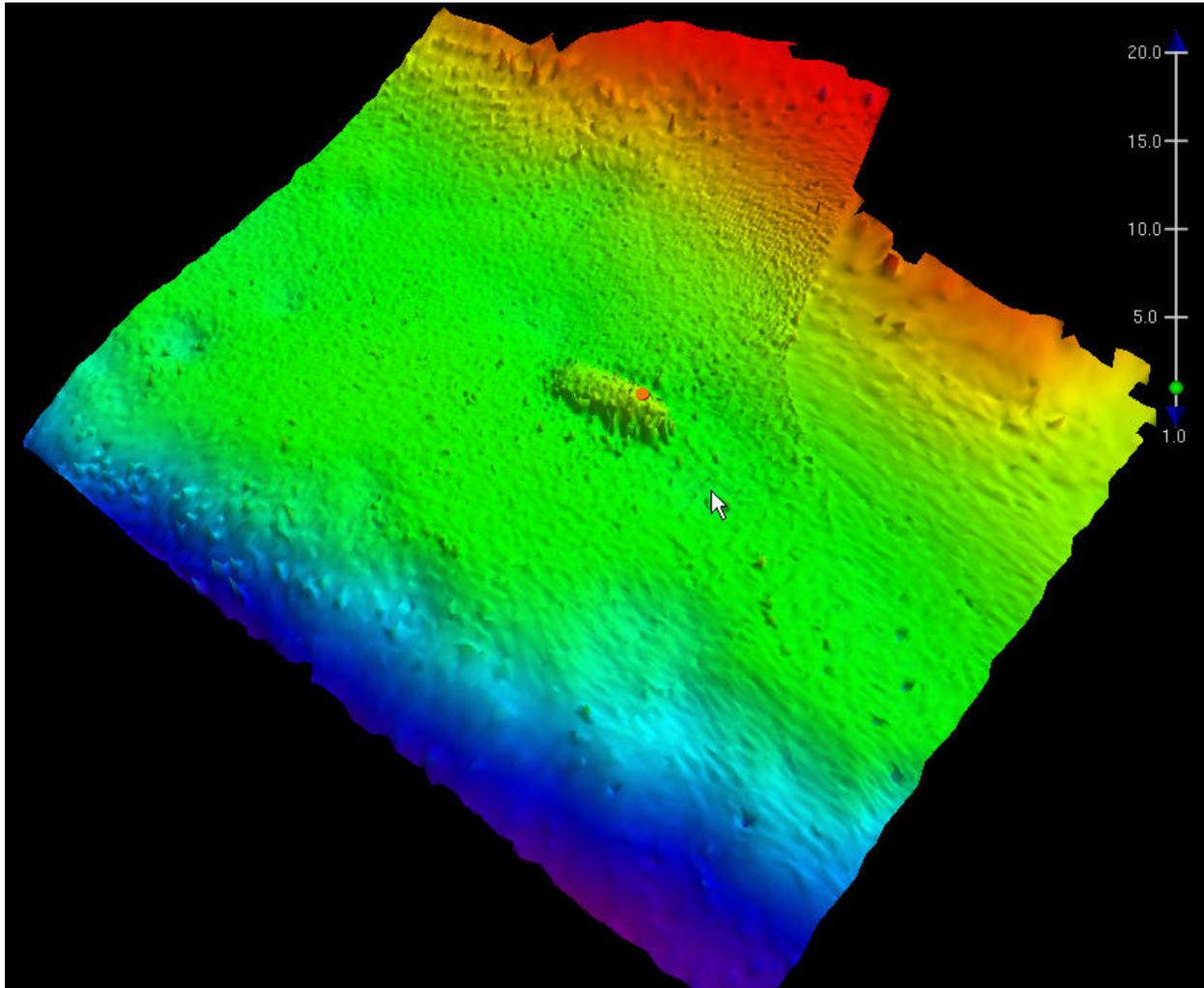


Figure 2.8.1



*Figure 2.8.2*

## 2.9) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 22' 15.0" N, 071° 03' 00.1" W  
**Least Depth:** 8.92 m (= 29.27 ft = 4.878 fm = 4 fm 5.27 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.964$  m ; TVU (TPEv)  $\pm 0.188$  m  
**Timestamp:** 2007-192.17:29:51.652 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 409\_1729  
**Profile/Beam:** 197/67  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is an OBSTN.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/409_1729	197/67	0.00	000.0	Primary
h11736/s3002_mbes/2007-192/409_1729	197/68	0.13	180.0	Secondary (grouped)

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN, LD and position as surveyed.

#### Cartographically-Rounded Depth (Affected Charts):

29ft (13272\_1, 13270\_1, 13267\_1)

4  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070711  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 8.920 m

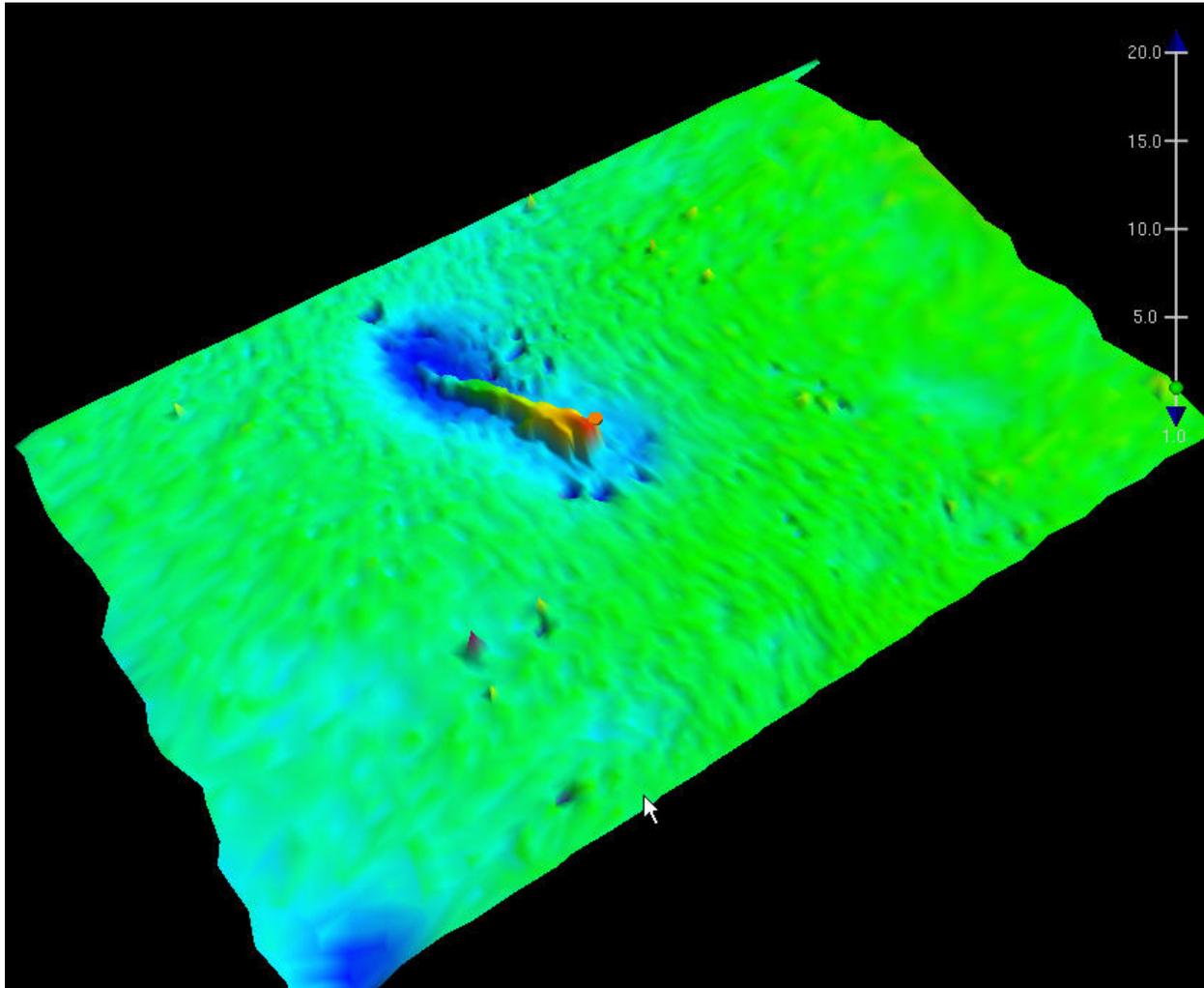
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur.

### Feature Images



*Figure 2.9.1*

## 2.10) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 18.9" N, 071° 02' 38.7" W  
**Least Depth:** 7.32 m (= 24.02 ft = 4.003 fm = 4 fm 0.02 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.964$  m ; **TVU (TPEv)**  $\pm 0.189$  m  
**Timestamp:** 2007-197.19:01:00.228 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 152\_1859  
**Profile/Beam:** 902/47  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Simrad EM3000 MBES, final tides applied. The object is a small OBSTN, LD in agreement with charted soundings in the area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/152_1859	902/47	0.00	000.0	Primary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN, LD and position as surveyed.

#### Cartographically-Rounded Depth (Affected Charts):

24ft (13272\_1, 13270\_1, 13267\_1)

4fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070716  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 7.320 m  
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur.

### Feature Images

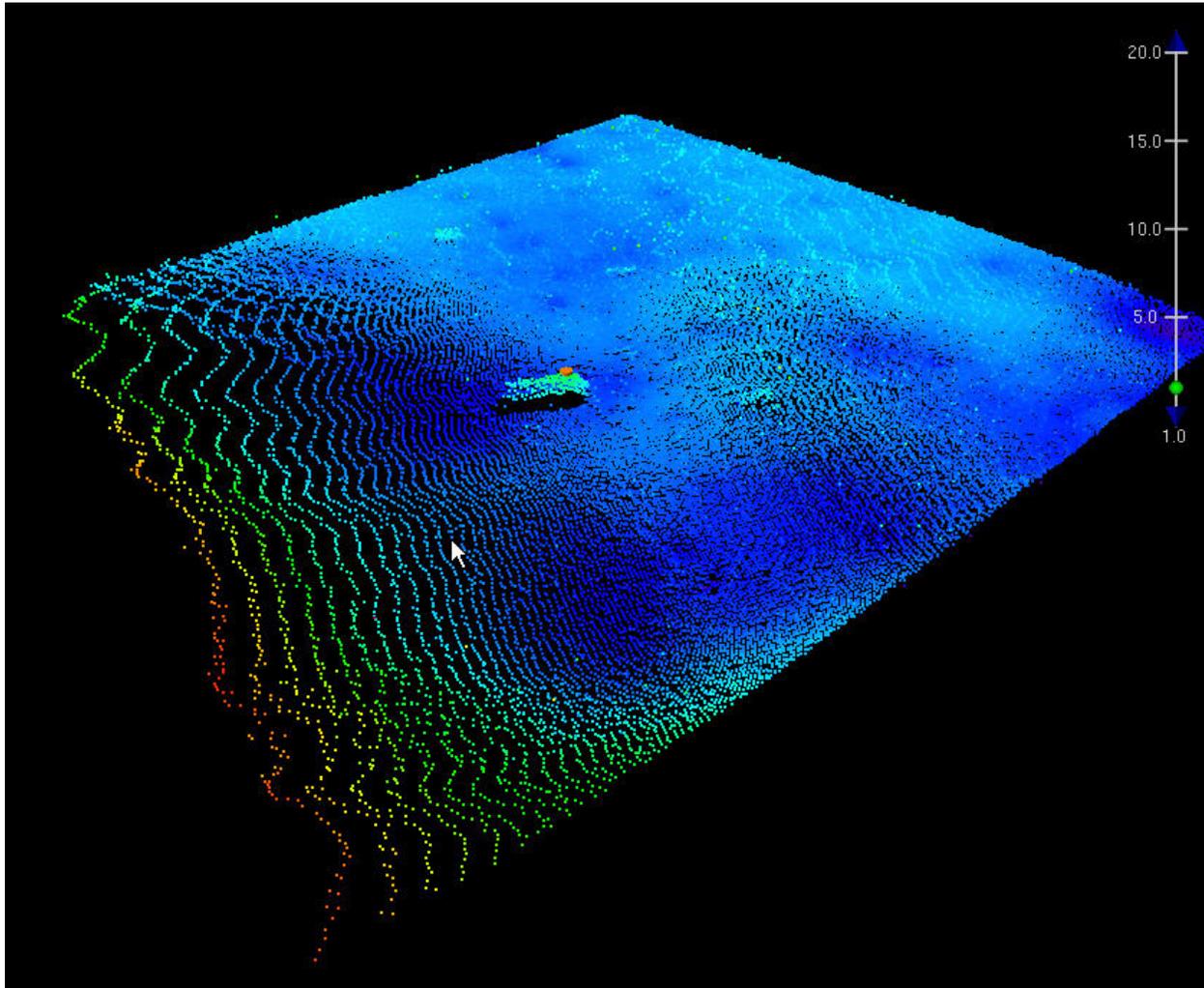


Figure 2.10.1

## 2.11) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 46.6" N, 071° 02' 18.2" W  
**Least Depth:** 8.49 m (= 27.86 ft = 4.644 fm = 4 fm 3.86 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.980$  m ; **TVU (TPEv)**  $\pm 0.361$  m  
**Timestamp:** 2007-199.15:09:41.883 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 011\_1509  
**Profile/Beam:** 315/4  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/011_1509	315/4	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615122400	0007	4.26	221.4	Secondary

### Hydrographer Recommendations

[None]

**Cartographically-Rounded Depth (Affected Charts):**

28ft (13272\_1, 13270\_1, 13267\_1)

4 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 8.493 m

### Office Notes

Chart obstruction area.

## 2.12) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 35.3" N, 071° 01' 53.2" W  
**Least Depth:** 4.22 m (= 13.86 ft = 2.310 fm = 2 fm 1.86 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.183$  m  
**Timestamp:** 2007-199.14:36:22.263 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 093\_1435  
**Profile/Beam:** 329/40  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is an OBSTN.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/093_1435	329/40	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615120600	0001	10.52	355.4	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN.

#### Cartographically-Rounded Depth (Affected Charts):

14ft (13272\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070718  
 SORIND - US,US,survy,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 4.224 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur.

### Feature Images

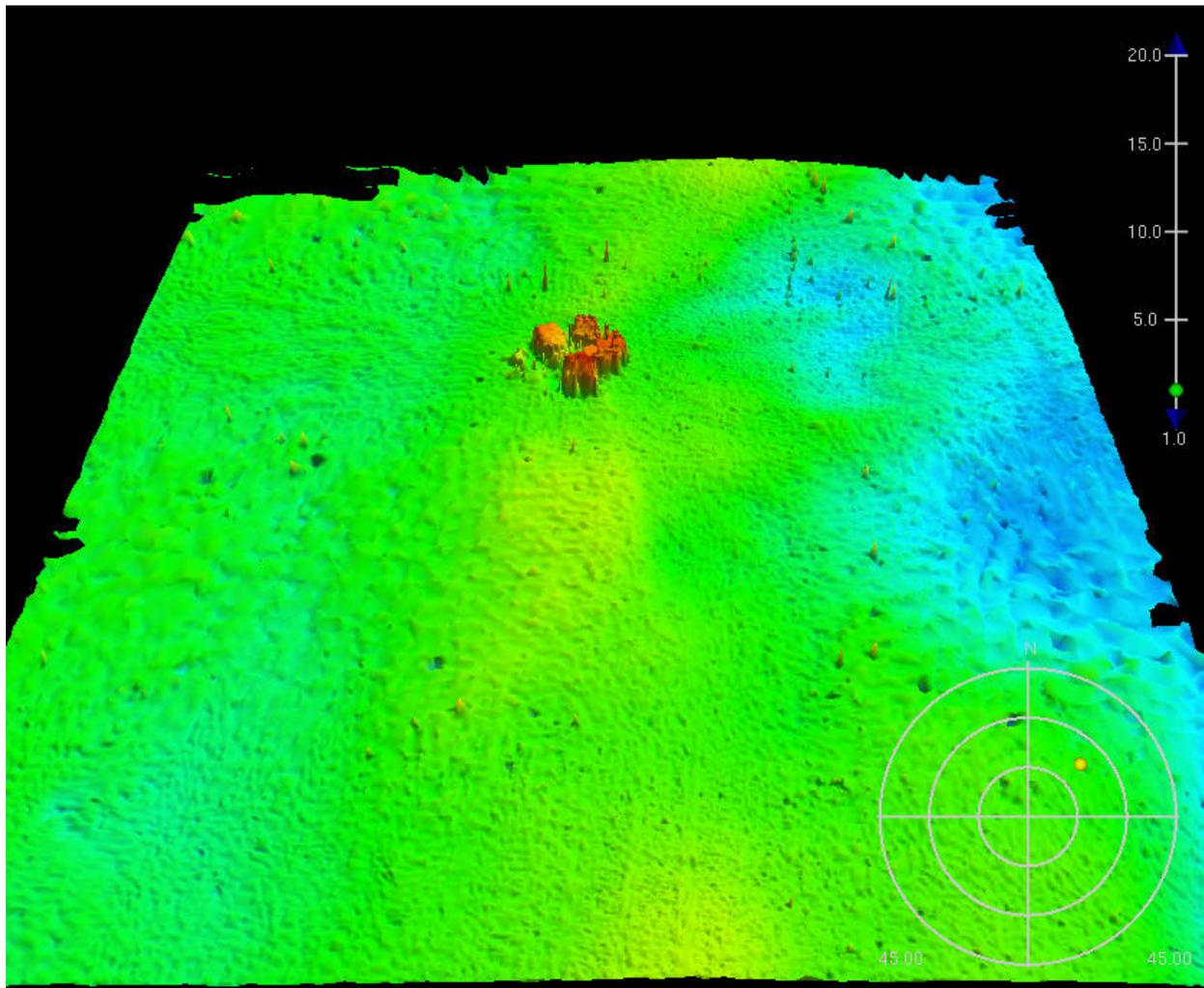
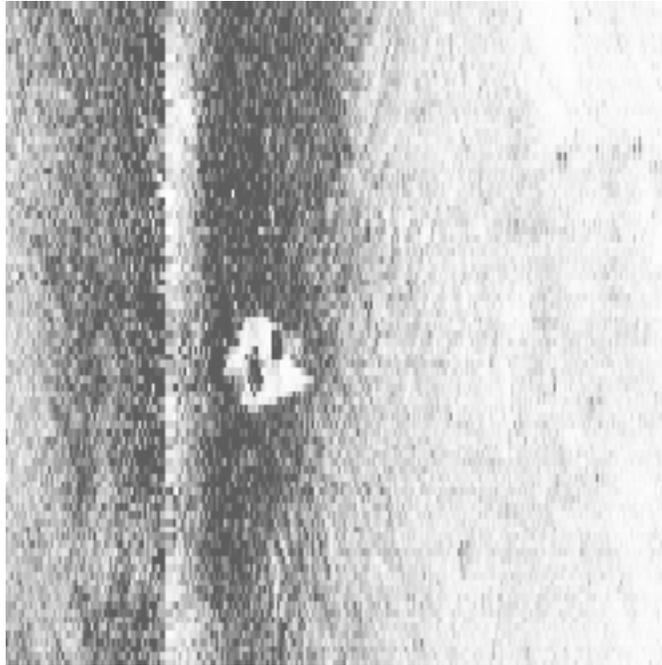


Figure 2.12.1



*Figure 2.12.2*

## 2.13) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 20' 57.0" N, 071° 02' 00.4" W  
**Least Depth:** 6.24 m (= 20.47 ft = 3.412 fm = 3 fm 2.47 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.188$  m  
**Timestamp:** 2007-197.18:07:06.900 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 077\_1805  
**Profile/Beam:** 769/54  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area covered with 100% Simrad EM3000 MBES, final tides applied.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/077_1805	769/54	0.00	000.0	Primary

### Hydrographer Recommendations

The hydrographer recommends an obstruction with LD charted at this position.

#### Cartographically-Rounded Depth (Affected Charts):

20ft (13272\_1, 13270\_1, 13267\_1)

3 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 6.239 m

## Office Notes

Concur.

## 2.14) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 11.8" N, 071° 02' 24.2" W  
**Least Depth:** 10.64 m (= 34.89 ft = 5.815 fm = 5 fm 4.89 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.969$  m ; **TVU (TPEv)**  $\pm 0.209$  m  
**Timestamp:** 2007-197.18:25:20.597 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 080\_1824  
**Profile/Beam:** 272/24  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is a grand piano-shaped OBSTN.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/080_1824	272/24	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615113700	0001	9.21	049.1	Secondary
h11736/3002sss500k/2007-166/sonar_data070615113900	0001	13.76	191.5	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN

#### Cartographically-Rounded Depth (Affected Charts):

35ft (13272\_1, 13270\_1, 13267\_1)

5  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070716  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 10.635 m

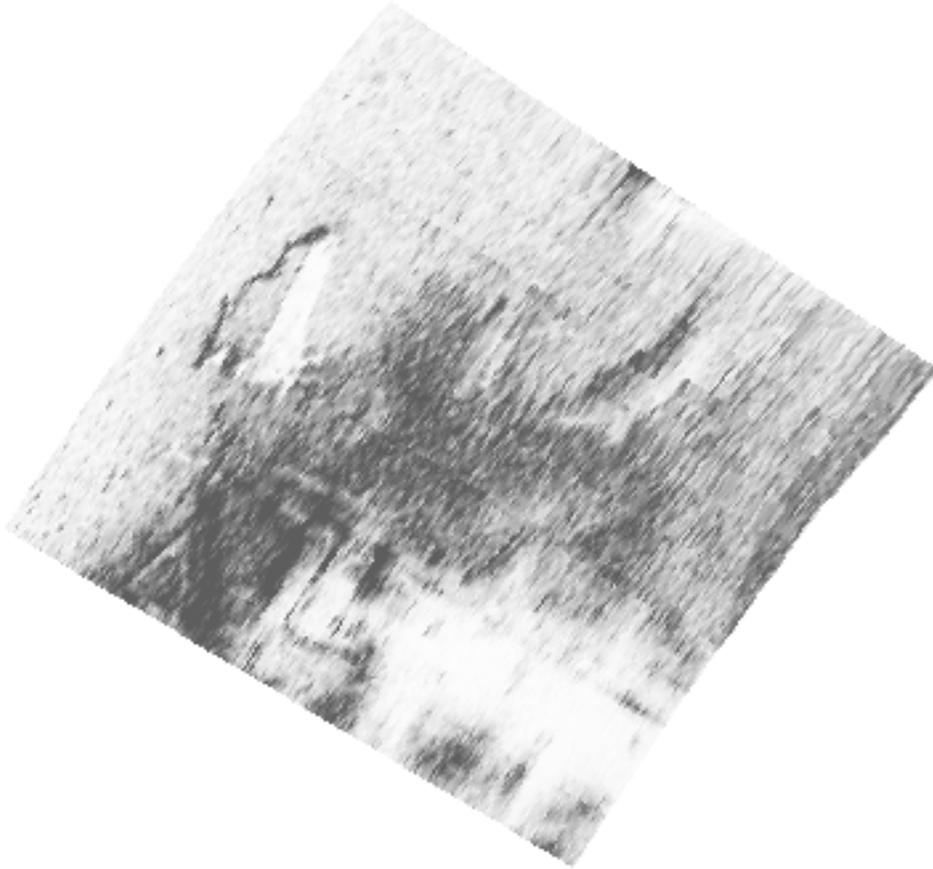
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur.

## Feature Images



*Figure 2.14.1*

## 2.15) uncharted wreck

### Survey Summary

**Survey Position:** 42° 21' 19.4" N, 071° 02' 47.2" W  
**Least Depth:** 4.98 m (= 16.35 ft = 2.725 fm = 2 fm 4.35 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.184$  m  
**Timestamp:** 2007-199.14:02:13.054 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 058\_1401  
**Profile/Beam:** 541/22  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Simrad EM3000 MBES, final tides applied. The object appears to be a wreck near a charted 12' sounding.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/058_1401	541/22	0.00	000.0	Primary

### Hydrographer Recommendations

Due to the nature of traffic in the area and the location of the object, the hydrographer recommends the object be charted as a dangerous wreck. Due to the object location and the nature of traffic, the item was not submitted as a DToN.

#### Cartographically-Rounded Depth (Affected Charts):

16ft (13272\_1, 13270\_1, 13267\_1)

2  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 SORDAT - 20070718  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 4.983 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur.

### Feature Images

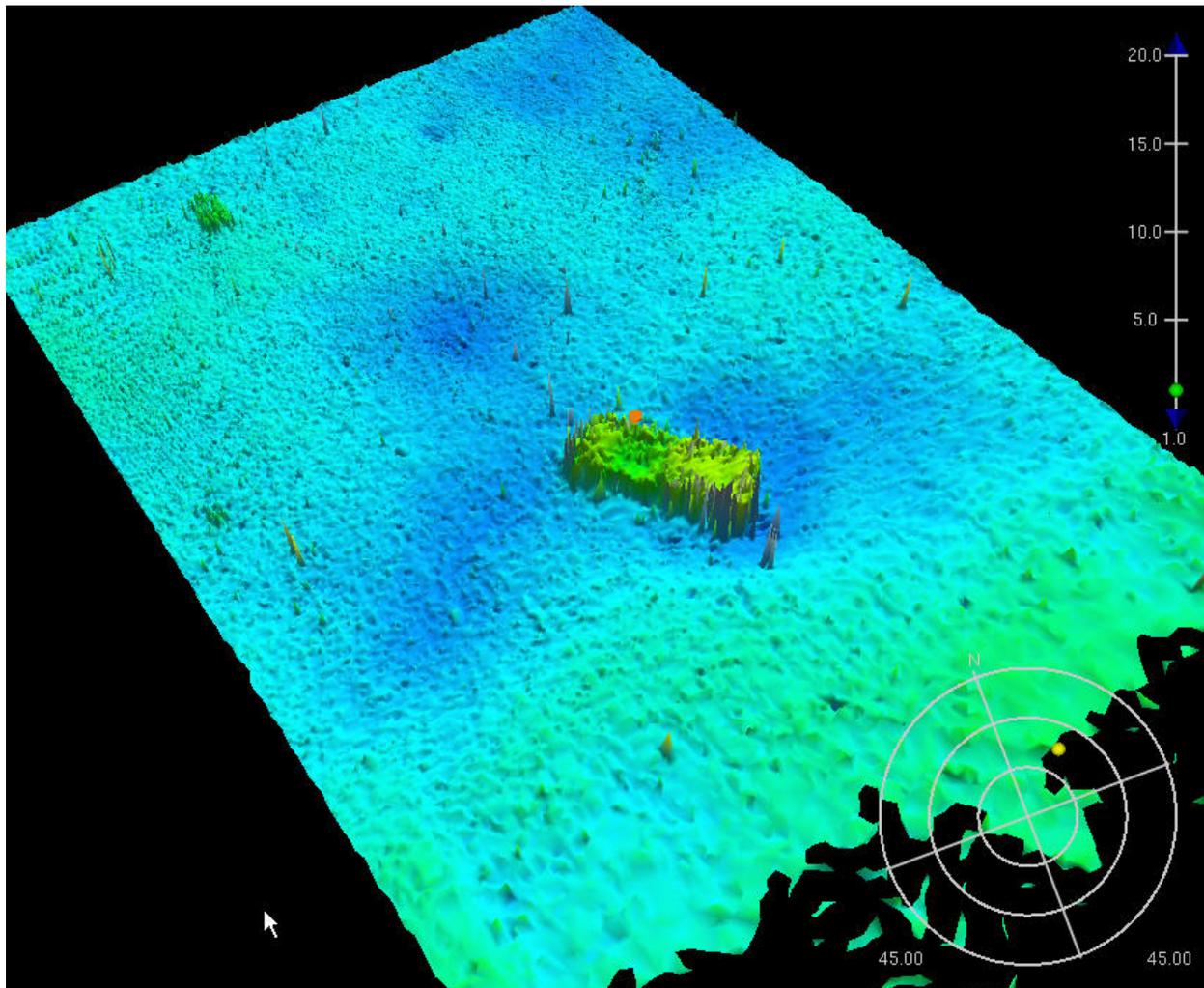


Figure 2.15.1

## 2.16) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 18.7" N, 071° 02' 49.8" W  
**Least Depth:** 4.34 m (= 14.23 ft = 2.372 fm = 2 fm 2.23 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.961$  m ; TVU (TPEv)  $\pm 0.184$  m  
**Timestamp:** 2007-199.14:12:19.214 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 117\_1411  
**Profile/Beam:** 504/49  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Simrad EM3000 MBES final tides applied. The object appears to be an OBSTN.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/117_1411	504/49	0.00	000.0	Primary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN.

#### Cartographically-Rounded Depth (Affected Charts):

14ft (13272\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070718  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 4.338 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart 14 ft obstruction at this location.

### Feature Images

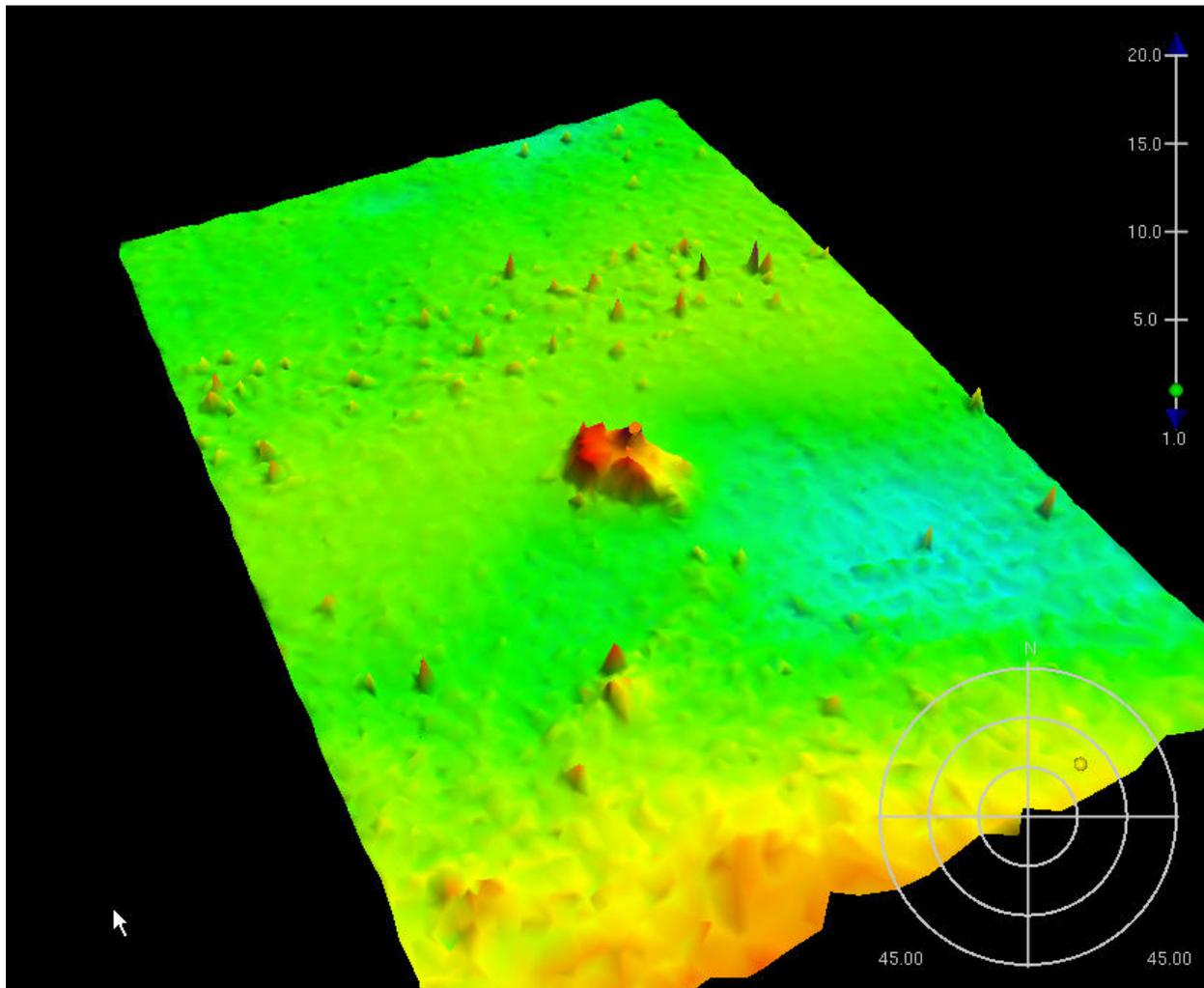


Figure 2.16.1

## 2.17) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 20' 19.5" N, 071° 00' 00.2" W  
**Least Depth:** 4.02 m (= 13.18 ft = 2.197 fm = 2 fm 1.18 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.184$  m  
**Timestamp:** 2007-197.14:02:27.204 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 051\_1401  
**Profile/Beam:** 672/67  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Object is a rock located on a charted rocky shoal.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/051_1401	672/67	0.00	000.0	Primary
h11736/3002sss500k/2007-165/sonar_data070614150000	0003	1.11	223.7	Secondary
h11736/3002sss500k/2007-165/sonar_data070614150000	0001	14.53	128.3	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN.

#### Cartographically-Rounded Depth (Affected Charts):

13ft (13272\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070716  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.017 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur.

## 2.18) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 22' 07.0" N, 071° 03' 31.8" W  
**Least Depth:** 7.71 m (= 25.31 ft = 4.219 fm = 4 fm 1.31 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.965$  m ; **TVU (TPEv)**  $\pm 0.202$  m  
**Timestamp:** 2007-192.17:56:24.847 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 273\_1754  
**Profile/Beam:** 1221/117  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is an OBSTN.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/273_1754	1221/117	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615124700	0001	3.57	185.1	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN

#### Cartographically-Rounded Depth (Affected Charts):

25ft (13272\_1, 13270\_1, 13267\_1)

4 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 SORDAT - 20070711  
 SORIND - US,US,survy,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 7.715 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur.

## Feature Images



*Figure 2.18.1*

## 2.19) uncharted 19-ft OBSTRN

### Survey Summary

**Survey Position:** 42° 23' 51.2" N, 071° 00' 42.3" W  
**Least Depth:** 5.82 m (= 19.10 ft = 3.183 fm = 3 fm 1.10 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.961$  m ; TVU (TPEv)  $\pm 0.184$  m  
**Timestamp:** 2007-199.11:50:54.245 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 031\_1148  
**Profile/Beam:** 964/42  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

Object found during office processing.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/031_1148	964/42	0.00	000.0	Primary

### Hydrographer Recommendations

Object lies outside recommended pier ruins limits. Chart as OBSTRN with LD.

#### Cartographically-Rounded Depth (Affected Charts):

19ft (13272\_1, 13270\_1, 13274\_5, 13267\_1)

3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070718  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 5.821 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur.

### Feature Images

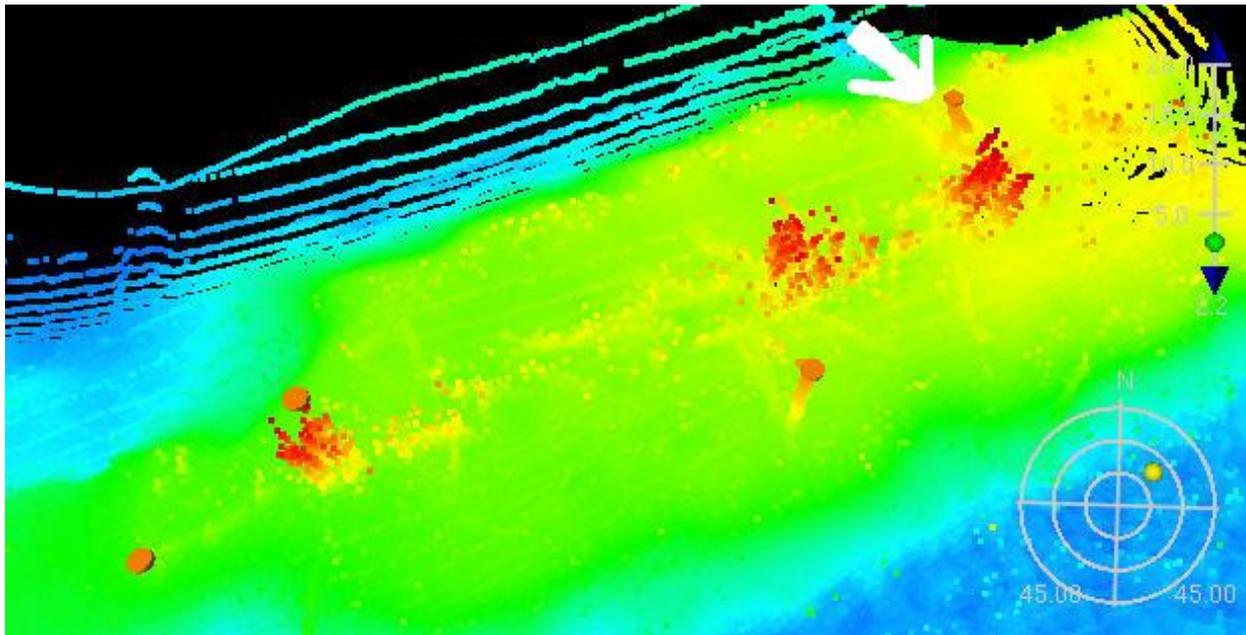


Figure 2.19.1

## 2.20) uncharted 19-ft OBSTRN

### Survey Summary

**Survey Position:** 42° 23' 50.0" N, 071° 00' 43.2" W  
**Least Depth:** 5.74 m (= 18.84 ft = 3.140 fm = 3 fm 0.84 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.961$  m ; TVU (TPEv)  $\pm 0.185$  m  
**Timestamp:** 2007-199.11:56:10.855 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 033\_1155  
**Profile/Beam:** 587/68  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The contact is the ruins of a charted pier, Dols exposed.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/033_1155	587/68	0.00	000.0	Primary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as ruins.

#### Cartographically-Rounded Depth (Affected Charts):

19ft (13272\_1, 13270\_1, 13274\_5, 13267\_1)

3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20070718  
 SORIND - US,US,survey,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 5.743 m  
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Do not concur. The feature is the least depth on a structure extending outside the limits of a recommended pier ruins area. Chart the feature as a dangerous obstruction.

### Feature Images

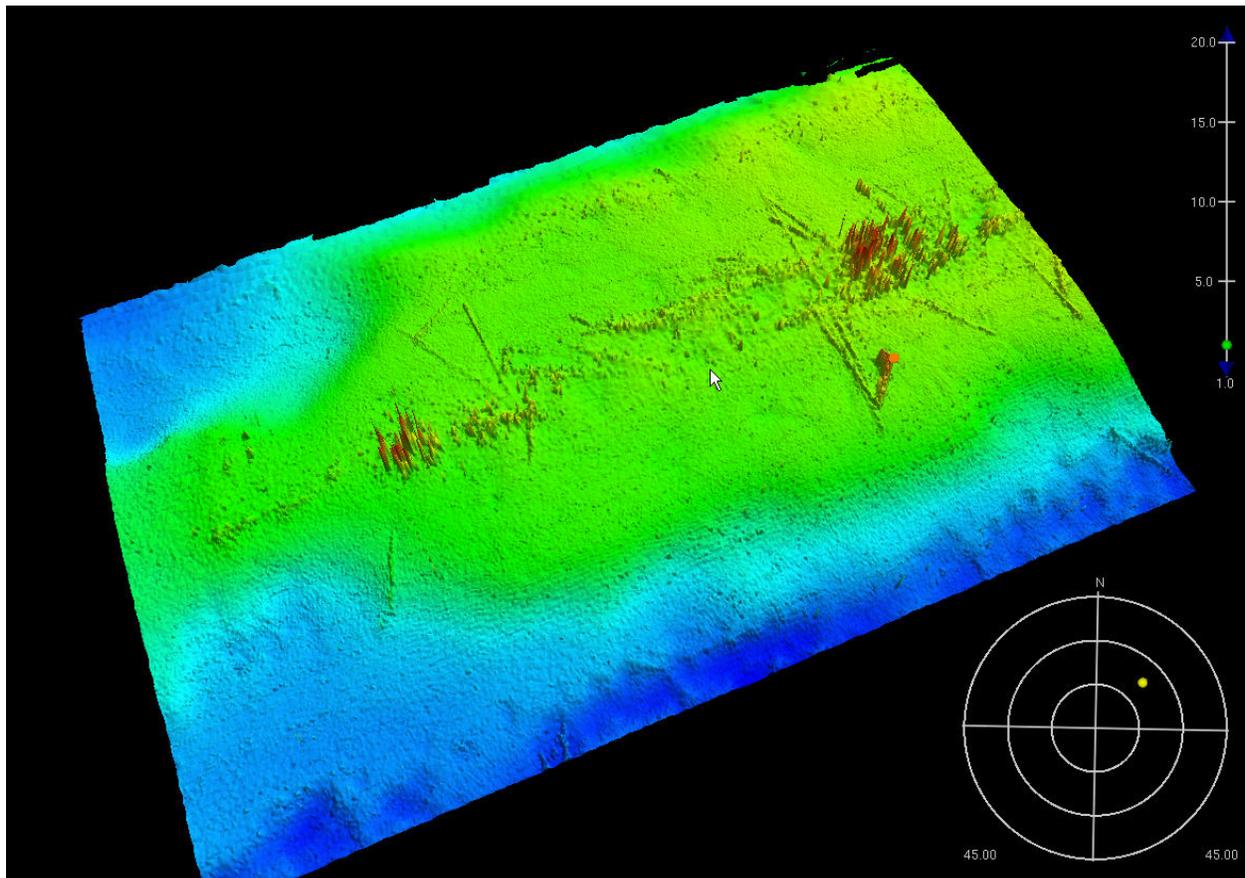
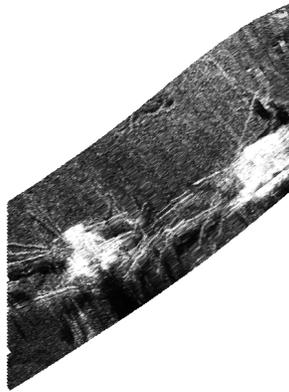


Figure 2.20.1



*Figure 2.20.2*

## 2.21) uncharted obstruction below project depth

### Survey Summary

**Survey Position:** 42° 20' 14.7" N, 071° 00' 09.5" W  
**Least Depth:** 11.13 m (= 36.51 ft = 6.085 fm = 6 fm 0.51 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.984$  m ; **TVU (TPEv)**  $\pm 0.336$  m  
**Timestamp:** 2007-257.15:22:41.509 (09/14/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-257 / 003\_1517  
**Profile/Beam:** 2015/6  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object appears to be a rock, LD deeper than charted depths in the area and the project depth of the channel.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-257/003_1517	2015/6	0.00	000.0	Primary
h11736/s3002_mbes/2007-197/043_1616	275/20	1.89	226.0	Secondary
h11736/3002sss500k/2007-165/sonar_data070614140100	0001	2.53	209.6	Secondary
h11736/s3002_mbes/2007-197/034_1451	2834/9	5.37	279.4	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object not be charted as an OBSTN.

#### Cartographically-Rounded Depth (Affected Charts):

36ft (13272\_1, 13270\_1, 13267\_1)

6fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** QUASOU - 1:depth known  
 TECSOU - 3:found by multi-beam

## Office Notes

Concur. Object falls below the regulated depth for this channel. Chart 36-ft depth.

## 2.22) uncharted obstruction, depth unknown

### Survey Summary

**Survey Position:** 42° 23' 05.9" N, 071° 02' 05.9" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2007-295.06:16:00 (10/22/2007)  
**Survey Line:** h11736 / 3002sss500k / 2007-164 / sonar\_data070613145200  
**Contact/Point:** 0005/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

Contact of noted in SSS trace near a charted GP. Possible mud lump or bottom feature. Unable to obtain MBES data over the contact.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-164/sonar_data070613145200	0005	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613145200	0006	1.07	038.0	Secondary (grouped)

### Hydrographer Recommendations

The hydrographer recommends the object be charted as an OBSTN, LD unknown.

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 SORDAT - 20071022  
 SORIND - US,US,survey,H11736  
 TECSOU - 2:found by side scan sonar  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur.

## Feature Images

*Figure 2.22.1*

## 2.23) uncharted obstruction, depth unknown

### Survey Summary

**Survey Position:** 42° 21' 00.8" N, 071° 02' 10.6" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-213.05:16:56 (07/31/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-166 / sonar\_data070615111800  
**Contact/Point:** 0002/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-166/sonar_data070615111800	0002	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615111800	0004	3.15	322.4	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615112000	0005	3.38	278.9	Secondary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 TECSOU - 2:found by side scan sonar

### Office Notes

The feature was detected with 200% SSS, but was not developed with bathymetry. Chart the feature as a dangerous obstruction, depth unknown.

## Feature Images



*Figure 2.23.1*

## 2.24) uncharted obstruction, depth unknown

### Survey Summary

**Survey Position:** 42° 21' 52.5" N, 071° 02' 22.4" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2008-213.01:51:56 (07/31/2008)  
**Survey Line:** h11736 / 3002sss500k / 2007-166 / sonar\_data070615122900  
**Contact/Point:** 0002/1  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/3002sss500k/2007-166/sonar_data070615122900	0002	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

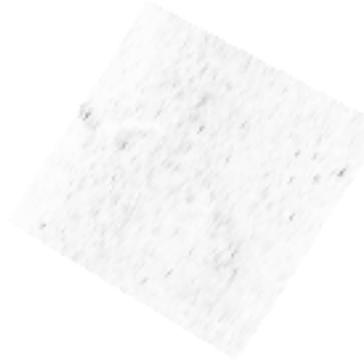
### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 2:depth unknown  
 TECSOU - 2:found by side scan sonar

### Office Notes

The feature was detected with 100% SSS. 200% SSS was run, but the position is obstructed by propwash. The feature's position was developed with MBES, but no feature was detected. The feature is a narrow object protruding into the water column. Chart the feature as an obstruction, depth unknown.

## Feature Images



*Figure 2.24.1*

## 2.25) uncharted 23-ft obstruction

### Survey Summary

**Survey Position:** 42° 23' 11.2" N, 071° 04' 00.1" W  
**Least Depth:** 7.24 m (= 23.74 ft = 3.957 fm = 3 fm 5.74 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.966$  m ; **TVU (TPEv)**  $\pm 0.191$  m  
**Timestamp:** 2007-192.14:43:27.344 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 398\_1443  
**Profile/Beam:** 125/32  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is a wreck marked by a private mooring buoy and floating dock.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/398_1443	125/32	0.00	000.0	Primary
h11736/s3002_mbes/2007-192/400_1503	370/122	3.51	083.1	Secondary
h11736/s3002_mbes/2007-192/399_1504	234/117	4.70	098.0	Secondary
h11736/3002sss500k/2007-164/sonar_data070613131900	0001	6.79	100.1	Secondary
h11736/s3002_mbes/2007-192/399_1504	244/109	9.54	102.6	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be charted as a non-dangerous wreck.

#### Cartographically-Rounded Depth (Affected Charts):

23ft (13272\_1, 13270\_1, 13267\_1)

4fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 7.237 m

## Office Notes

Concur with clarification. The data do not definitively show the feature to be a wreck. Chart the feature as a dangerous obstruction.

## 2.26) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 01.4" N, 071° 02' 06.6" W  
**Least Depth:** 7.53 m (= 24.72 ft = 4.120 fm = 4 fm 0.72 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.245$  m  
**Timestamp:** 2008-220.14:51:20.934 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 002\_1449  
**Profile/Beam:** 1326/111  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/002_1449	1326/111	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615111200	0013	3.50	054.2	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

24ft (13272\_1, 13270\_1, 13267\_1)

4fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

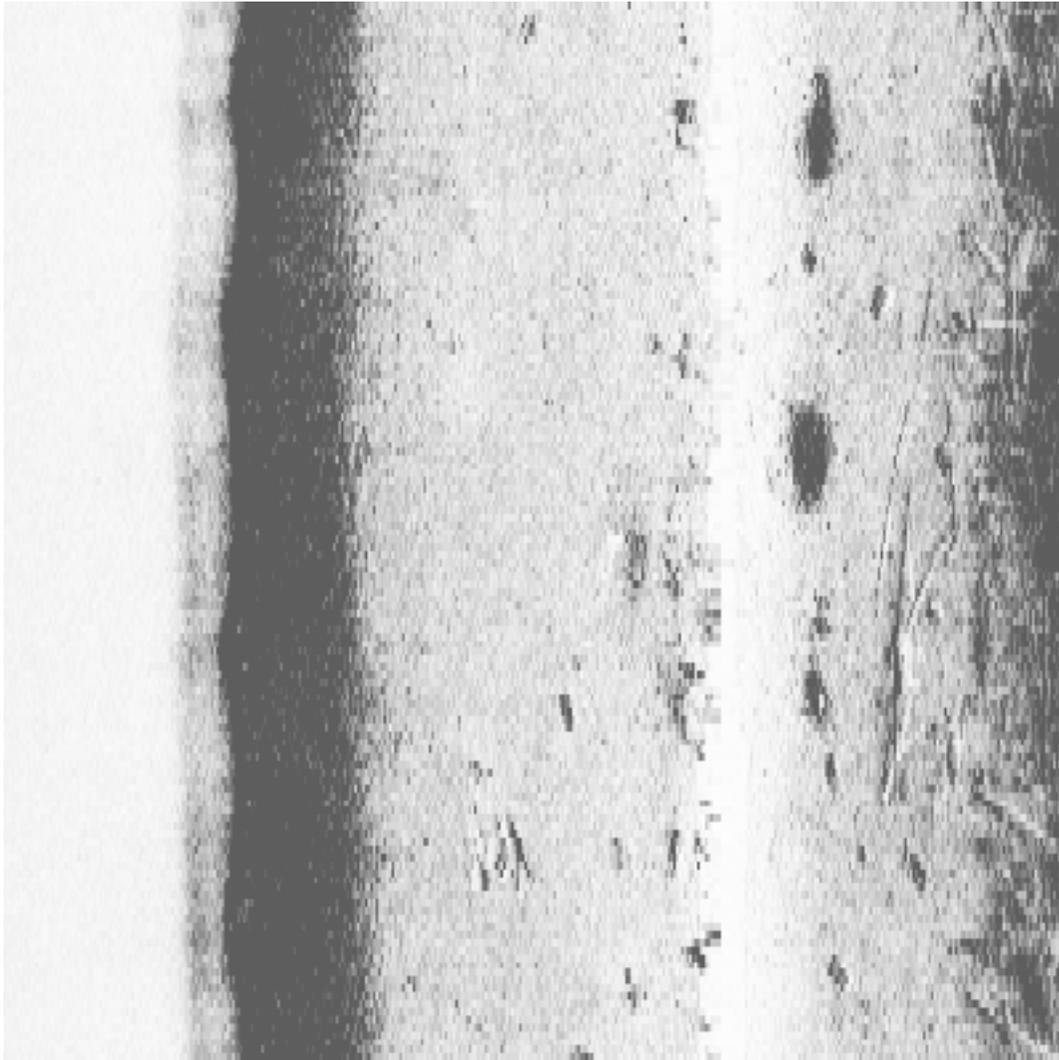
### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 7.534 m

## Office Notes

The feature was covered with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## Feature Images



*Figure 2.26.1*

## 2.27) uncharted 19-ft obstruction

### Survey Summary

**Survey Position:** 42° 21' 04.8" N, 071° 02' 09.5" W  
**Least Depth:** 5.89 m (= 19.34 ft = 3.223 fm = 3 fm 1.34 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.241$  m  
**Timestamp:** 2008-220.14:38:13.143 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 006\_1437  
**Profile/Beam:** 178/75  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/006_1437	178/75	0.00	000.0	Primary
h11736/nrt5_s3002_em3000_mbes/2008-220/008_1438	474/31	0.46	313.2	Secondary
h11736/3002sss500k/2007-166/sonar_data070615111800	0001	2.32	327.3	Secondary
h11736/3002sss500k/2007-166/sonar_data070615112000	0002	4.47	303.3	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

19ft (13272\_1, 13270\_1, 13267\_1)

3 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 5.894 m

## Office Notes

The significant feature was covered with 200% SSS and developed with MBES. Although the feature is on a relatively steep localized slope, chart the feature as a dangerous obstruction.

## 2.28) uncharted 19-ft obstruction

### Survey Summary

**Survey Position:** 42° 20' 57.8" N, 071° 02' 13.1" W  
**Least Depth:** 5.89 m (= 19.31 ft = 3.219 fm = 3 fm 1.31 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.241$  m  
**Timestamp:** 2008-220.14:44:21.586 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 014\_1443  
**Profile/Beam:** 357/23  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/014_1443	357/23	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615112000	0006	1.16	284.5	Secondary
h11736/3002sss500k/2007-166/sonar_data070615111800	0005	3.06	064.1	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

19ft (13272\_1, 13270\_1, 13267\_1)

3 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

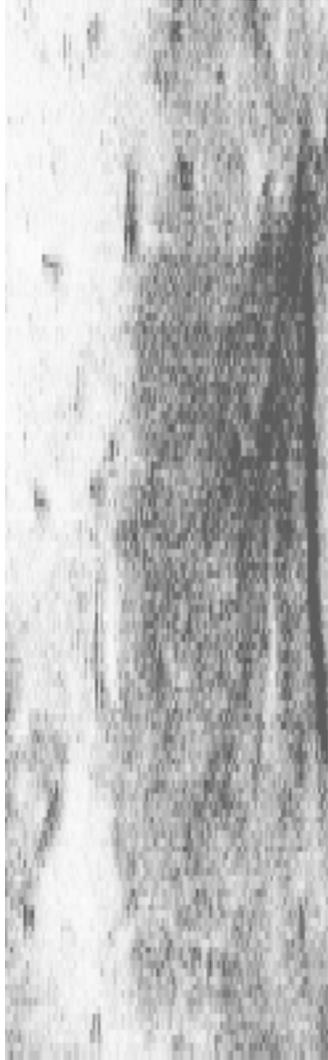
### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 5.886 m

## Office Notes

The 2.6-meter high object was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## Feature Images



*Figure 2.28.1*

## 2.29) uncharted 22-ft obstruction

### Survey Summary

**Survey Position:** 42° 20' 58.2" N, 071° 02' 12.3" W  
**Least Depth:** 6.67 m (= 21.88 ft = 3.647 fm = 3 fm 3.88 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.241$  m  
**Timestamp:** 2008-220.14:44:33.876 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 014\_1443  
**Profile/Beam:** 538/85  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/014_1443	538/85	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615112000	0007	4.56	141.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615111800	0003	5.39	108.8	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

22ft (13272\_1, 13270\_1, 13267\_1)

3 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

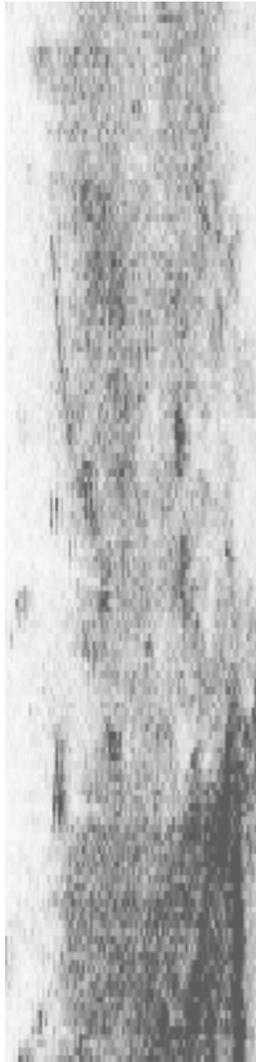
### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 6.670 m

## Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## Feature Images



*Figure 2.29.1*

## 2.30) uncharted 20-ft obstruction

### Survey Summary

**Survey Position:** 42° 20' 59.0" N, 071° 02' 12.2" W  
**Least Depth:** 6.24 m (= 20.47 ft = 3.411 fm = 3 fm 2.47 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.963$  m ; **TVU (TPEv)**  $\pm 0.250$  m  
**Timestamp:** 2008-220.14:44:46.352 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 014\_1443  
**Profile/Beam:** 721/10  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/014_1443	721/10	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

20ft (13272\_1, 13270\_1, 13267\_1)

3 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 6.238 m

## Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## 2.31) uncharted obstructions

### Survey Summary

**Survey Position:** 42° 21' 40.1" N, 071° 01' 57.2" W  
**Least Depth:** 4.93 m (= 16.17 ft = 2.695 fm = 2 fm 4.17 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.240$  m  
**Timestamp:** 2008-220.14:25:00.319 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 016\_1424  
**Profile/Beam:** 592/27  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/016_1424	592/27	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615121300	0001	4.05	202.6	Secondary

### Hydrographer Recommendations

uncharted obstruction

#### Cartographically-Rounded Depth (Affected Charts):

16ft (13272\_1, 13270\_1, 13267\_1)

2  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 4.929 m

## Office Notes

The feature is the least depth on a pile of debris at the end of a pier. Chart an obstruction symbol with a least depth of 16 feet and the text "Obstns".

## 2.32) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 48.3" N, 071° 02' 10.7" W  
**Least Depth:** 7.49 m (= 24.58 ft = 4.097 fm = 4 fm 0.58 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.241$  m  
**Timestamp:** 2008-220.14:18:18.809 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 019\_1417  
**Profile/Beam:** 446/63  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/019_1417	446/63	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615122100	0002	2.96	217.4	Secondary
h11736/3002sss500k/2007-166/sonar_data070615121900	0002	6.08	241.8	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

24ft (13272\_1, 13270\_1, 13267\_1)

4fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 7.492 m

## Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## 2.33) uncharted 27-ft obstruction

### Survey Summary

**Survey Position:** 42° 21' 47.2" N, 071° 02' 11.3" W  
**Least Depth:** 8.42 m (= 27.62 ft = 4.604 fm = 4 fm 3.62 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.964$  m ; **TVU (TPEv)**  $\pm 0.250$  m  
**Timestamp:** 2008-220.14:18:38.103 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 019\_1417  
**Profile/Beam:** 693/15  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/019_1417	693/15	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615121900	0004	6.46	055.9	Secondary
h11736/3002sss500k/2007-166/sonar_data070615121900	0001	9.58	042.8	Secondary
h11736/3002sss500k/2007-166/sonar_data070615122100	0001	22.29	031.2	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

27ft (13272\_1, 13270\_1, 13267\_1)

4 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 8.420 m

## Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## 2.34) uncharted obstruction

### Survey Summary

**Survey Position:** 42° 21' 47.1" N, 071° 02' 17.7" W  
**Least Depth:** 8.37 m (= 27.45 ft = 4.575 fm = 4 fm 3.45 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.242$  m  
**Timestamp:** 2008-220.14:13:19.685 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 024\_1412  
**Profile/Beam:** 634/90  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/024_1412	634/90	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 8.367 m

### Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction. Chart obstruction area

## 2.35) uncharted 29-ft obstruction

### Survey Summary

**Survey Position:** 42° 21' 46.4" N, 071° 02' 17.5" W  
**Least Depth:** 8.81 m (= 28.92 ft = 4.820 fm = 4 fm 4.92 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.964$  m ; **TVU (TPEv)**  $\pm 0.246$  m  
**Timestamp:** 2008-220.14:11:43.595 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 025\_1411  
**Profile/Beam:** 237/21  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/025_1411	237/21	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615122400	0006	4.36	213.1	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

29ft (13272\_1, 13270\_1, 13267\_1)

4  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 8.814 m

## Office Notes

The feature is one of three significant features within the 50-m radius of AWOIS 14034; chart obstruction area.

## 2.36) uncharted 25-ft obstruction

### Survey Summary

**Survey Position:** 42° 21' 52.6" N, 071° 02' 23.3" W  
**Least Depth:** 7.66 m (= 25.13 ft = 4.189 fm = 4 fm 1.13 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.965$  m ; **TVU (TPEv)**  $\pm 0.271$  m  
**Timestamp:** 2008-220.13:52:51.771 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 032\_1352  
**Profile/Beam:** 30/6  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/032_1352	30/6	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615122900	0004	4.30	021.1	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

25ft (13272\_1, 13270\_1, 13267\_1)

4 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 7.660 m

## Office Notes

The feature was covered with 200% SSS, but the feature was obstructed by propwash in one line. The feature was also covered by the outer beams of a single MBES line. Chart the feature as a dangerous obstruction.

## 2.37) uncharted 26-ft obstruction

### Survey Summary

**Survey Position:** 42° 21' 51.2" N, 071° 02' 22.3" W  
**Least Depth:** 8.12 m (= 26.65 ft = 4.442 fm = 4 fm 2.65 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.963$  m ; **TVU (TPEv)**  $\pm 0.244$  m  
**Timestamp:** 2008-220.13:56:35.753 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 035\_1356  
**Profile/Beam:** 259/23  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/035_1356	259/23	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615122900	0003	0.91	200.8	Secondary
h11736/3002sss500k/2007-166/sonar_data070615123100	0002	1.22	030.5	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

26ft (13272\_1, 13270\_1, 13267\_1)

4 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 8.124 m

## Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## 2.38) uncharted 24-t obstruction

### Survey Summary

**Survey Position:** 42° 22' 10.4" N, 071° 03' 32.6" W  
**Least Depth:** 7.38 m (= 24.20 ft = 4.034 fm = 4 fm 0.20 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.241$  m  
**Timestamp:** 2008-220.13:40:32.795 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 038\_1339  
**Profile/Beam:** 1133/56  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/038_1339	1133/56	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615130000	0001	2.51	212.9	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

24ft (13272\_1, 13270\_1, 13267\_1)

4fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 7.377 m

## Office Notes

The feature was detected with 200% SSS and developed MBES. Chart the feature as a dangerous obstruction.

## 2.39) uncharted 17-ft obstruction

### Survey Summary

**Survey Position:** 42° 22' 35.6" N, 071° 02' 55.0" W  
**Least Depth:** 5.34 m (= 17.51 ft = 2.918 fm = 2 fm 5.51 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.241$  m  
**Timestamp:** 2008-220.13:29:19.286 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 040\_1328  
**Profile/Beam:** 463/23  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/040_1328	463/23	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615132700	0018	1.13	218.7	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

17ft (13272\_1, 13270\_1, 13267\_1)

2  $\frac{3}{4}$ fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 5.336 m

## Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## 2.40) uncharted 17-ft wreck

### Survey Summary

**Survey Position:** 42° 22' 48.4" N, 071° 03' 05.9" W  
**Least Depth:** 5.41 m (= 17.76 ft = 2.959 fm = 2 fm 5.76 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.963$  m ; **TVU (TPEv)**  $\pm 0.256$  m  
**Timestamp:** 2008-220.12:22:25.682 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 042\_1221  
**Profile/Beam:** 657/7  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is a Wreck.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/042_1221	657/7	0.00	000.0	Primary
h11736/s3002_mbes/2007-192/207_1630	710/16	1.78	301.3	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0002	6.67	262.7	Secondary

### Hydrographer Recommendations

Due to the nature of traffic in this area, the hydrographer recommends the object be charted as a non-dangerous wreck, LD and position as surveyed.

#### Cartographically-Rounded Depth (Affected Charts):

18ft (13272\_1, 13270\_1, 13267\_1)

3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 5.412 m  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. Chart feature as a dangerous wreck.

### Feature Images

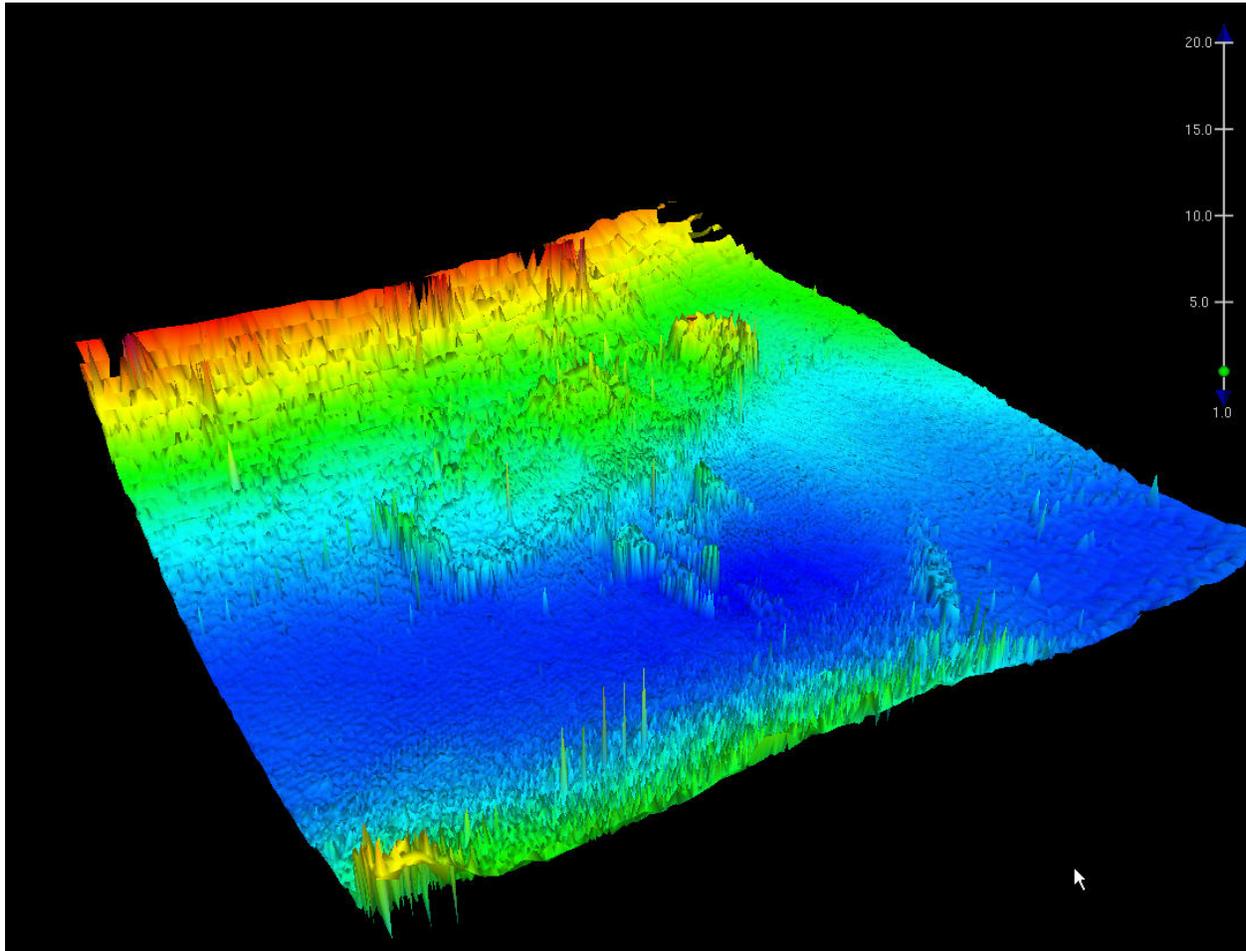


Figure 2.40.1

## 2.41) uncharted 33-ft obstruction

### Survey Summary

**Survey Position:** 42° 23' 08.8" N, 071° 01' 23.9" W  
**Least Depth:** 10.21 m (= 33.48 ft = 5.580 fm = 5 fm 3.48 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.964$  m ; **TVU (TPEv)**  $\pm 0.244$  m  
**Timestamp:** 2008-220.12:44:56.345 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 058\_1244  
**Profile/Beam:** 287/97  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/058_1244	287/97	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613155000	0003	6.00	103.5	Secondary
h11736/3002sss500k/2007-164/sonar_data070613150600	0010	9.06	221.8	Secondary

### Hydrographer Recommendations

[None]

#### Cartographically-Rounded Depth (Affected Charts):

33ft (13272\_1, 13270\_1, 13274\_5, 13267\_1)

5 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 10.205 m

## Office Notes

The feature was detected with 200% SSS and developed with MBES. Chart the feature as a dangerous obstruction.

## **3 - AWOIS Features**

### 3.1) AWOIS 12440

#### Primary Feature for AWOIS Item #12440

**Search Position:** 42° 22' 14.7" N, 071° 03' 04.9" W  
**Historical Depth:** 8.84 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT IDENTIFIED AS A WRECK. SWMB LD OF 29 FEET (8.8 METERS) IN LAT. 42-22-14.73N, LONG. 71-03-04.93W. EVALUATOR RECOMMENDS CHARTING A 29 WK AS SURVEYED. (ENT 5/25/04, SJV)

#### Survey Summary

**Survey Position:** 42° 22' 14.7" N, 071° 03' 04.9" W  
**Least Depth:** 9.68 m (= 31.76 ft = 5.293 fm = 5 fm 1.76 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.965$  m ; TVU (TPEv)  $\pm 0.189$  m  
**Timestamp:** 2007-192.17:27:05.766 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 197\_1726  
**Profile/Beam:** 229/64  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is a wreck located within the OBSTN circle for AWOIS 12440.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/197_1726	229/64	0.00	000.0	Primary
AWOIS	AWOIS # 12440	2.63	180.2	Secondary
ChartGPs - ENC US5MA11M	Danger 171	3.06	173.1	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615125400	0001	8.55	137.9	Secondary

## Hydrographer Recommendations

The hydrographer recommends the item be charted as per surveyed depth.

### Cartographically-Rounded Depth (Affected Charts):

32ft (13272\_1, 13270\_1, 13267\_1)

5 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

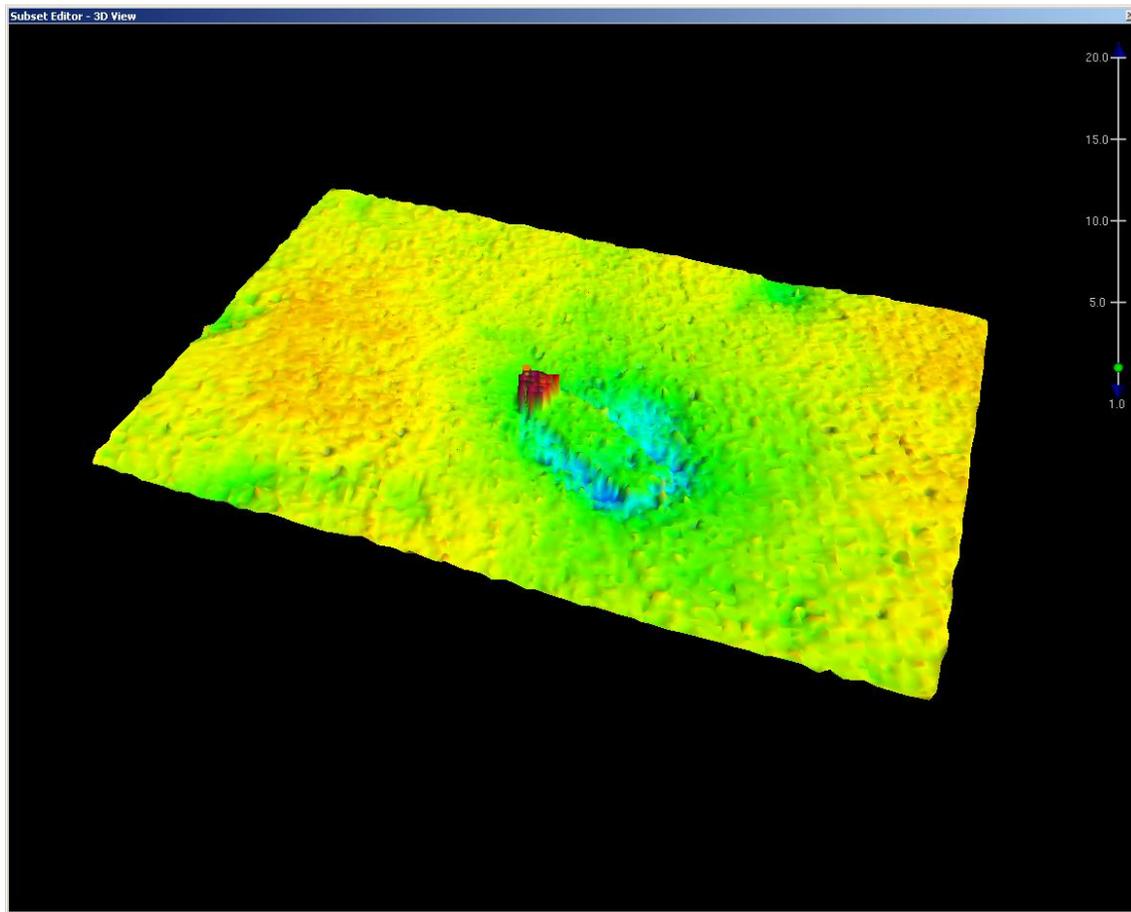
## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
CONVIS - 2:not visual conspicuous  
SORDAT - 20070711  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 9.679 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

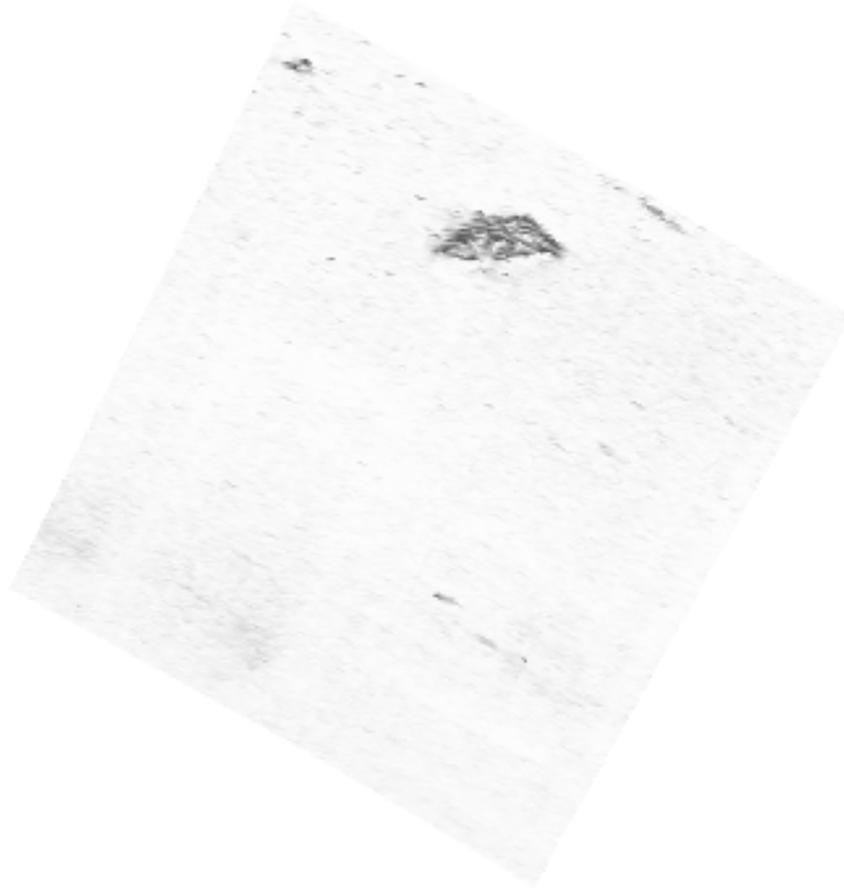
## Office Notes

Concur with clarification. Revise charted dangerous wreck to surveyed position and least depth.

### Feature Images



*Figure 3.1.1*



*Figure 3.1.2*

## 3.2) AWOIS 12450

### Primary Feature for AWOIS Item #12450

**Search Position:** 42° 22' 38.8" N, 071° 02' 51.1" W  
**Historical Depth:** 7.62 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 25 FEET OBTAINED IN LAT. 42-22-38.81N, LONG. 71-02-51.10W. EVALUATOR RECOMMENDS CHARTING A 25 OBSTN AS SURVEYED. (ENT 5/25/04, SJV)

### Survey Summary

**Survey Position:** 42° 22' 39.0" N, 071° 02' 51.1" W  
**Least Depth:** 7.81 m (= 25.62 ft = 4.271 fm = 4 fm 1.62 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.966$  m ; TVU (TPEv)  $\pm 0.196$  m  
**Timestamp:** 2007-192.16:59:52.638 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 202\_1658  
**Profile/Beam:** 693/111  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is an Obstn located within AWOIS 12450 radius.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/202_1658	693/111	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615134600	0002	3.56	001.8	Secondary
h11736/3002sss500k/2007-164/sonar_data070613180800	0002	4.80	005.5	Secondary
AWOIS	AWOIS # 12450	6.43	350.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0010	12.23	332.2	Secondary
h11736/s3002_mbes/2007-192/202_1658	725/79	13.39	324.8	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

25ft (13272\_1, 13270\_1, 13267\_1)

4 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** VALSOU - 7.810 m

## Office Notes

Concur with clarification. Revise dangerous obstruction to survey position and least depth.

### Feature Images

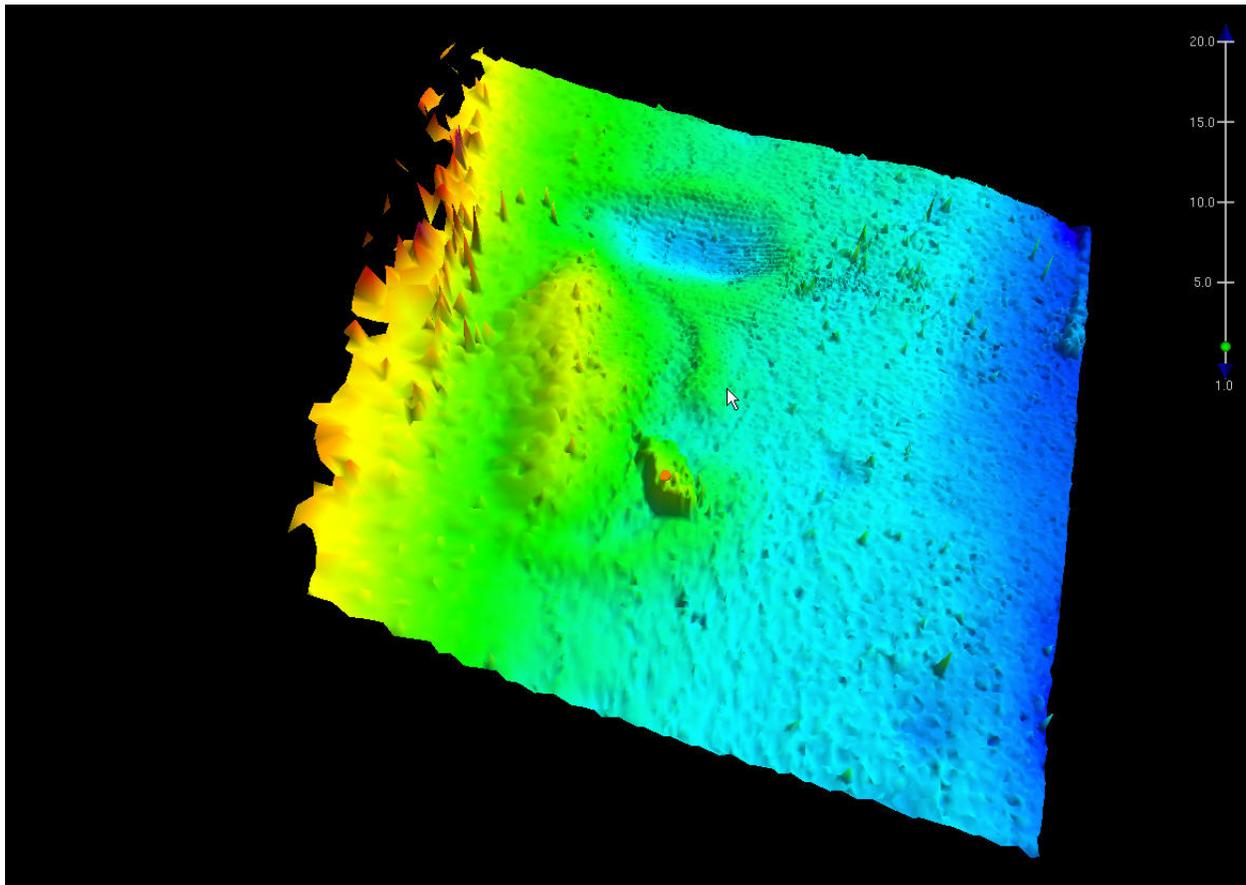


Figure 3.2.1

### 3.3) AWOIS 10213

#### Primary Feature for AWOIS Item #10213

**Search Position:** 42° 22' 54.2" N, 071° 02' 55.0" W  
**Historical Depth:** 5.18 m  
**Search Radius:** 50  
**Search Technique:** SD, S2, DI, MB  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM34/1980(7/29/80)-- 1 ST CGD; DANG. WRECK (PA), POSITION GIVEN IN LAT 42/22/53.5N, LONG 71/02/56.0W (NAD27). REPORTED BETWEEN PIERS 1 AND 48.(ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/2/03, SJV) ■ H10990/01-- OPR-A397-WH; LOCATED BY SWMB. LD OF 17 FEET LOCATED IN LAT. 42-22-54.17N, LONG. 71-02-55.00W. EVALUATOR RECOMMENDS DELETING THE CHARTED DANGEROUS SUNKEN WRECK, PA AND CHARTING A 17 WK AS SURVEYED. (UP 5/25/04, SJV)

#### Survey Summary

**Survey Position:** 42° 22' 54.2" N, 071° 02' 55.1" W  
**Least Depth:** 5.19 m (= 17.02 ft = 2.837 fm = 2 fm 5.02 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.961$  m ; TVU (TPEv)  $\pm 0.185$  m  
**Timestamp:** 2007-192.16:22:23.012 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 219\_1621  
**Profile/Beam:** 311/41  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object appears to be the wreckage of a tug and barge located within the search radius of AWOIS 10213.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/219_1621	311/41	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 199	1.83	215.6	Secondary (grouped)
AWOIS	AWOIS # 10213	2.38	272.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615134800	0002	16.05	099.6	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object be retained as charted.

### Cartographically-Rounded Depth (Affected Charts):

17ft (13272\_1, 13270\_1, 13267\_1)

2 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
CONVIS - 2:not visual conspicuous  
SORDAT - 20070711  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 5.189 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

## Office Notes

Concur.

### Feature Images

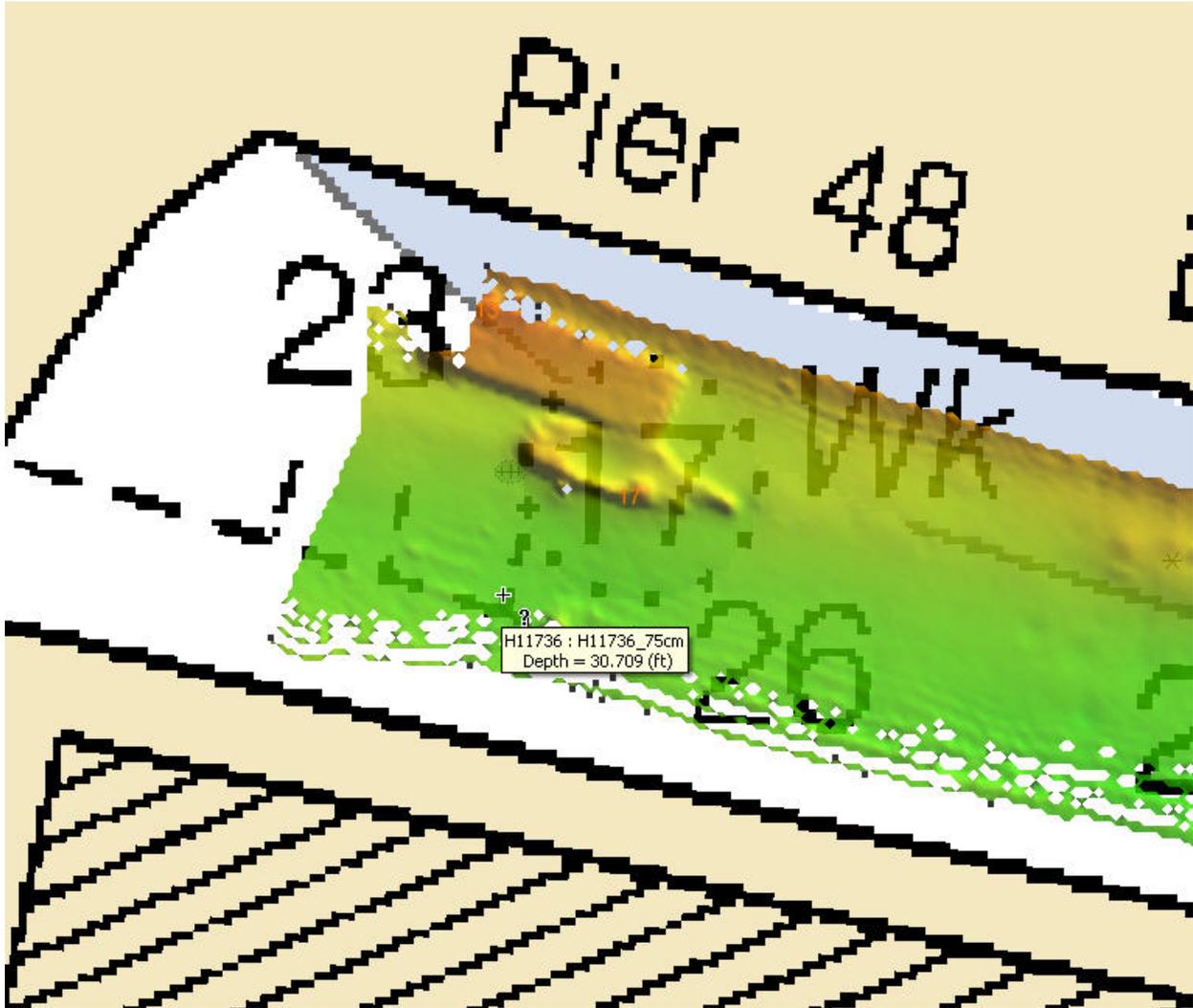


Figure 3.3.1

### 3.4) AWOIS 12557

#### Primary Feature for AWOIS Item #12557

**Search Position:** 42° 22' 54.3" N, 071° 02' 50.8" W  
**Historical Depth:** 3.05 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 10 FEET OBTAINED IN LAT. 42-22-54.30N, LONG. 71-02-50.85W. EVALUATOR RECOMMENDS CHARTING A 10 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

#### Survey Summary

**Survey Position:** 42° 22' 53.9" N, 071° 02' 51.2" W  
**Least Depth:** 5.46 m (= 17.91 ft = 2.985 fm = 2 fm 5.91 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.188$  m  
**Timestamp:** 2007-192.16:19:32.021 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 229\_1618  
**Profile/Beam:** 724/110  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object appears to be a wreck located within the search radius of AWOIS 12557.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/229_1618	724/110	0.00	000.0	Primary
AWOIS	AWOIS # 12557	13.84	215.6	Secondary
ChartGPs - ENC US5MA11M	Danger 29	14.31	218.1	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615134800	0001	18.09	091.3	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

18ft (13272\_1, 13270\_1, 13267\_1)

3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

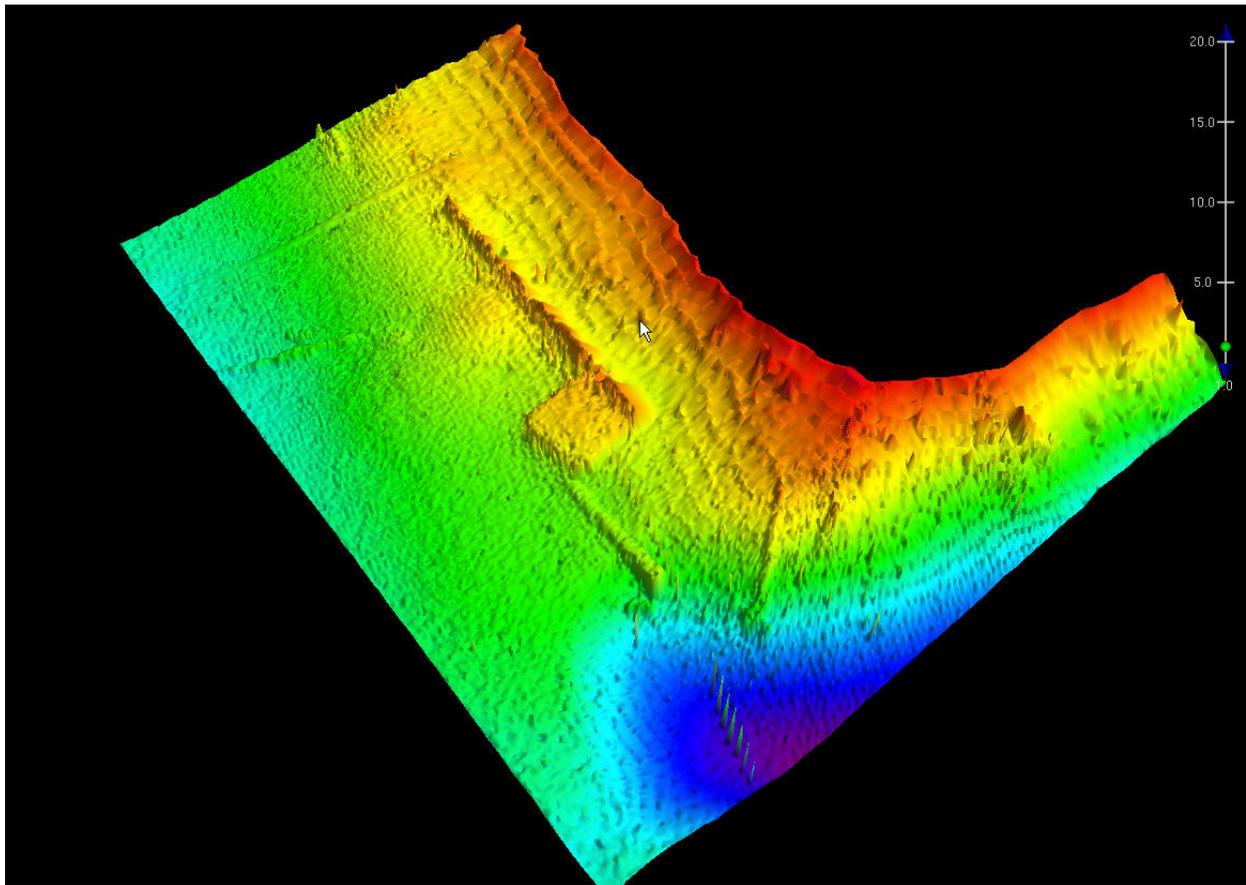
## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
SORDAT - 20070711  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 5.459 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

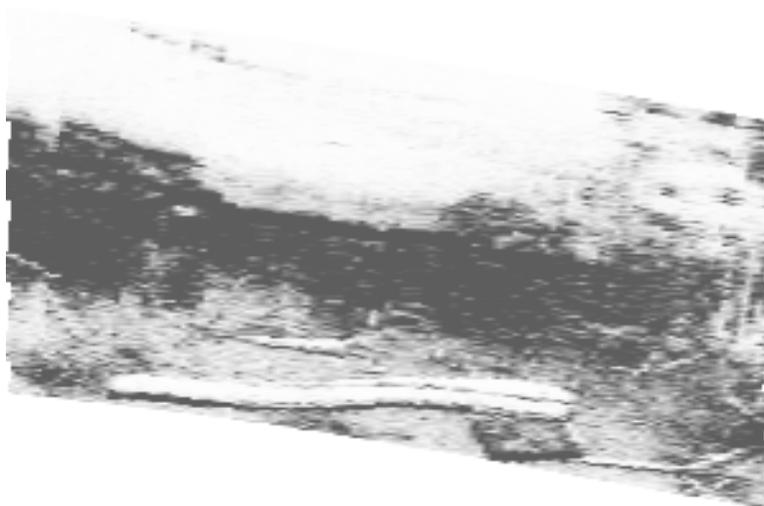
## Office Notes

Concur with clarification. Revise charted obstruction to surveyed position and least depth.

### Feature Images



*Figure 3.4.1*



*Figure 3.4.2*

### 3.5) AWOIS 12454

#### Primary Feature for AWOIS Item #12454

**Search Position:** 42° 22' 06.8" N, 071° 02' 40.3" W  
**Historical Depth:** 3.96 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 13 FEET OBTAINED IN LAT. 42-22-06.85N, LONG. 71-02-40.28W. EVALUATOR RECOMMENDS CHARTING A 13 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

#### Survey Summary

**Survey Position:** 42° 22' 06.5" N, 071° 02' 40.2" W  
**Least Depth:** 4.93 m (= 16.18 ft = 2.696 fm = 2 fm 4.18 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.184$  m  
**Timestamp:** 2007-192.18:11:20.670 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 330\_1810  
**Profile/Beam:** 297/41  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The Object is an OBSTN on edge of the Channel within the search radius of AWOIS 12454.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/330_1810	297/41	0.00	000.0	Primary
AWOIS	AWOIS # 12454	10.54	168.8	Secondary
ChartGPs - ENC US5MA11M	Danger 24	10.94	114.3	Secondary (grouped)

## Hydrographer Recommendations

Retain as charted.

### Cartographically-Rounded Depth (Affected Charts):

16ft (13272\_1, 13270\_1, 13267\_1)

2 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

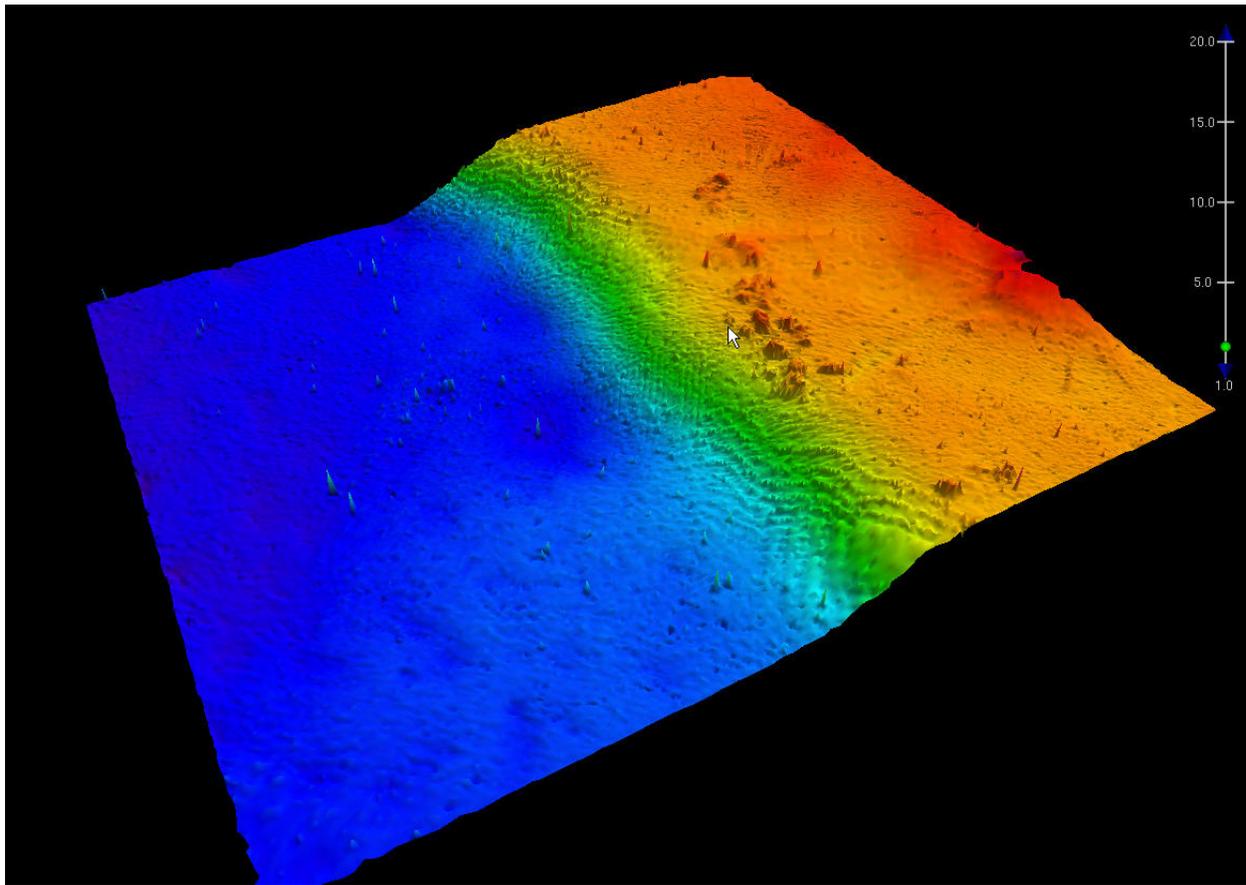
## S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Do not concur. Object is insignificant. Chart current sounding data and remove obstruction from chart.

### Feature Images



*Figure 3.5.1*

### 3.6) AWOIS 14033

#### Primary Feature for AWOIS Item #14033

**Search Position:** 42° 21' 43.4" N, 071° 01' 46.0" W  
**Historical Depth:** 6.10 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, SD  
**Technique Notes:** [None]

#### History Notes:

H10990-- 20 WRECK WAS ADDED AT 42/21/43.39 - 71/01/45.97. (ENTERED CEH 6/2007)

#### Survey Summary

**Survey Position:** 42° 21' 43.4" N, 071° 01' 46.3" W  
**Least Depth:** 7.08 m (= 23.22 ft = 3.870 fm = 3 fm 5.22 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.187$  m  
**Timestamp:** 2007-199.14:50:56.240 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 087a1450  
**Profile/Beam:** 250/40  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/087a1450	250/40	0.00	000.0	Primary
h11736/s3002_mbes/2007-199/086_1448	894/4	1.39	118.0	Secondary
h11736/s3002_mbes/2007-199/087a1450	221/44	2.50	168.5	Secondary (grouped)
AWOIS	AWOIS # 14033	7.31	273.3	Secondary
h11736/s3002_mbes/2007-199/087a1450	290/11	7.87	293.5	Secondary (grouped)
ChartGPs - ENC US5MA11M	Danger 183	8.42	016.4	Secondary (grouped)

## Hydrographer Recommendations

[None]

### Cartographically-Rounded Depth (Affected Charts):

23ft (13272\_1, 13270\_1, 13267\_1)

3 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

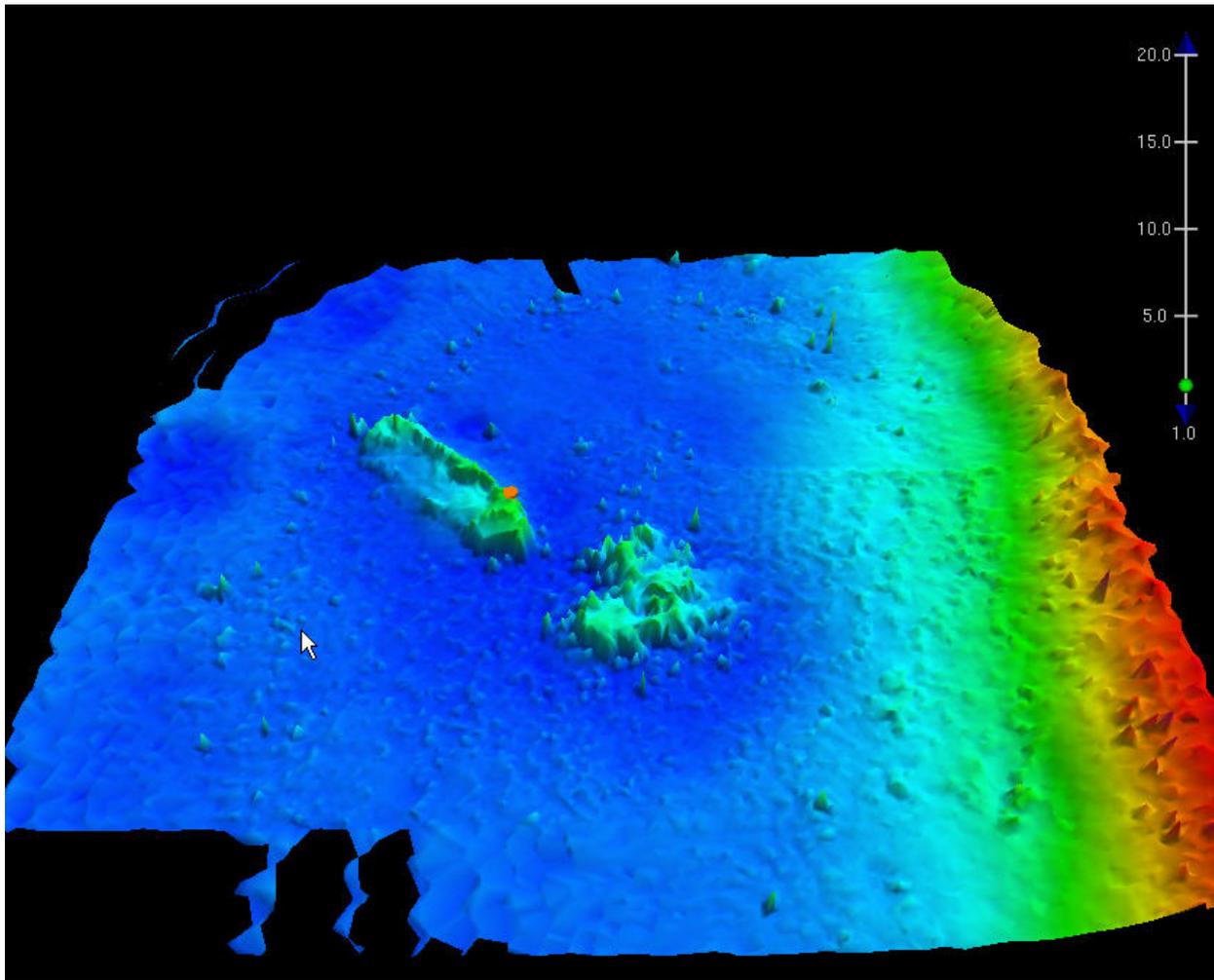
## S-57 Data

[None]

## Office Notes

The area was covered with EM3000 MBES data but no SSS data. Two features were detected, about 9 meters apart from each other. Revise charted depth with survey least depth and position.

### Feature Images



*Figure 3.6.1*

### 3.7) AWOIS #10210 - UNKNOWN

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 42° 22' 20.5" N, 071° 03' 03.5" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, DI, VS  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ CL970/1986--USCG AUX; VISIBLE WRECK (PA), POSITION GIVEN IN LAT 42/22/18N, LONG 71/03/05W (NAD27). WRECK SCALED FROM CHART 13272 IN LAT 42/22/20.5N, LONG 71/03/03.5W (NAD83). SKETCH PROVIDED INDICATES POSITION BETWEEN PIERS 4 AND 5 ON THE PIER 5 SIDE OF CHANNEL. (NAD83). (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV)

#### Survey Summary

**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The Area was covered with 200% Klein 3000 SSS, no item matching the description of AWOIS 10210 was seen in the trace, and there was no visual sighting of an exposed wreck.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 10210	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 172	10.14	029.7	Secondary (grouped)

#### Hydrographer Recommendations

The hydrographer recommends the item be removed from the chart and AWOIS 10210 be removed from the database.

#### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Concur.

### 3.8) AWOIS #10214 - UNKNOWN

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 42° 23' 03.4" N, 071° 03' 00.8" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, SWMB, DI  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM42/1978(9/27/78)--1 ST CGD; DANG. WK, POSITION SCALED FROM CHART IN LAT 42/23/03.4N, LONG 71/03/00.8W (NAD83). A STEEL DECK HOUSE WAS LOCATED IN APPROX 25 FT OF WATER. (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV)

#### Survey Summary

**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The search radius was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES. No Item matching that of AWOIS 10214 was seen in the SSS trace or in the bathymetry data.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 10214	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 200	1.42	359.3	Secondary (grouped)

#### Hydrographer Recommendations

The hydrographer recommends the object be removed from the chart and AWOIS 10214 be removed from the database.

#### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Concur.

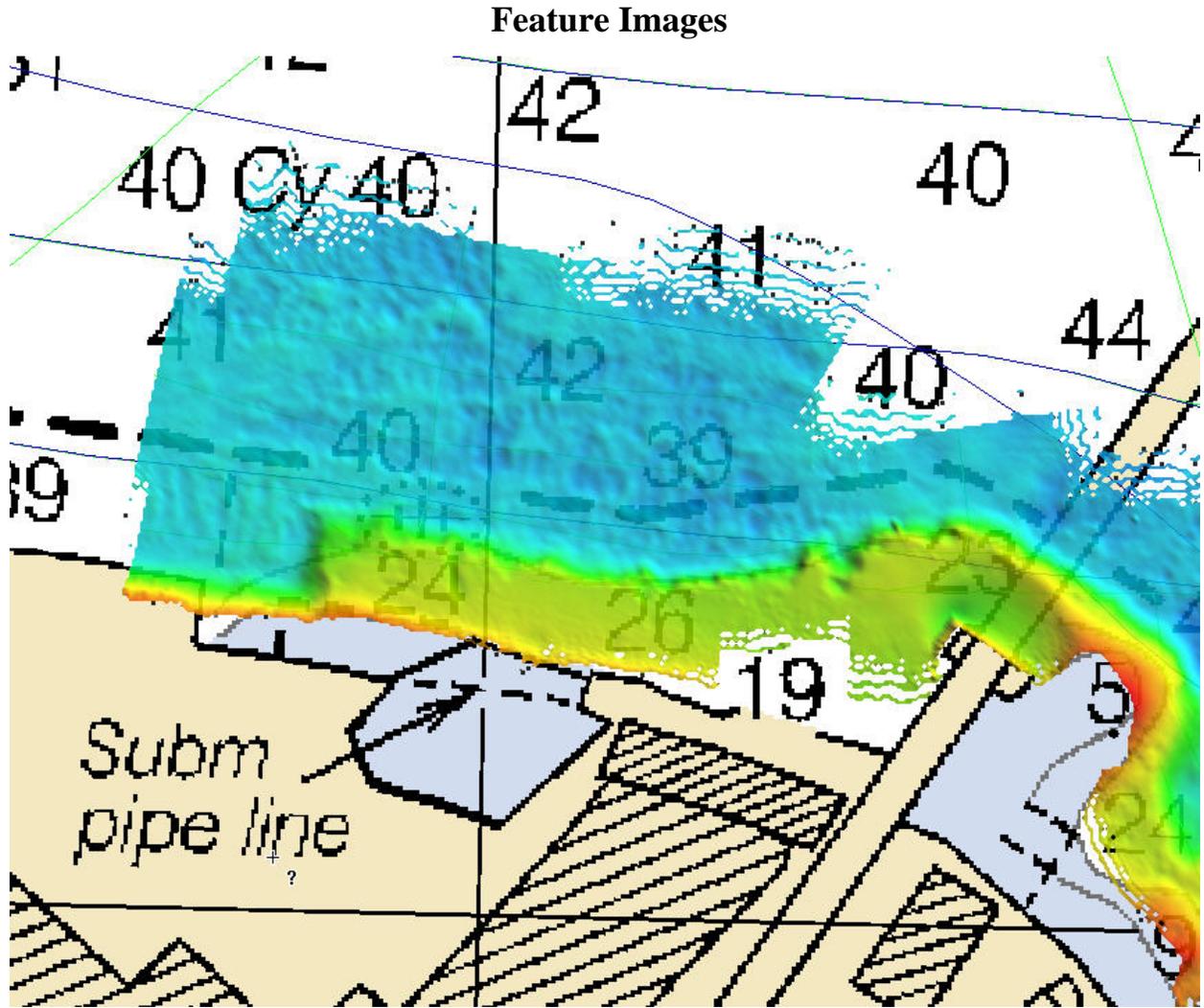


Figure 3.8.1

### 3.9) AWOIS #10237 - UNKNOWN

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 42° 23' 37.6" N, 071° 00' 57.5" W  
**Historical Depth:** [None]  
**Search Radius:** 75  
**Search Technique:** SD, VS, S2, MB  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H7061/1945-- VISIBLE WRECK, POSITION SCALED FROM CHART IN LAT 42/23/37.6N, LONG 71/00/57.5W (NAD83). ■ CL1627/1972--COE MEMO; REMAINS OF SUNKEN BARGE, "ALL WRECKS AWASH", NOTED ON SKETCH PROVIDED. (THIS WRECK SHOULD BE CHARTED AS VISIBLE) (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV) The navigable area of the AWOIS search radius was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES. No item matching that of AWOIS 10237 was seen in the SSS trace or in the bathymetry data. - MJJ

#### Survey Summary

**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area of the AWOIS search radius was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES. No item matching that of AWOIS 10237 was seen in the SSS trace or in the bathymetry data, and there was no visual sighting of an exposed wreck. The correlated SSS contact appears to be an OBSTN outside both the channel and navigable area.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 10237	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 219	4.15	139.2	Secondary (grouped)
h11736/3002sss500k/2007-164/sonar_data070613150600	0001	17.04	246.7	Secondary
h11736/3002sss500k/2007-164/sonar_data070613150600	0008	19.28	279.1	Secondary

#### Hydrographer Recommendations

The hydrographer recommends the object be removed from the chart and AWOIS 10237 be removed from the AWOIS database.

## **S-57 Data**

**Geo object 1:** Cartographic symbol (\$CSYMB)

## **Office Notes**

Concur. Remove dangerous wreck, depth unknown, from the chart.

Feature Images

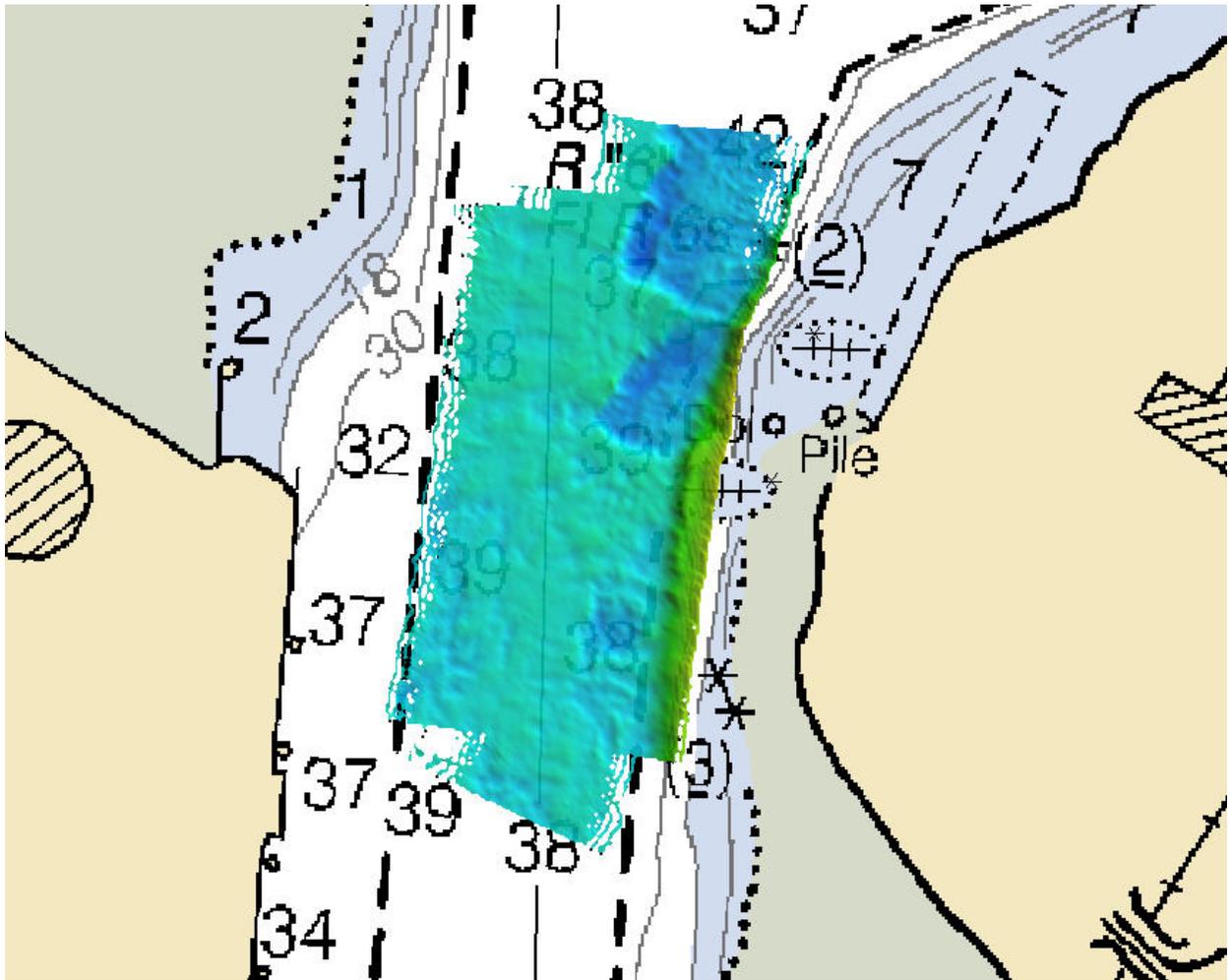


Figure 3.9.1

### 3.10) AWOIS 12443

#### Primary Feature for AWOIS Item #12443

**Search Position:** 42° 21' 41.9" N, 071° 02' 36.1" W  
**Historical Depth:** 11.89 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

#### History Notes:

H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT. SWMB LD OF 39 FEET (11.94 METERS) IN LAT. 42-21-41.94N, LONG. 71-02-36.15W. DIVERS DESCRIBE A BLOCK OF RAILROAD TIES LACED (SIC) TOGETHER AS WELL AS OTHER METAL DEBRIS. LD OBTAINED ON A BROKEN RAILROAD TIE STANDING VERTICALLY OFF THE BOTTOM. EVALUATOR RECOMMENDS CHARTING A 39 OBSTN AS SURVEYED. (ENT 5/25/04, SJV)

#### Survey Summary

**Survey Position:** 42° 21' 42.0" N, 071° 02' 36.1" W  
**Least Depth:** 12.38 m (= 40.62 ft = 6.771 fm = 6 fm 4.62 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.966$  m ; TVU (TPEv)  $\pm 0.192$  m  
**Timestamp:** 2007-199.13:12:06.405 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 001\_1311  
**Profile/Beam:** 341/69  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is an obstn located within the search radius of AWOIS 12443.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/001_1311	341/69	0.00	000.0	Primary
AWOIS	AWOIS # 12443	0.48	005.3	Secondary
h11736/3002sss500k/2007-164/sonar_data070613170200	0002	10.35	151.0	Secondary
ChartGPs - ENC US5MA11M	Danger 16	13.87	058.9	Secondary (grouped)
h11736/3002sss500k/2007-164/sonar_data070613164900	0001	15.72	334.9	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

40ft (13272\_1, 13270\_1, 13267\_1)

6 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

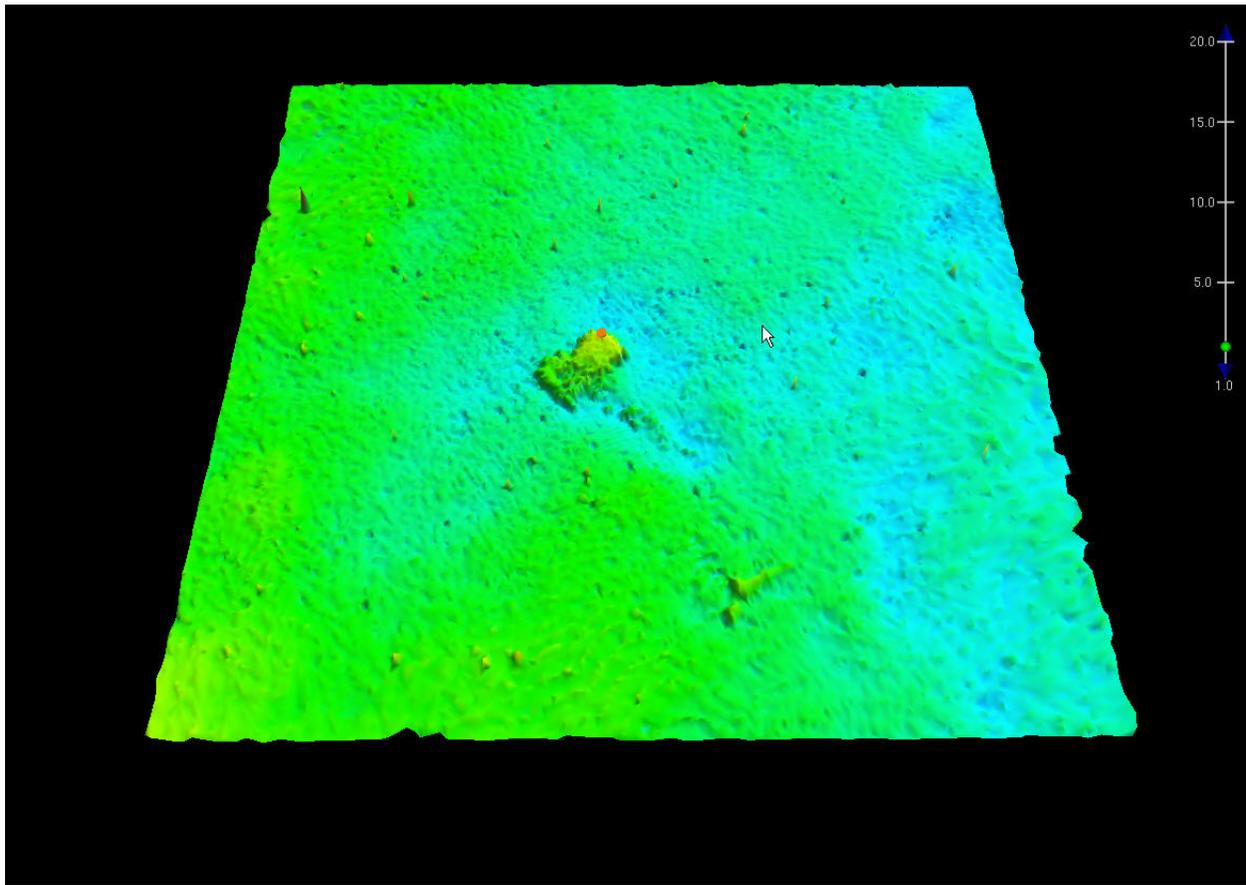
## S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Do not concur. Insignificant object. Remove from chart. Chart present survey soundings.

### Feature Images



*Figure 3.10.1*

### 3.11) AWOIS 12439

#### Primary Feature for AWOIS Item #12439

**Search Position:** 42° 22' 08.2" N, 071° 03' 10.9" W  
**Historical Depth:** 5.49 m  
**Search Radius:** 50  
**Search Technique:** S2, MB, DI  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT IDENTIFIED AS A WRECK. SWMB LD OF 18 FEET (5.53 METERS) IN LAT. 42-22-08.21N, LONG. 71-03-10.88W. EVALUATOR RECOMMENDS CHARTING A 18 WK AS SURVEYED. (ENT 5/25/04, SJV)

#### Survey Summary

**Survey Position:** 42° 22' 08.3" N, 071° 03' 11.0" W  
**Least Depth:** 3.14 m (= 10.31 ft = 1.718 fm = 1 fm 4.31 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.213$  m  
**Timestamp:** 2007-207.13:48:38.262 (07/26/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-207 / 013\_1347  
**Profile/Beam:** 1000/124  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-207/013_1347	1000/124	0.00	000.0	Primary
h11736/s3002_mbes/2007-205/046_1751	2268/124	0.65	260.5	Secondary (grouped)
h11736/s3002_mbes/2007-205/046_1751	2262/124	0.89	222.7	Secondary
h11736/s3002_mbes/2007-205/046_1751	2258/124	1.22	222.0	Secondary
AWOIS	AWOIS # 12439	4.82	329.8	Secondary
h11736/3002sss500k/2007-178/sonar_data070627112900	0001	13.37	199.3	Secondary

## Hydrographer Recommendations

[None]

### Cartographically-Rounded Depth (Affected Charts):

10ft (13272\_1, 13270\_1, 13267\_1)

1 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

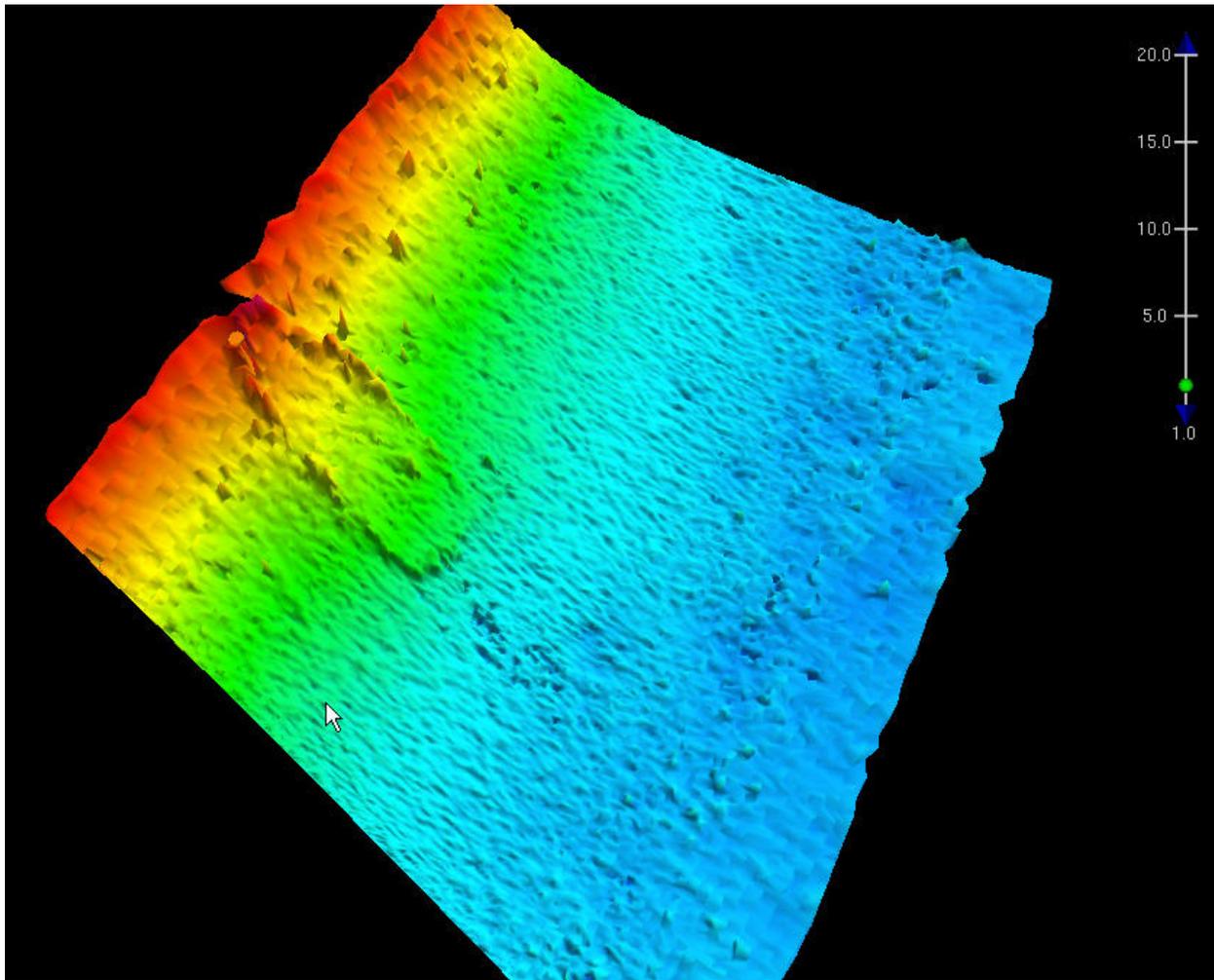
**Geo object 1:** Wreck (WRECKS)

**Attributes:** VALSOU - 3.142 m

## Office Notes

The feature is a charted wreck that was detected with 100% SSS data and MBES data. Revise charted dangerous wreck to surveyed position and least depth.

### Feature Images



*Figure 3.11.1*

### 3.12) AWOIS 10207

#### Primary Feature for AWOIS Item #10207

**Search Position:** 42° 21' 37.9" N, 071° 01' 50.6" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, SWMB, DI  
**Technique Notes:** [None]

#### History Notes:

LNM10/1990(3/7/90)--1 ST CGD; DANG. WK (PA), POSITION SCALED FROM CHART IN LAT 42/21/38.4N, LONG 71/01/51.4W (NAD83). (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV) ■ H10990/01--OPR-A397-WH; SEVERAL CONTACTS FOUND WITH ONE MATCHING THE AWOIS DESCRIPTION. SWMB OBTAINED A LD OF 12 FEET (3.88 METERS) IN LAT. 42-21-37.94N, LONG. 71-01-50.56W. EVALUATOR RECOMMENDS DELETING CHARTED DANGEROUS SUNKEN WRECK AND CHARTING A 12 WK AS SURVEYED. (UP 5/5/04, SJV)

#### Survey Summary

**Survey Position:** 42° 21' 37.9" N, 071° 01' 50.6" W  
**Least Depth:** 3.84 m (= 12.60 ft = 2.100 fm = 2 fm 0.60 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.201$  m  
**Timestamp:** 2007-199.14:45:14.170 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 008\_1444  
**Profile/Beam:** 397/124  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

AWOIS 10207 search area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is a wreckage of a tug with charted LD 12 ft.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/008_1444	397/124	0.00	000.0	Primary
AWOIS	AWOIS # 10207	1.13	191.4	Secondary
h11736/s3002_mbes/2007-199/006_1446	194/4	1.44	295.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120200	0004	2.25	196.5	Secondary

h11736/3002sss500k/2007-166/sonar_data070615120600	0004	2.83	337.4	Secondary
ChartGPs - ENC US5MA11M	Danger 181	10.88	207.0	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615115900	0001	11.82	354.4	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

12ft (13272\_1, 13270\_1, 13267\_1)

2fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** VALSOU - 3.841 m

## Office Notes

Concur with clarification. Revise the charted dangerous wreck to reflect the surveyed position and least depth.

### Feature Images

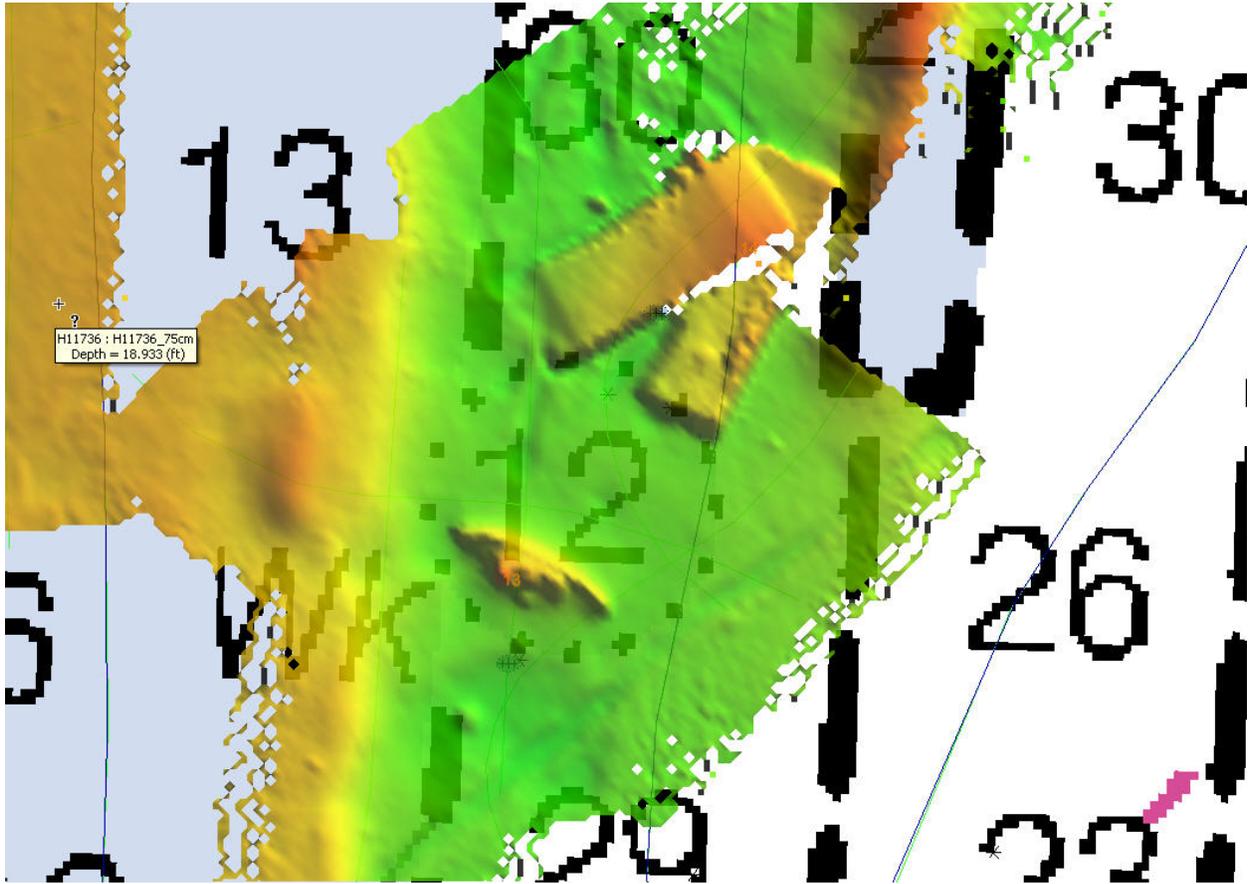


Figure 3.12.1

### 3.13) AWOIS 14035

#### Primary Feature for AWOIS Item #14035

**Search Position:** 42° 21' 47.6" N, 071° 02' 16.6" W  
**Historical Depth:** 2.74 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI, SD  
**Technique Notes:** [None]

#### History Notes:

L869/02-- A OBSTRUCTION WAS FOUND AT 42/21/47.6 - 71/02/16.6. THE WRECK HAD A LEAST DEPTH OF 9 FOOT.■(ENTERED CEH 6/2007)

#### Survey Summary

**Survey Position:** 42° 21' 47.8" N, 071° 02' 16.2" W  
**Least Depth:** 2.49 m (= 8.17 ft = 1.361 fm = 1 fm 2.17 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.238$  m  
**Timestamp:** 2008-220.14:12:12.038 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 025\_1411  
**Profile/Beam:** 568/119  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is a wreck within search radius of AWOIS 14035. Least depth not obtained due to the presence of a moored vessel over the wreck.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/025_1411	568/119	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 18	2.59	159.9	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615122400	0001	6.36	326.1	Secondary
AWOIS	AWOIS # 14035	10.84	051.3	Secondary
h11736/3002sss500k/2007-166/sonar_data070615122400	0002	12.27	010.3	Secondary
h11736/s3002_mbes/2007-199/015_1512	709/4	15.17	025.2	Secondary

## Hydrographer Recommendations

Retain as charted.

### Cartographically-Rounded Depth (Affected Charts):

8ft (13272\_1, 13270\_1, 13267\_1)

1 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** VALSOU - 2.489 m

### Office Notes

Concur with clarification. Feature was developed as part of addendum to H11736. The entire feature was not developed (the eastern facing side of the wreck was not ensonified), but the obtained least depth is shallower than what is charted. Revise charted least depth to 8 feet, and modify charted circular danger curve to reflect the orientation and elongated shape of the observed wreck. Two endpoints of the wreck are 42-21-48.02N, 071-02-16.03W and 42-21-46.97N, 071-02-16.65W. See image of transparent DTM overlaid on chart.

### Feature Images

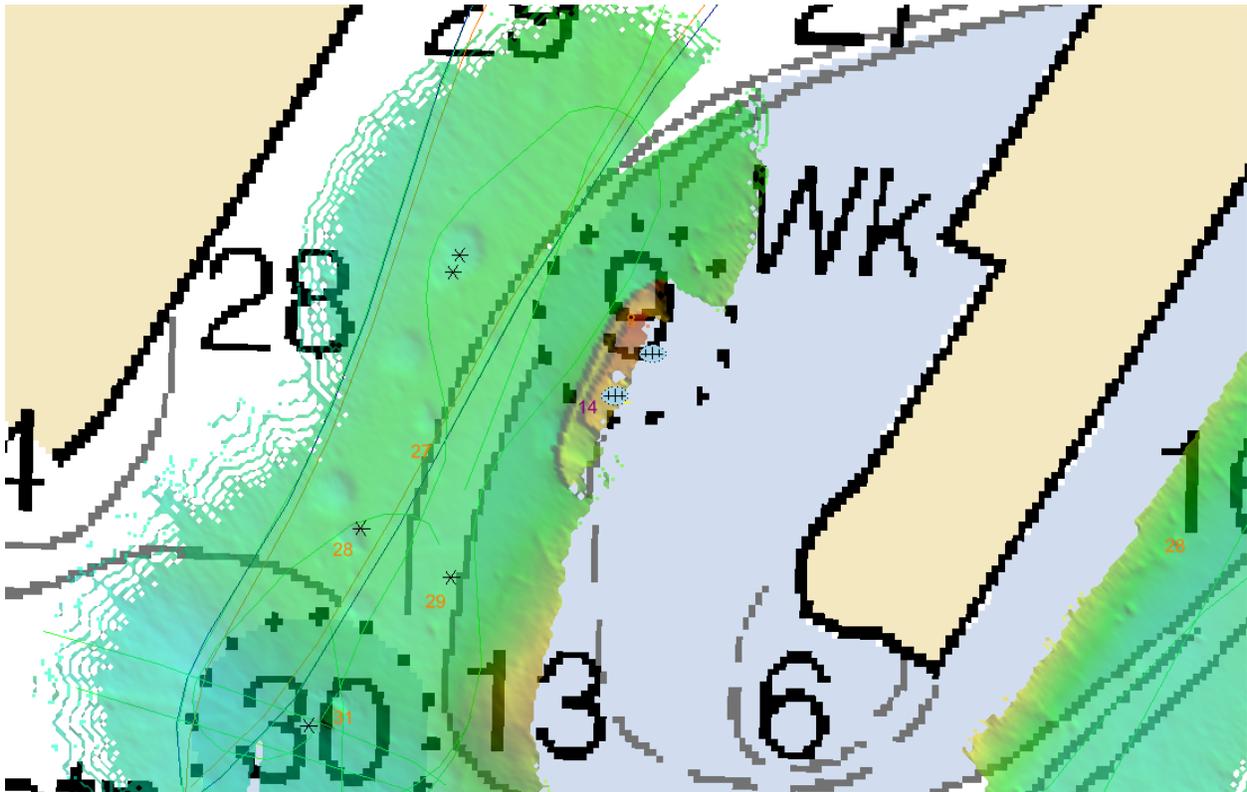


Figure 3.13.1

## **4 - Dangers to Navigation**

**4.1) AWOIS 12451****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #12451**

**Search Position:** 42° 22' 43.1" N, 071° 02' 51.6" W  
**Historical Depth:** 8.53 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 28 FEET OBTAINED IN LAT. 42-22-43.12N, LONG. 71-02-51.58W. EVALUATOR RECOMMENDS CHARTING A 28 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

**Survey Summary**

**Survey Position:** 42° 22' 42.5" N, 071° 02' 51.7" W  
**Least Depth:** 6.34 m (= 20.81 ft = 3.469 fm = 3 fm 2.81 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.186$  m  
**Timestamp:** 2007-192.16:59:14.855 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 202\_1658  
**Profile/Beam:** 410/48  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The navigable area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. The object is an OBSTN located within the search radius of AWOIS 12451.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/202_1658	410/48	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615134600	0001	1.67	232.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0013	14.15	186.0	Secondary
AWOIS	AWOIS # 12451	18.87	188.4	Secondary
ChartGPs - ENC US5MA11M	Danger 22	23.09	189.3	Secondary (grouped)

h11736/3002sss500k/2007-166/sonar_data070615132700	0012	40.34	147.0	Secondary (grouped)
h11736/s3002_mbes/2007-192/204_1703	9/14	41.34	145.5	Secondary
h11736/s3002_mbes/2007-192/204_1703	86/31	49.23	166.0	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

21ft (13272\_1, 13270\_1, 13267\_1)

3 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** QUASOU - 6:least depth known

SORDAT - 20070711

SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.344 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. Revise the charted 28-foot dangerous obstruction to reflect survey data.

## Feature Images



*Figure 4.1.1*

**4.2) AWOIS 12452****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #12452**

**Search Position:** 42° 22' 45.5" N, 071° 02' 52.7" W  
**Historical Depth:** 7.01 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 23 FEET OBTAINED IN LAT. 42-22-45.43N, LONG. 71-02-52.68W. EVALUATOR RECOMMENDS CHARTING A 23 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

**Survey Summary**

**Survey Position:** 42° 22' 45.6" N, 071° 02' 52.6" W  
**Least Depth:** 6.52 m (= 21.39 ft = 3.565 fm = 3 fm 3.39 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.964$  m ; TVU (TPEv)  $\pm 0.188$  m  
**Timestamp:** 2007-192.17:04:33.876 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 204\_1703  
**Profile/Beam:** 654/24  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The navigable area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Several contacts noted in SSS trace, LD obtained with MBES. OBSTN located within the search radius of AWOIS 12452.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/204_1703	654/24	0.00	000.0	Primary
AWOIS	AWOIS # 12452	1.77	029.9	Secondary
ChartGPs - ENC US5MA11M	Danger 23	1.94	191.6	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615132700	0022	2.43	223.1	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0007	3.27	272.3	Secondary

h11736/3002sss500k/2007-166/sonar_data070615132700	0014	22.51	104.3	Secondary
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## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

21ft (13272\_1, 13270\_1, 13267\_1)

3 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** QUASOU - 6:least depth known

SORDAT - 20070711

SORIND - US,US,survy,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 6.519 m

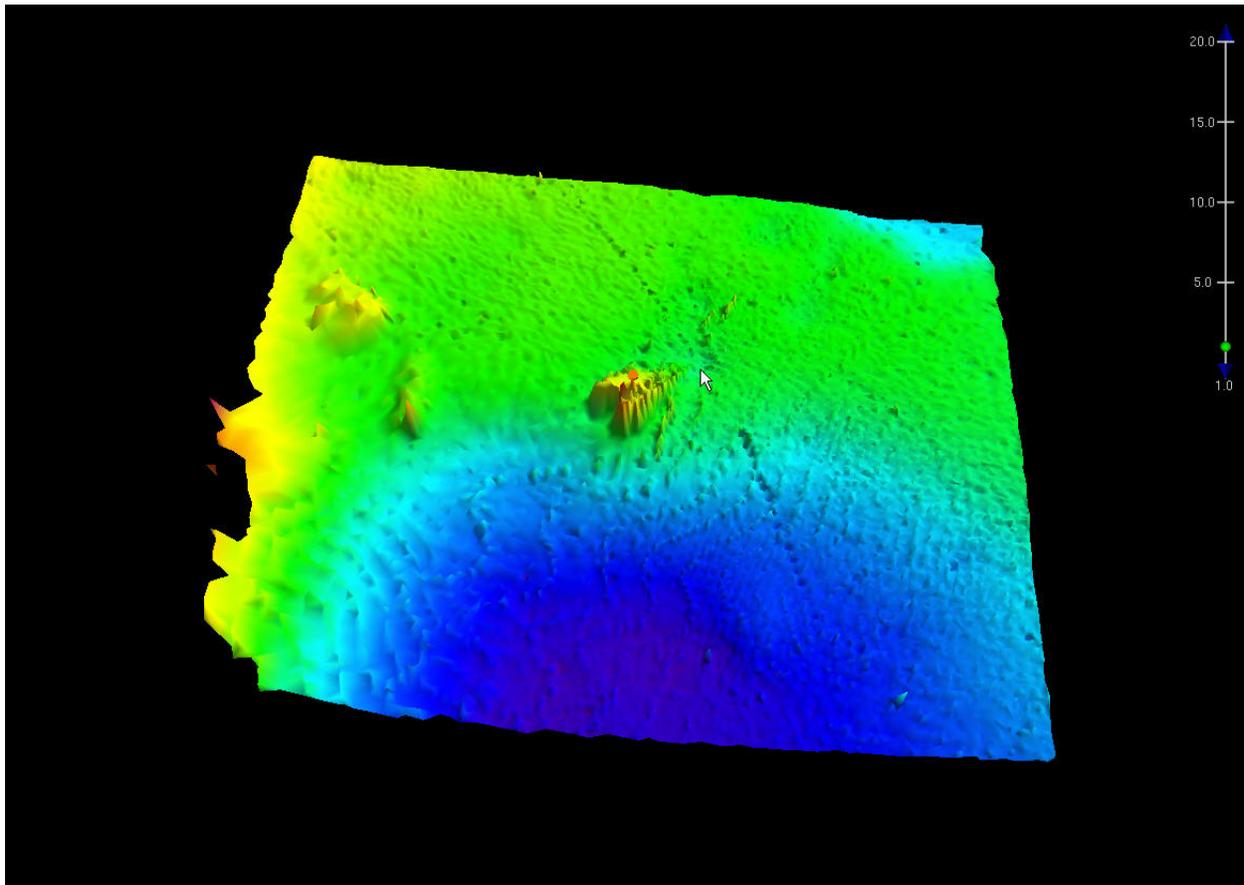
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. Update charted obstruction to least depth of 21 ft.

### Feature Images



*Figure 4.2.1*



*Figure 4.2.2*

### 4.3) Barge Wreck - Little Mystic R.

## DANGER TO NAVIGATION

### Primary Feature for AWOIS Item #10212

**Search Position:** 42° 22' 51.5" N, 071° 03' 17.2" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD,VS, S2  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM39/1971(9/22/71)-- 1 ST CGD; VISIBLE WK (PA), POSITION SCALED FROM CHART IN LAT 42/22/51.50N, LONG 71/03/17.20W (NAD83). COE ADVISES THAT A SUNKEN WORK BARGE EXISTS IN LITTLE MYSTIC CHANNEL. IT LIES ADJACENT TO THE NORTH BULKHEAD APPROX MIDWAY BETWEEN MYSTIC RIVER BRIDGE AND THE UPSTREAM CHANNEL LIMIT. ONE CORNER OF BARGE VISIBLE AT LOW WATER ONLY. (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV)

### Survey Summary

**Survey Position:** 42° 22' 51.6" N, 071° 03' 20.4" W  
**Least Depth:** 3.41 m (= 11.20 ft = 1.866 fm = 1 fm 5.20 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.182$  m  
**Timestamp:** 2007-192.16:37:43.492 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 213\_1636  
**Profile/Beam:** 760/103  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. The object appears to be the wreckage of a barge near AWOIS 10212 and matches the description of that AWOIS item.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/213_1636	760/103	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615132700	0004	15.84	046.4	Secondary

h11736/3002sss500k/2007-166/sonar_data070615132700	0006	18.10	303.9	Secondary
ChartGPs - ENC US5MA11M	Danger 173	71.47	272.3	Secondary (grouped)
AWOIS	AWOIS # 10212	73.96	271.3	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck.

### Cartographically-Rounded Depth (Affected Charts):

11ft (13272\_1, 13270\_1, 13267\_1)

1 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 SORDAT - 20070711  
 SORIND - US,US,survy,H11736  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 3.413 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The charted 11-ft dangerous wreck was charted as a result of a field-submitted DToN report. Retain charted dangerous wreck at this location, and delete the charted visible wreck PA associated with AWOIS 10212.

## Feature Images



*Figure 4.3.1*

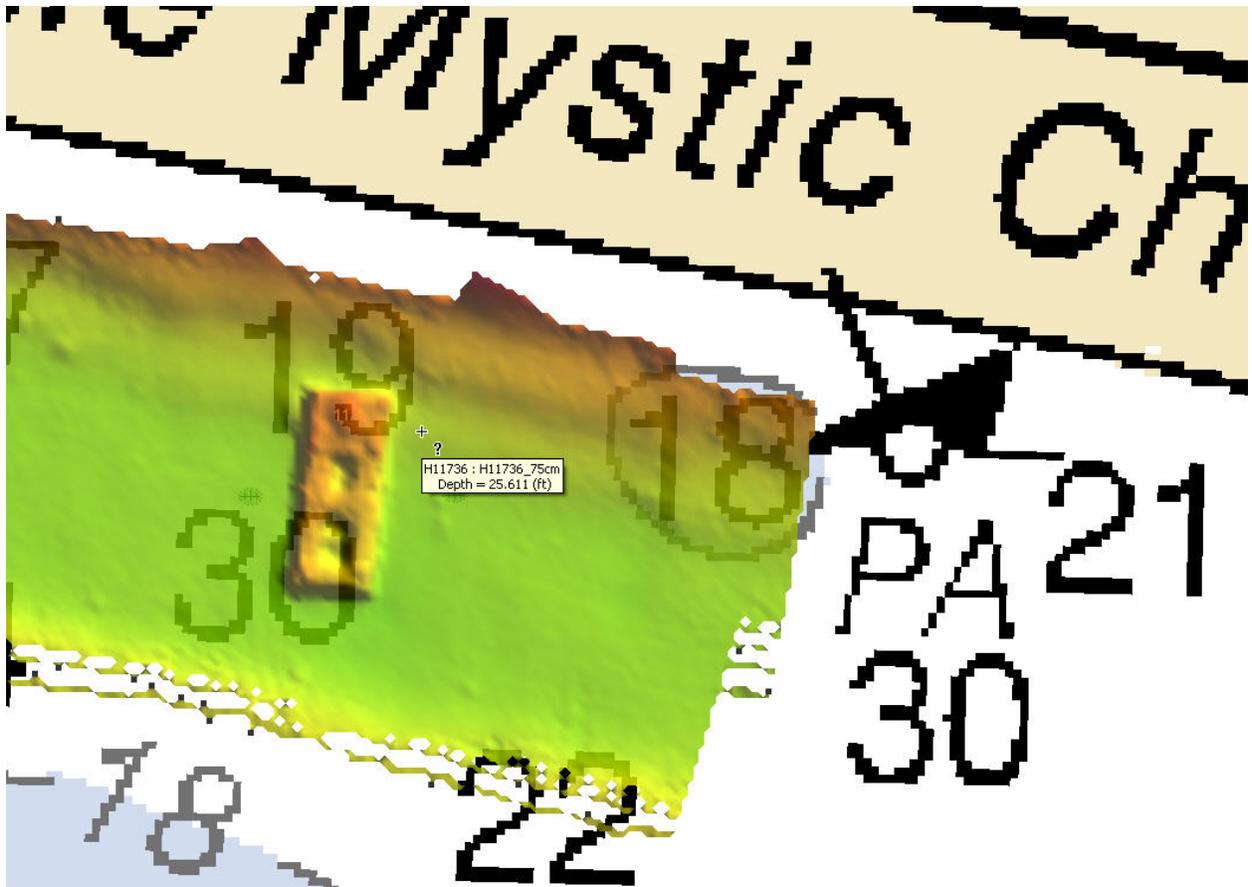


Figure 4.3.2

## 4.4) Barge Wreck Charlestown Pier 48

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 42° 22' 54.9" N, 071° 02' 56.0" W  
**Least Depth:** 3.99 m (= 13.08 ft = 2.180 fm = 2 fm 1.08 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.200$  m  
**Timestamp:** 2007-192.16:21:18.821 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 220\_1619  
**Profile/Beam:** 843/122  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. Object is part of a charted wreck (charted LD 17ft.) near a charted 23 ft sounding.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/220_1619	843/122	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615134800	0003	47.27	334.8	Secondary

#### Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck LD and position as surveyed.

#### Cartographically-Rounded Depth (Affected Charts):

13ft (13272\_1, 13270\_1, 13267\_1)

2fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

#### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 SORDAT - 20070711  
 SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.986 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. Chart the feature as a dangerous wreck, shown by an area feature indicating the shape and orientation of the wreck because the feature would extend beyond the limits of a regular danger circle.

### Feature Images

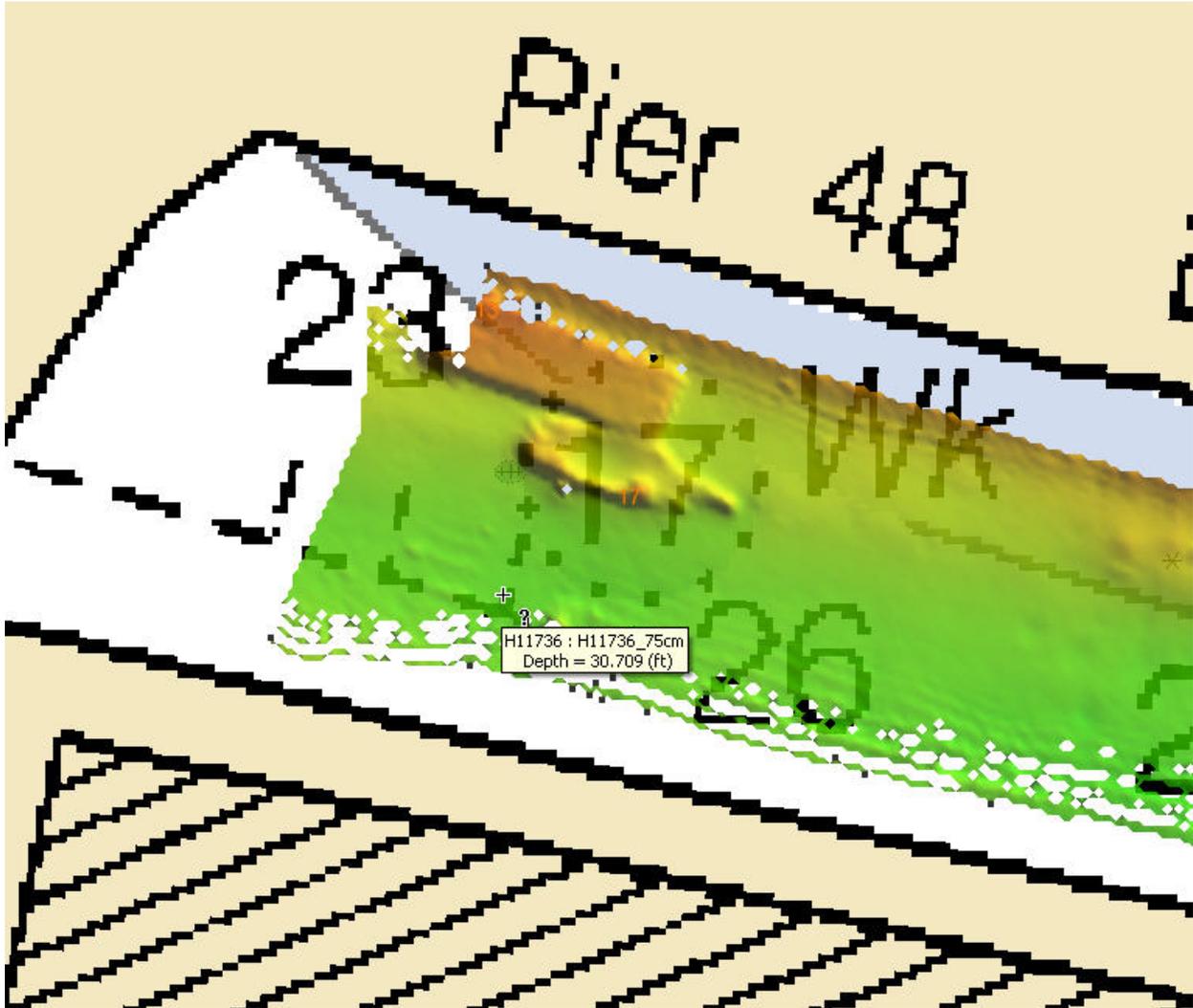


Figure 4.4.1

**4.5) AWOIS 12442****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #12442**

**Search Position:** 42° 20' 30.6" N, 071° 01' 54.2" W  
**Historical Depth:** 9.45 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT. SWMB LD OF 31 FEET (9.56 METERS) IN LAT. 42-20-30.64N, LONG. 71-01-54.16W. EVALUATOR RECOMMENDS CHARTING A 31 WK AS SURVEYED. (ENT 5/25/04, SJV)

**Survey Summary**

**Survey Position:** 42° 20' 30.3" N, 071° 01' 52.5" W  
**Least Depth:** 5.47 m (= 17.95 ft = 2.991 fm = 2 fm 5.95 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.967$  m ; **TVU (TPEv)**  $\pm 0.221$  m  
**Timestamp:** 2007-197.17:05:21.567 (07/16/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-197 / 191\_1705  
**Profile/Beam:** 141/9  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The navigable area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. The object is a wreck located within the search radius of AWOIS 12442.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-197/191_1705	141/9	0.00	000.0	Primary
h11736/3002sss500k/2007-165/sonar_data070614173400	0003	17.82	104.9	Secondary
AWOIS	AWOIS # 12442	38.78	105.7	Secondary
ChartGPs - ENC US5MA11M	Danger 159	49.02	094.5	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends a representative sounding be charted.

### Cartographically-Rounded Depth (Affected Charts):

18ft (13272\_1, 13270\_1, 13267\_1)

3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 1:non-dangerous wreck  
CONVIS - 2:not visual conspicuous  
SORDAT - 20070716  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 5.470 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

## Office Notes

Do not concur. The object was submitted by the field unit as a DToN, but the current chart does not reflect the hydrographer recommendation. The object is within the search radius of AWOIS 12442, a charted Wk with a least depth of 31 feet. Revise the charted dangerous wreck to reflect the surveyed least depth and position.

### Feature Images

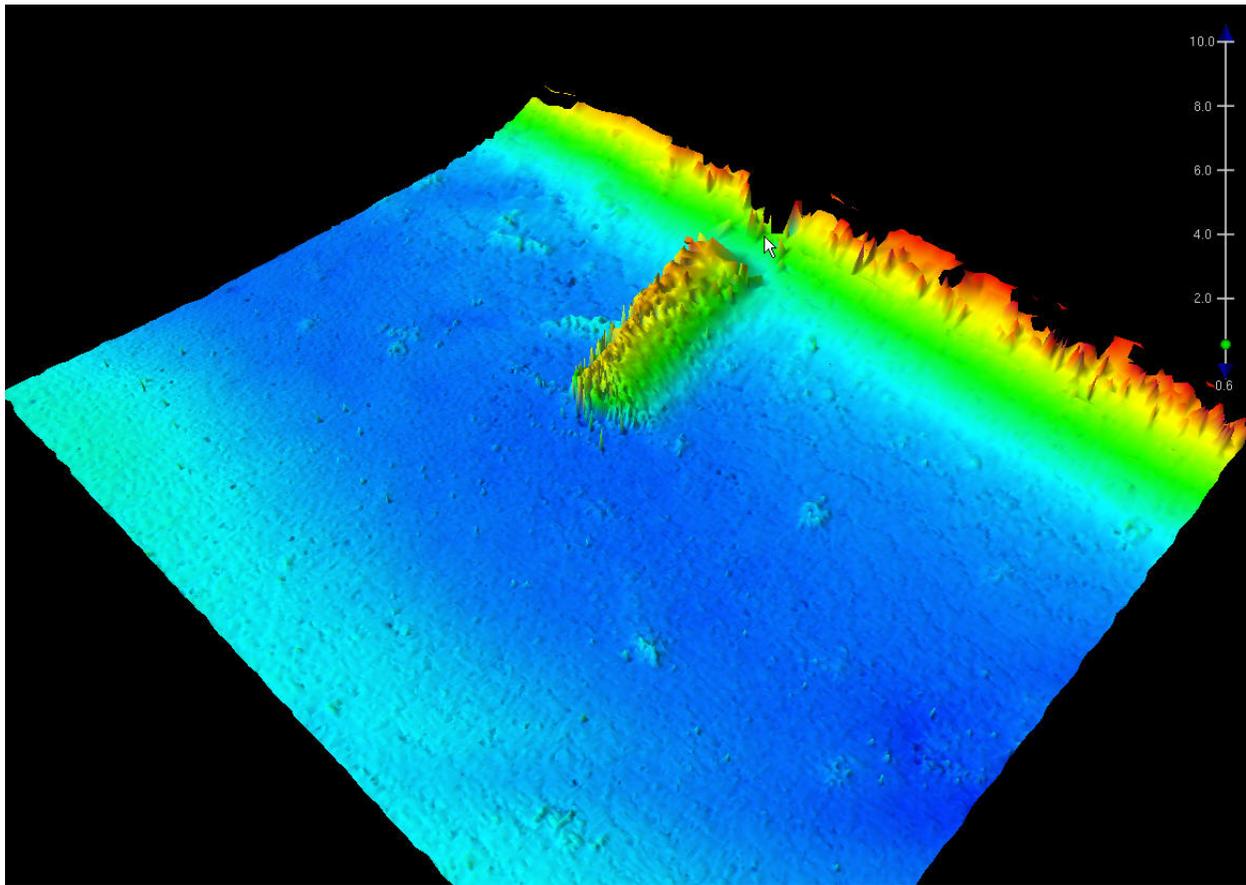


Figure 4.5.1



*Figure 4.5.2*

## 4.6) Wreck on the edge of Chelsea Creek Channel

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 42° 23' 03.9" N, 071° 01' 37.4" W  
**Least Depth:** 10.08 m (= 33.08 ft = 5.514 fm = 5 fm 3.08 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.962$  m ; **TVU (TPEv)**  $\pm 0.189$  m  
**Timestamp:** 2007-199.12:35:12.026 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 025\_1231  
**Profile/Beam:** 1874/77  
**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

Object is a wreck on the edge of a narrow channel.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/025_1231	1874/77	0.00	000.0	Primary
h11736/3002sss500k/2007-164/sonar_data070613155000	0001	13.49	097.4	Secondary

#### Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck.

#### Cartographically-Rounded Depth (Affected Charts):

33ft (13272\_1, 13270\_1, 13274\_5, 13267\_1)

5 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

#### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 SORDAT - 20070718  
 SORIND - US,US,survey,H11736

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 10.084 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur. Retain wreck as charted. The wreck was charted as a result of a field-submitted DToN letter.

### Feature Images

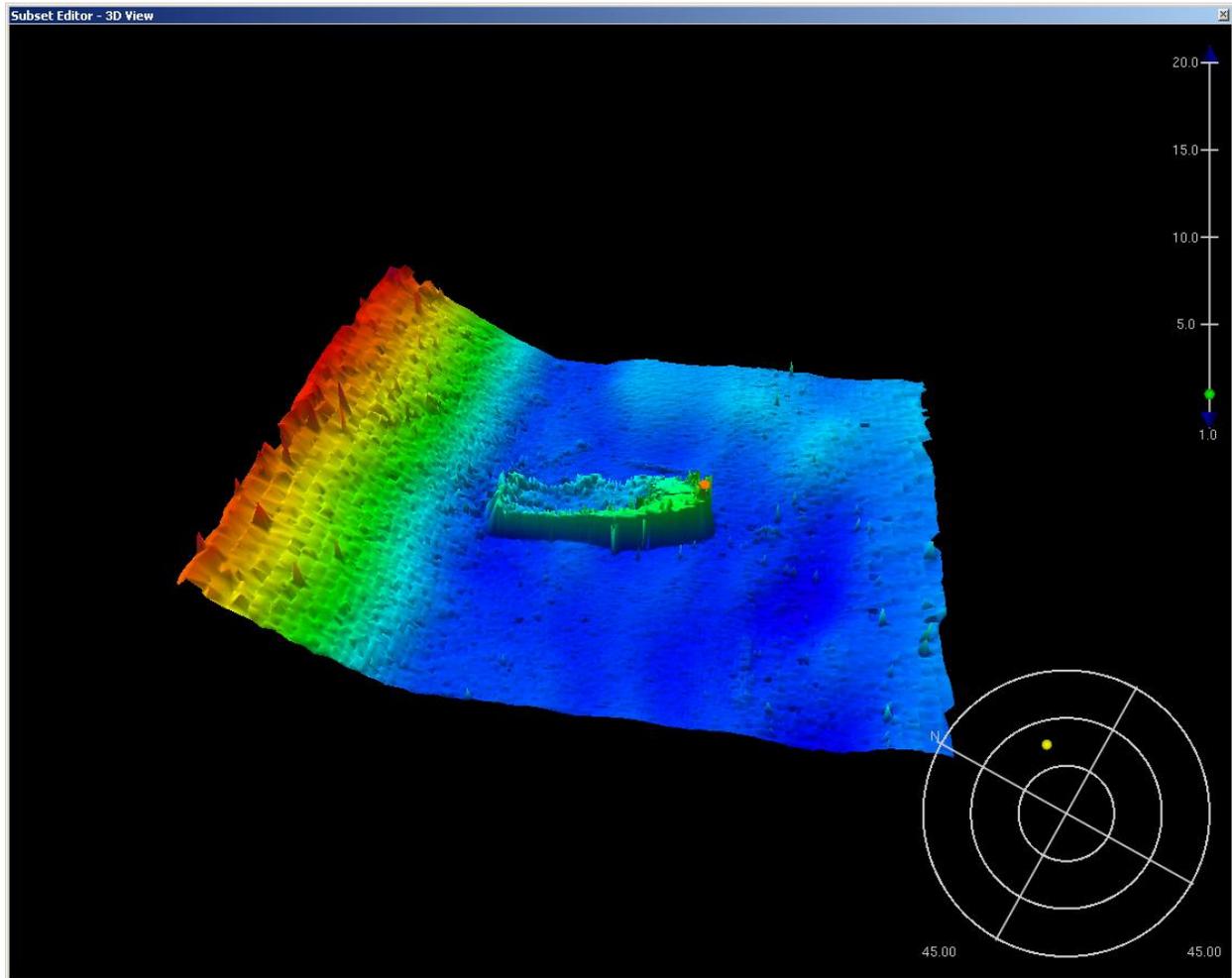


Figure 4.6.1

**4.7) AWOIS 10208 - PATTY JEAN****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #10208**

**Search Position:** 42° 21' 43.4" N, 071° 01' 48.7" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, MB, DI  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ LNM47/1975(11/19/75)-- 1 ST CGD; PATTY JEAN, STEEL HULLED F/V, DANG. WRECK (PA), POSITION GIVEN IN LAT 42/21/42.0N, LONG 71/01/51.0W (NAD27). (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/2/03, SJV) ■ H10990/01-- OPR-A397-WH; WRECK LOCATED BY SIDE SCAN SONAR. SWMB LD OF 10 FEET (3.12 METERS) IN LAT. 42-21-43.35N, LONG. 71-01-48.68W. EVALUATOR RECOMMENDS DELETING THE CHARTED DANGEROUS SUNKEN WRECK AND CHARTING A 10 WK AS SURVEYED. (UP 5/5/04,SJV)

**Survey Summary**

**Survey Position:** 42° 21' 43.9" N, 071° 01' 48.9" W  
**Least Depth:** 1.59 m (= 5.22 ft = 0.870 fm = 0 fm 5.22 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.960$  m ; TVU (TPEv)  $\pm 0.178$  m  
**Timestamp:** 2007-199.14:55:35.892 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 080\_1455  
**Profile/Beam:** 168/120  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The area was covered with 100% Simrad EM3000 MBES. The object is a wreck located within the search radius of AWOIS 10208

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/080_1455	168/120	0.00	000.0	Primary
h11736/s3002_mbes/2007-199/080_1455	168/118	0.45	161.6	Secondary (grouped)
h11736/s3002_mbes/2007-199/080_1455	158/43	2.97	322.5	Secondary (grouped)

AWOIS	AWOIS # 10208	18.06	341.8	Secondary
ChartGPs - ENC US5MA11M	Danger 182	19.54	010.2	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends the item be updated to reflect current bathymetry data.

### Cartographically-Rounded Depth (Affected Charts):

5ft (13272\_1, 13270\_1, 13267\_1)

0 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** QUASOU - 6:least depth known

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 1.591 m

## Office Notes

Concur with clarification. The wreck extends beyond the limits of the charted wreck danger curve. Chart the actual outline of the wreck to indicate the orientation and shape of the wreck, annotated with the least depth and 'Wk'.

### Feature Images

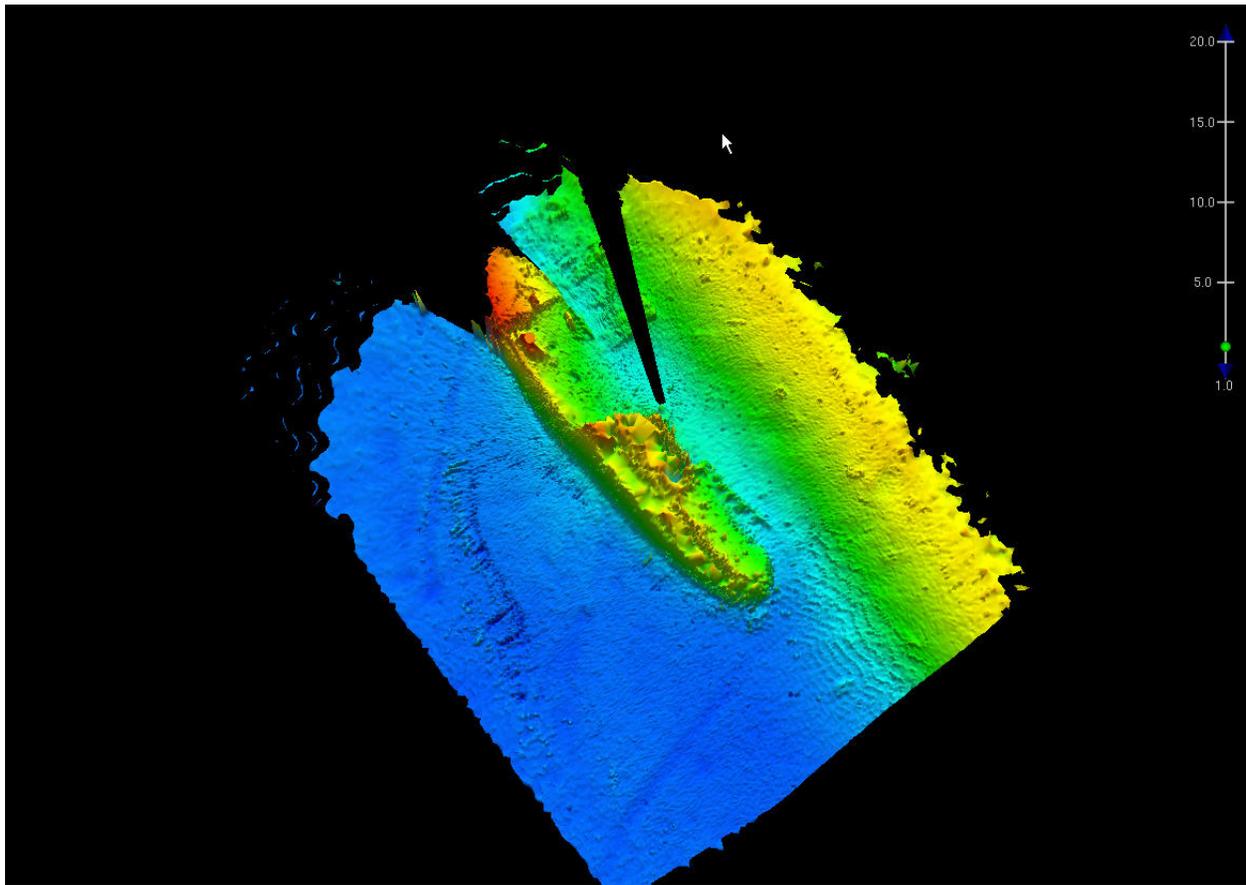


Figure 4.7.1

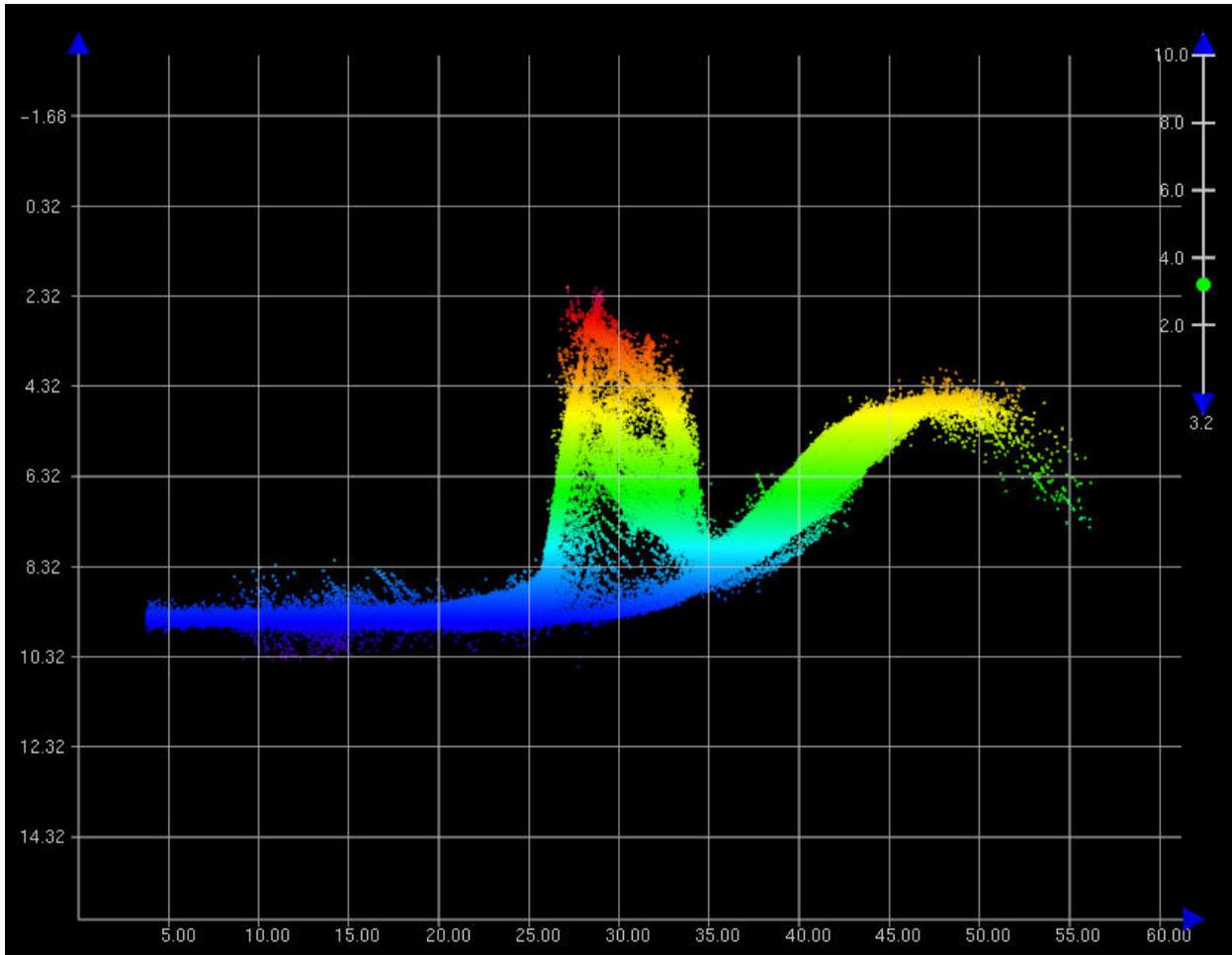


Figure 4.7.2

## 4.8) Barge Wreck Near AWOIS 10207

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 42° 21' 39.3" N, 071° 01' 49.2" W  
**Least Depth:** 4.28 m (= 14.06 ft = 2.343 fm = 2 fm 2.06 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.185$  m  
**Timestamp:** 2007-199.14:53:35.003 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 081\_1453  
**Profile/Beam:** 302/114  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 200% Klein 3000 SSS and 100% Simrad EM3000 MBES. Contact noted in SSS trace, LD obtained with MBES. Object appears to be the wreckage of two barges near the charted wreckage of a tug. The wreckage lies outside the charted wreck danger circle and near a charted 30' sounding.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/081_1453	302/114	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615120200	0005	9.25	104.3	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120200	0006	9.53	058.9	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120200	0001	14.76	053.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615115900	0005	23.18	024.8	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120600	0005	26.40	042.6	Secondary

#### Hydrographer Recommendations

The hydrographer recommends the object be charted as a dangerous wreck.

#### Cartographically-Rounded Depth (Affected Charts):

14ft (13272\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
SORDAT - 20070718  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 4.284 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

## Office Notes

Concur with clarification. The wreck was charted as a result of a field-submitted DToN letter. The wrecks extend beyond the limits of the charted wreck danger curve. Chart the actual extents of the wrecks as an area feature, annotated with the least depth and 'Wks'

### Feature Images



*Figure 4.8.1*

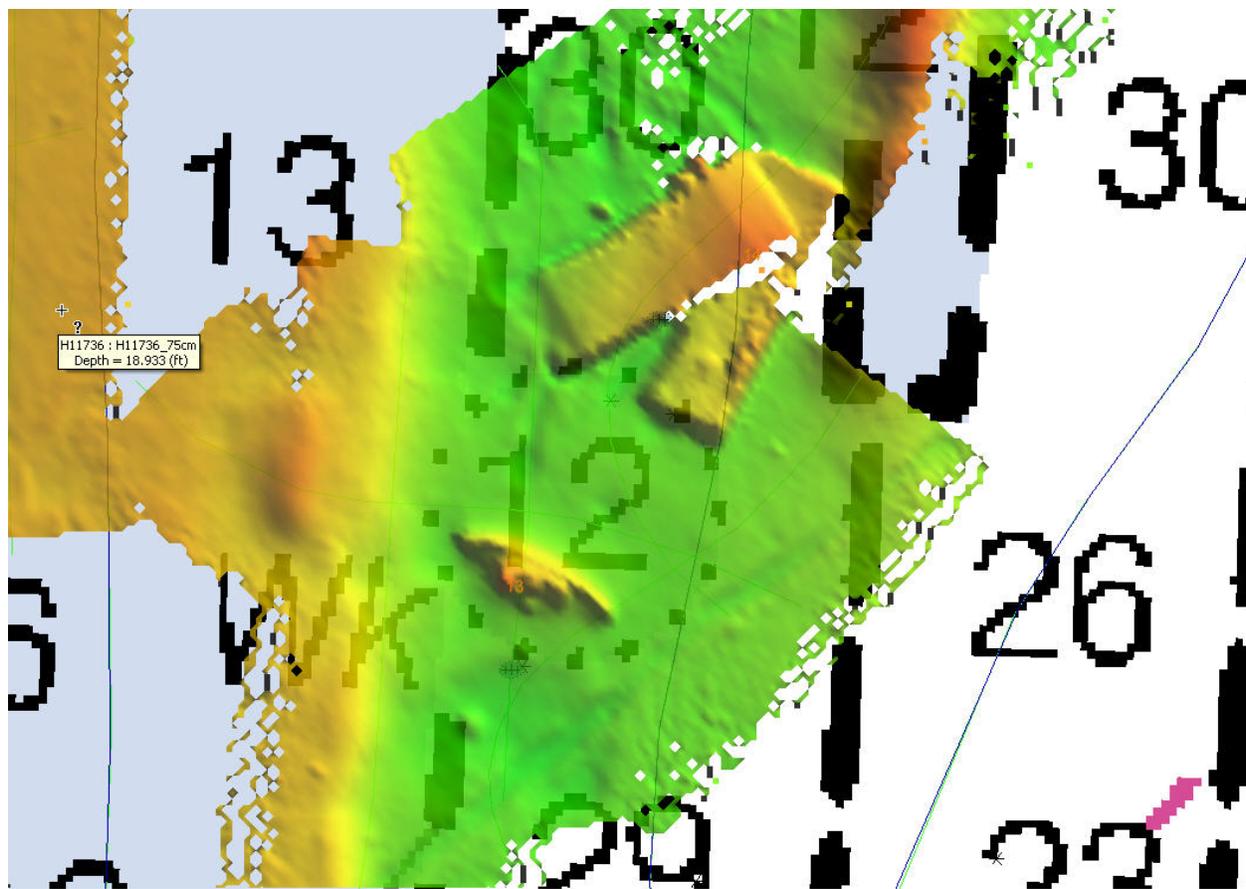


Figure 4.8.2

**4.9) AWOIS 14036****DANGER TO NAVIGATION****Primary Feature for AWOIS Item #14036**

**Search Position:** 42° 22' 09.0" N, 071° 03' 28.2" W  
**Historical Depth:** [None]  
**Search Radius:** 60  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

**History Notes:**

LNM 30/04-- USCG; AN OBSTRUCTION WAS ADDED TO THE CHART AT 42/22/09 - 71/03/28.2.  
 (ENTERED CEH 6/2007)

**Survey Summary**

**Survey Position:** 42° 22' 10.1" N, 071° 03' 24.9" W  
**Least Depth:** 4.08 m (= 13.38 ft = 2.229 fm = 2 fm 1.38 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.183$  m  
**Timestamp:** 2007-199.15:30:46.175 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 115\_1530  
**Profile/Beam:** 457/25  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The object appears to be a submerged pile(s) or mast.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/115_1530	457/25	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615124700	0002	9.28	237.6	Secondary
h11736/3002sss500k/2007-166/sonar_data070615124100	0001	24.48	134.2	Secondary
AWOIS	AWOIS # 14036	82.45	065.0	Secondary (grouped)
ChartGPs - ENC US5MA11M	Danger 19	82.45	065.2	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends AWOIS 14036 be moved to surveyed position and surveyed depth be added to OBSTN circle.

### Cartographically-Rounded Depth (Affected Charts):

13ft (13272\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** QUASOU - 6:least depth known

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 4.077 m

WATLEV - 3:always under water/submerged

## Office Notes

The feature was charted as the result of a field-submitted DToN letter. Retain as charted.

### Feature Images

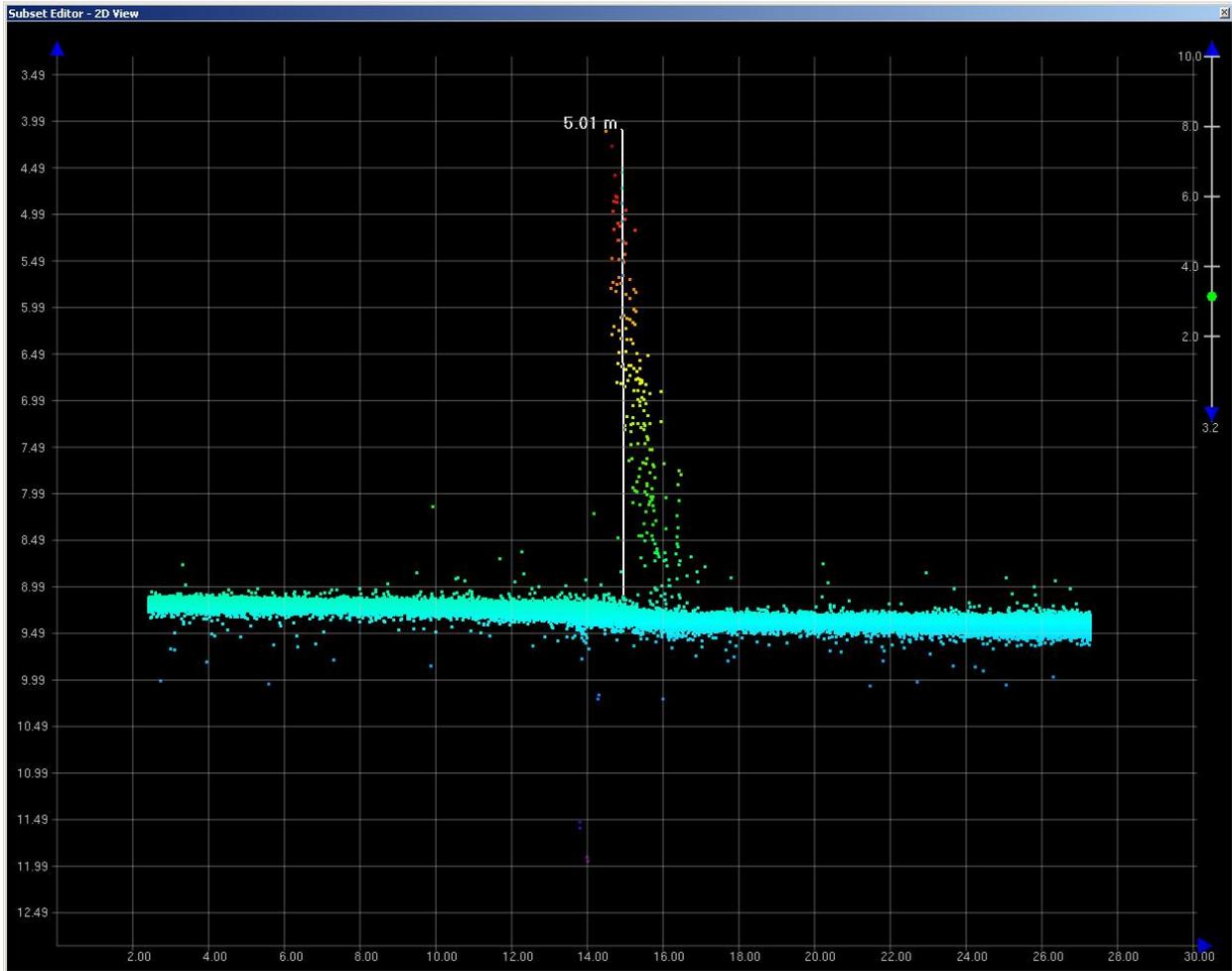


Figure 4.9.1

# H11736 Potential Obstruction Investigation

**Registry Number:** H11736  
**State:** Massachusetts  
**Locality:** Boston Harbor  
**Sub-locality:** Boston Inner Harbor  
**Project Number:** OPR-A397-NRT5-07  
**Survey Dates:** June 12, 2007 - September 23, 2008 (Addm)

## Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
13272	50th	08/01/2008	1:10,000 (13272_1)	USCG LNM: 12/04/2007 (03/11/2008) CHS NTM: None (01/25/2008) NGA NTM: None (03/22/2008)
13270	62nd	06/01/2006	1:25,000 (13270_1)	[L]NTM: ?
13274	26th	04/01/2005	1:40,000 (13274_5)	[L]NTM: ?
13267	32nd	12/01/2004	1:80,000 (13267_1)	[L]NTM: ?
13260	39th	06/01/2003	1:378,838 (13260_1)	[L]NTM: ?
13200	34th	12/01/2005	1:400,000 (13200_1)	[L]NTM: ?
13009	32nd	07/01/2006	1:500,000 (13009_1)	[L]NTM: ?
13006	33rd	04/01/2006	1:675,000 (13006_1)	[L]NTM: ?
13003	48th	10/01/2004	1:1,200,000 (13003_1)	[L]NTM: ?

\* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS 12440	Wreck	9.68 m	42° 22' 14.7" N	071° 03' 04.9" W	12440
1.2	AWOIS 12450	Obstruction	7.81 m	42° 22' 39.0" N	071° 02' 51.1" W	12450
1.3	AWOIS 10213	Wreck	5.19 m	42° 22' 54.2" N	071° 02' 55.1" W	10213
1.4	AWOIS 12557	Obstruction	5.46 m	42° 22' 53.9" N	071° 02' 51.2" W	12557
1.5	AWOIS 12454	Obstruction	4.93 m	42° 22' 06.5" N	071° 02' 40.2" W	12454
1.6	AWOIS 14033	Wreck	7.08 m	42° 21' 43.4" N	071° 01' 46.3" W	14033
1.7	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---

1.8	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.9	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.10	AWOIS 12443	Shoal	12.38 m	42° 21' 42.0" N	071° 02' 36.1" W	12443
1.11	AWOIS 12439	Wreck	3.14 m	42° 22' 08.3" N	071° 03' 11.0" W	12439
1.12	AWOIS 10207	Wreck	3.84 m	42° 21' 37.9" N	071° 01' 50.6" W	10207
1.13	AWOIS 14035	Wreck	2.49 m	42° 21' 47.8" N	071° 02' 16.2" W	14035

**1 - DR\_AWOIS**

## 1.1) AWOIS 12440

### Primary Feature for AWOIS Item #12440

**Search Position:** 42° 22' 14.7" N, 071° 03' 04.9" W  
**Historical Depth:** 8.84 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT IDENTIFIED AS A WRECK. SWMB LD OF 29 FEET (8.8 METERS) IN LAT. 42-22-14.73N, LONG. 71-03-04.93W. EVALUATOR RECOMMENDS CHARTING A 29 WK AS SURVEYED. (ENT 5/25/04, SJV)

### Survey Summary

**Survey Position:** 42° 22' 14.7" N, 071° 03' 04.9" W  
**Least Depth:** 9.68 m (= 31.76 ft = 5.293 fm = 5 fm 1.76 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.965$  m ; TVU (TPEv)  $\pm 0.189$  m  
**Timestamp:** 2007-192.17:27:05.766 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 197\_1726  
**Profile/Beam:** 229/64  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is a wreck located within the OBSTN circle for AWOIS 12440.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/197_1726	229/64	0.00	000.0	Primary
AWOIS	AWOIS # 12440	2.63	180.2	Secondary
ChartGPs - ENC US5MA11M	Danger 171	3.06	173.1	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615125400	0001	8.55	137.9	Secondary

## Hydrographer Recommendations

The hydrographer recommends the item be charted as per surveyed depth.

### Cartographically-Rounded Depth (Affected Charts):

32ft (13272\_1, 13270\_1, 13267\_1)

5 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

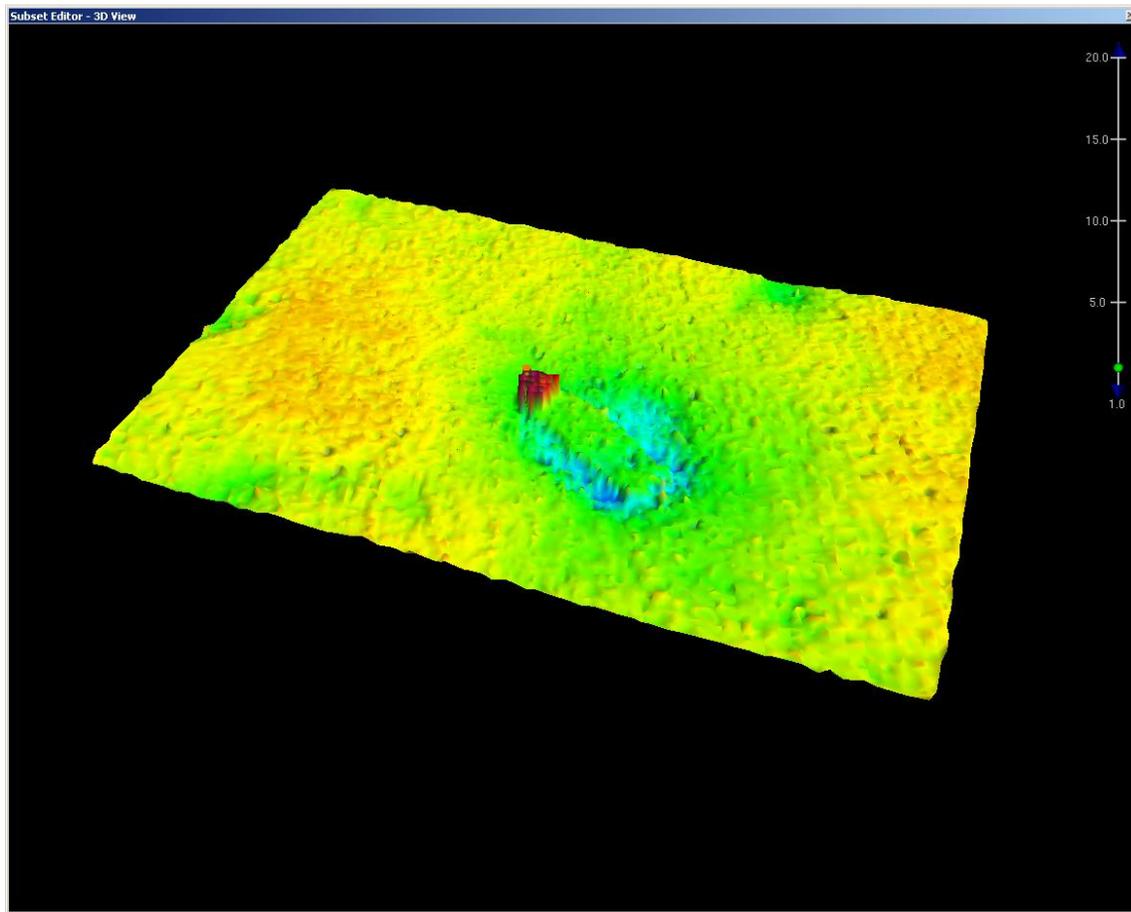
## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
CONVIS - 2:not visual conspicuous  
SORDAT - 20070711  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 9.679 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

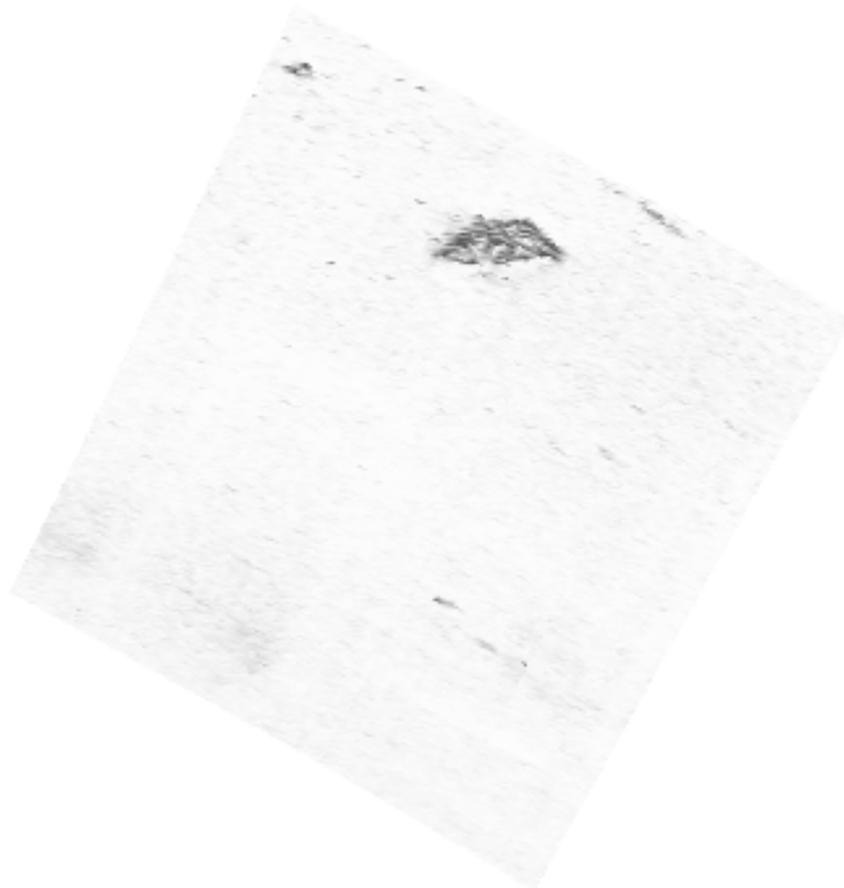
## Office Notes

Concur with clarification. Revise charted dangerous wreck to surveyed position and least depth.

### Feature Images



*Figure 1.1.1*



*Figure 1.1.2*

## 1.2) AWOIS 12450

### Primary Feature for AWOIS Item #12450

**Search Position:** 42° 22' 38.8" N, 071° 02' 51.1" W  
**Historical Depth:** 7.62 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 25 FEET OBTAINED IN LAT. 42-22-38.81N, LONG. 71-02-51.10W. EVALUATOR RECOMMENDS CHARTING A 25 OBSTN AS SURVEYED. (ENT 5/25/04, SJV)

### Survey Summary

**Survey Position:** 42° 22' 39.0" N, 071° 02' 51.1" W  
**Least Depth:** 7.81 m (= 25.62 ft = 4.271 fm = 4 fm 1.62 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.966$  m ; TVU (TPEv)  $\pm 0.196$  m  
**Timestamp:** 2007-192.16:59:52.638 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 202\_1658  
**Profile/Beam:** 693/111  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is an Obstn located within AWOIS 12450 radius.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/202_1658	693/111	0.00	000.0	Primary
h11736/3002sss500k/2007-166/sonar_data070615134600	0002	3.56	001.8	Secondary
h11736/3002sss500k/2007-164/sonar_data070613180800	0002	4.80	005.5	Secondary
AWOIS	AWOIS # 12450	6.43	350.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615132700	0010	12.23	332.2	Secondary
h11736/s3002_mbes/2007-192/202_1658	725/79	13.39	324.8	Secondary (grouped)

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

25ft (13272\_1, 13270\_1, 13267\_1)

4 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** VALSOU - 7.810 m

## Office Notes

Concur with clarification. Revise dangerous obstruction to survey position and least depth.

### Feature Images

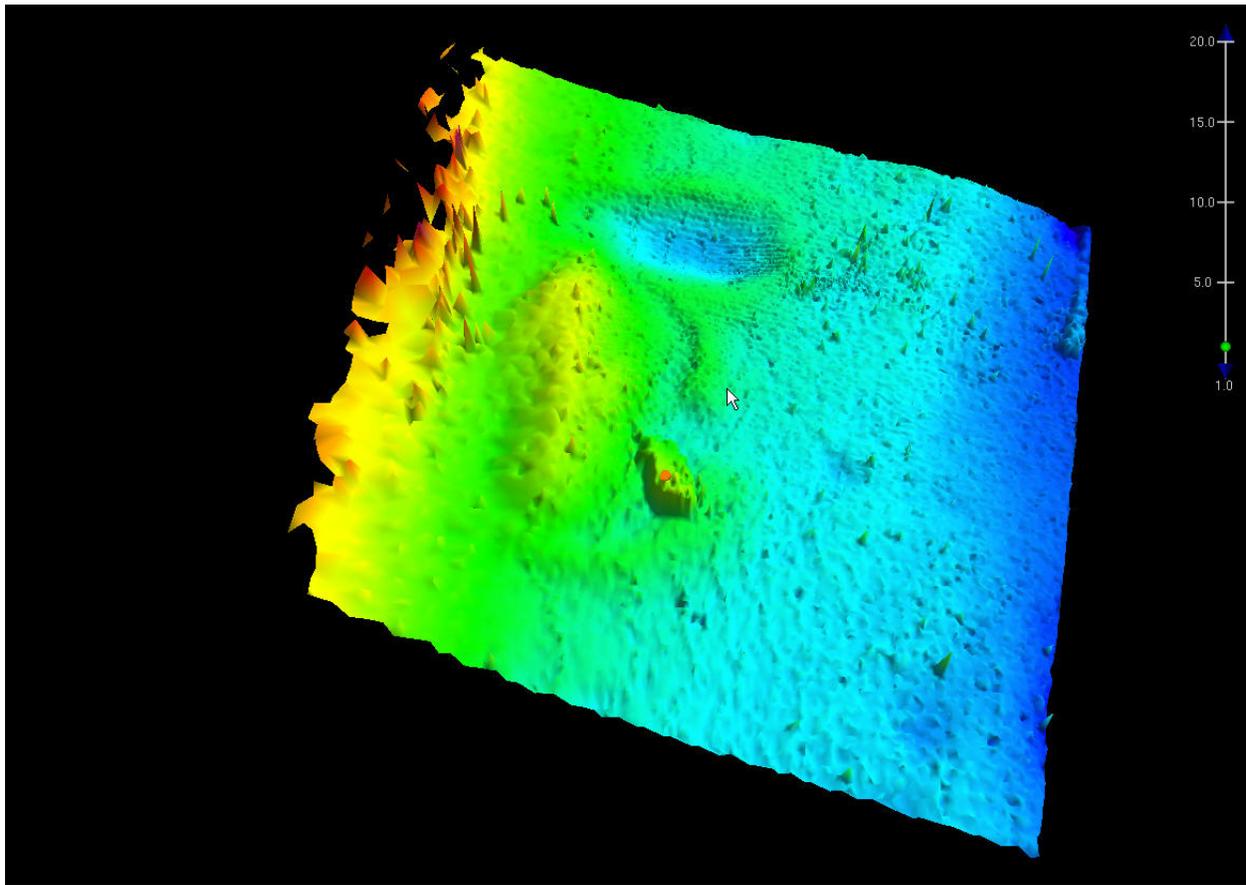


Figure 1.2.1

### 1.3) AWOIS 10213

#### Primary Feature for AWOIS Item #10213

**Search Position:** 42° 22' 54.2" N, 071° 02' 55.0" W  
**Historical Depth:** 5.18 m  
**Search Radius:** 50  
**Search Technique:** SD, S2, DI, MB  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM34/1980(7/29/80)-- 1 ST CGD; DANG. WRECK (PA), POSITION GIVEN IN LAT 42/22/53.5N, LONG 71/02/56.0W (NAD27). REPORTED BETWEEN PIERS 1 AND 48.(ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/2/03, SJV) ■ H10990/01-- OPR-A397-WH; LOCATED BY SWMB. LD OF 17 FEET LOCATED IN LAT. 42-22-54.17N, LONG. 71-02-55.00W. EVALUATOR RECOMMENDS DELETING THE CHARTED DANGEROUS SUNKEN WRECK, PA AND CHARTING A 17 WK AS SURVEYED. (UP 5/25/04, SJV)

#### Survey Summary

**Survey Position:** 42° 22' 54.2" N, 071° 02' 55.1" W  
**Least Depth:** 5.19 m (= 17.02 ft = 2.837 fm = 2 fm 5.02 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.961$  m ; TVU (TPEv)  $\pm 0.185$  m  
**Timestamp:** 2007-192.16:22:23.012 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 219\_1621  
**Profile/Beam:** 311/41  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object appears to be the wreckage of a tug and barge located within the search radius of AWOIS 10213.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/219_1621	311/41	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 199	1.83	215.6	Secondary (grouped)
AWOIS	AWOIS # 10213	2.38	272.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615134800	0002	16.05	099.6	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object be retained as charted.

### Cartographically-Rounded Depth (Affected Charts):

17ft (13272\_1, 13270\_1, 13267\_1)

2 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
CONVIS - 2:not visual conspicuous  
SORDAT - 20070711  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 5.189 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

## Office Notes

Concur.

### Feature Images

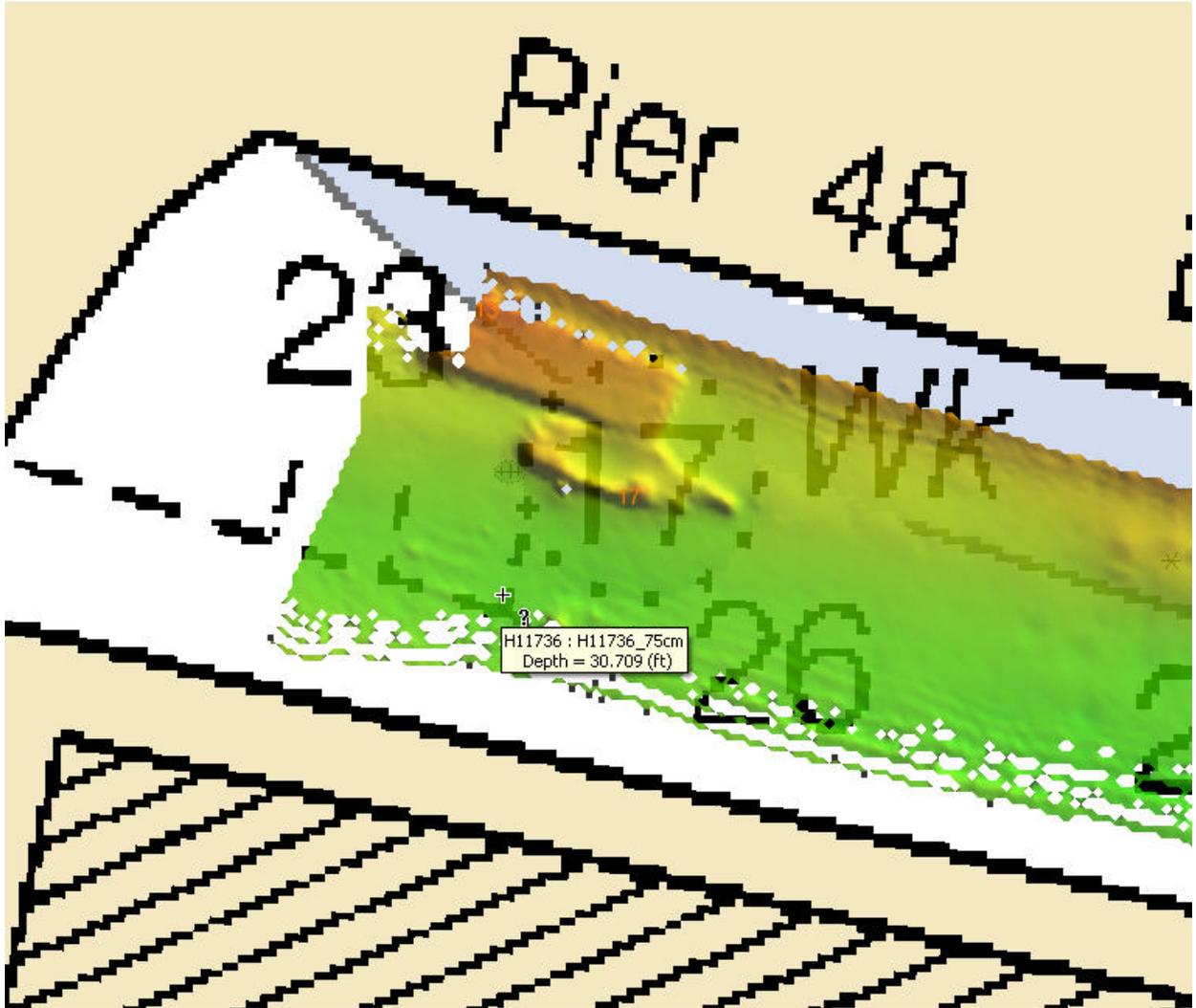


Figure 1.3.1

**1.4) AWOIS 12557****Primary Feature for AWOIS Item #12557**

**Search Position:** 42° 22' 54.3" N, 071° 02' 50.8" W  
**Historical Depth:** 3.05 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

**History Notes:**

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 10 FEET OBTAINED IN LAT. 42-22-54.30N, LONG. 71-02-50.85W. EVALUATOR RECOMMENDS CHARTING A 10 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

**Survey Summary**

**Survey Position:** 42° 22' 53.9" N, 071° 02' 51.2" W  
**Least Depth:** 5.46 m (= 17.91 ft = 2.985 fm = 2 fm 5.91 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.188$  m  
**Timestamp:** 2007-192.16:19:32.021 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 229\_1618  
**Profile/Beam:** 724/110  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

The area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object appears to be a wreck located within the search radius of AWOIS 12557.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/229_1618	724/110	0.00	000.0	Primary
AWOIS	AWOIS # 12557	13.84	215.6	Secondary
ChartGPs - ENC US5MA11M	Danger 29	14.31	218.1	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615134800	0001	18.09	091.3	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

18ft (13272\_1, 13270\_1, 13267\_1)

3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

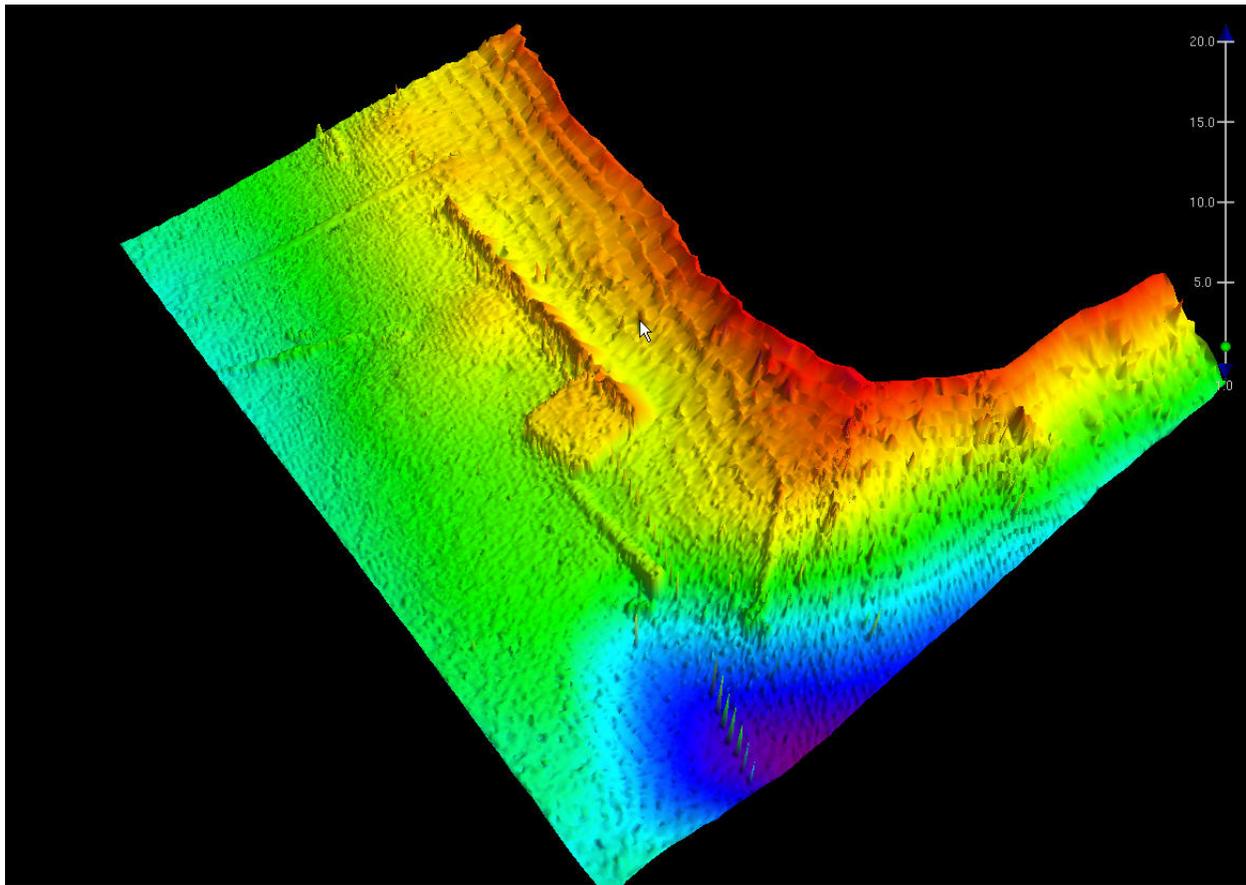
## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
SORDAT - 20070711  
SORIND - US,US,survey,H11736  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 5.459 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

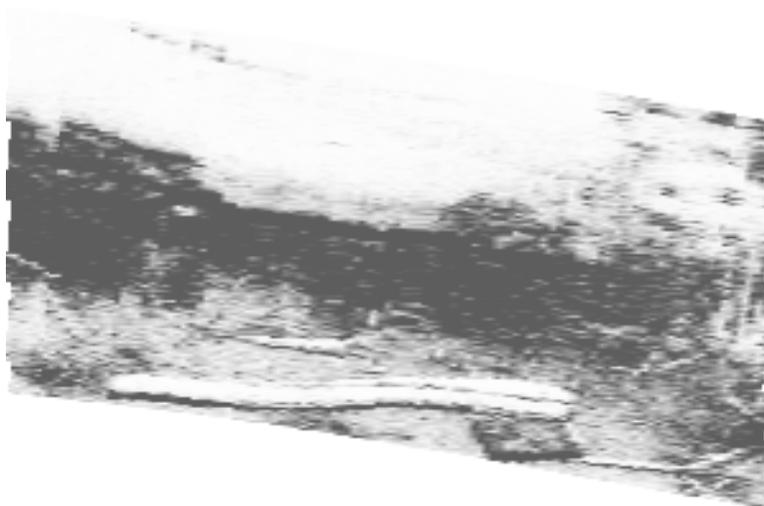
## Office Notes

Concur with clarification. Revise charted obstruction to surveyed position and least depth.

### Feature Images



*Figure 1.4.1*



*Figure 1.4.2*

## 1.5) AWOIS 12454

### Primary Feature for AWOIS Item #12454

**Search Position:** 42° 22' 06.8" N, 071° 02' 40.3" W  
**Historical Depth:** 3.96 m  
**Search Radius:** 50  
**Search Technique:** MB, S2  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; UNCHARTED OBSTRUCTION LOCATED DURING SWMB OPS. LD OF 13 FEET OBTAINED IN LAT. 42-22-06.85N, LONG. 71-02-40.28W. EVALUATOR RECOMMENDS CHARTING A 13 OBSTN AS SURVEYED. (ENT 5/26/04, SJV)

### Survey Summary

**Survey Position:** 42° 22' 06.5" N, 071° 02' 40.2" W  
**Least Depth:** 4.93 m (= 16.18 ft = 2.696 fm = 2 fm 4.18 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.962$  m ; TVU (TPEv)  $\pm 0.184$  m  
**Timestamp:** 2007-192.18:11:20.670 (07/11/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-192 / 330\_1810  
**Profile/Beam:** 297/41  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The Object is an OBSTN on edge of the Channel within the search radius of AWOIS 12454.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-192/330_1810	297/41	0.00	000.0	Primary
AWOIS	AWOIS # 12454	10.54	168.8	Secondary
ChartGPs - ENC US5MA11M	Danger 24	10.94	114.3	Secondary (grouped)

## Hydrographer Recommendations

Retain as charted.

### Cartographically-Rounded Depth (Affected Charts):

16ft (13272\_1, 13270\_1, 13267\_1)

2 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

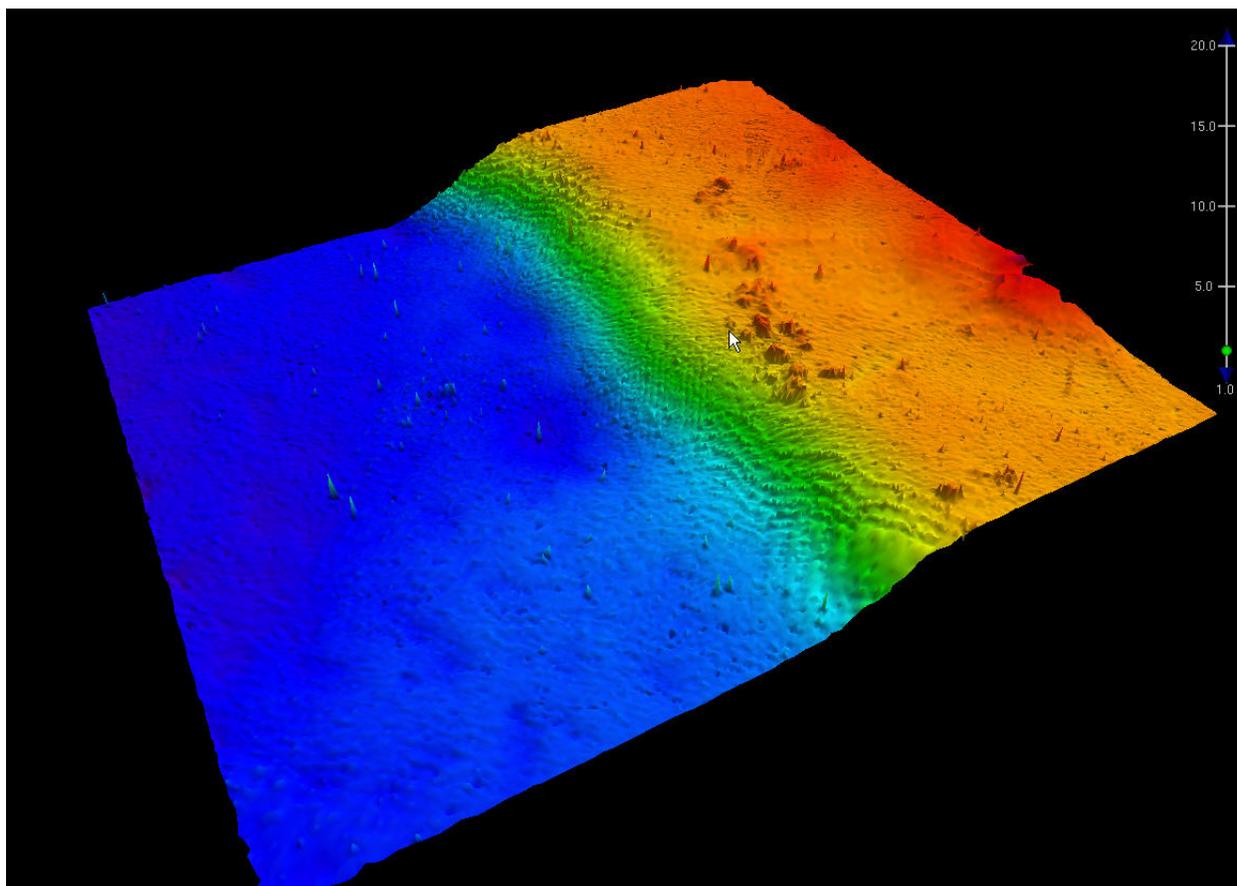
## S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Do not concur. Object is insignificant. Chart current sounding data and remove obstruction from chart.

### Feature Images



*Figure 1.5.1*

## 1.6) AWOIS 14033

### Primary Feature for AWOIS Item #14033

**Search Position:** 42° 21' 43.4" N, 071° 01' 46.0" W  
**Historical Depth:** 6.10 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, SD  
**Technique Notes:** [None]

#### History Notes:

H10990-- 20 WRECK WAS ADDED AT 42/21/43.39 - 71/01/45.97. (ENTERED CEH 6/2007)

### Survey Summary

**Survey Position:** 42° 21' 43.4" N, 071° 01' 46.3" W  
**Least Depth:** 7.08 m (= 23.22 ft = 3.870 fm = 3 fm 5.22 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPE<sub>h</sub>)**  $\pm 1.962$  m ; **TVU (TPE<sub>v</sub>)**  $\pm 0.187$  m  
**Timestamp:** 2007-199.14:50:56.240 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 087a1450  
**Profile/Beam:** 250/40  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/087a1450	250/40	0.00	000.0	Primary
h11736/s3002_mbes/2007-199/086_1448	894/4	1.39	118.0	Secondary
h11736/s3002_mbes/2007-199/087a1450	221/44	2.50	168.5	Secondary (grouped)
AWOIS	AWOIS # 14033	7.31	273.3	Secondary
h11736/s3002_mbes/2007-199/087a1450	290/11	7.87	293.5	Secondary (grouped)
ChartGPs - ENC US5MA11M	Danger 183	8.42	016.4	Secondary (grouped)

## Hydrographer Recommendations

[None]

### Cartographically-Rounded Depth (Affected Charts):

23ft (13272\_1, 13270\_1, 13267\_1)

3 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

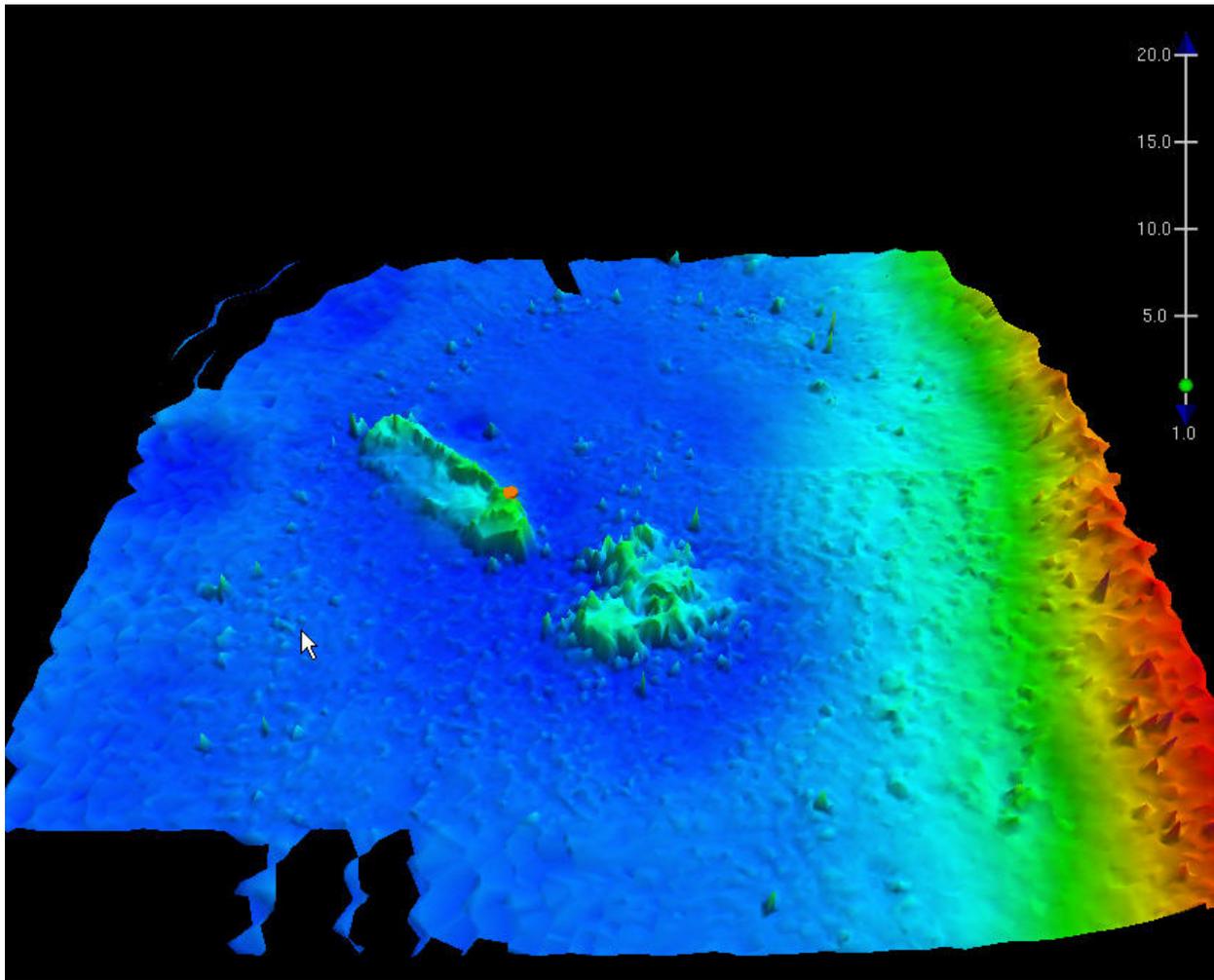
## S-57 Data

[None]

## Office Notes

The area was covered with EM3000 MBES data but no SSS data. Two features were detected, about 9 meters apart from each other. Revise charted depth with survey least depth and position.

### Feature Images



*Figure 1.6.1*

## 1.7) AWOIS #10210 - UNKNOWN

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 42° 22' 20.5" N, 071° 03' 03.5" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, DI, VS  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ CL970/1986--USCG AUX; VISIBLE WRECK (PA), POSITION GIVEN IN LAT 42/22/18N, LONG 71/03/05W (NAD27). WRECK SCALED FROM CHART 13272 IN LAT 42/22/20.5N, LONG 71/03/03.5W (NAD83). SKETCH PROVIDED INDICATES POSITION BETWEEN PIERS 4 AND 5 ON THE PIER 5 SIDE OF CHANNEL. (NAD83). (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV)

### Survey Summary

**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The Area was covered with 200% Klein 3000 SSS, no item matching the description of AWOIS 10210 was seen in the trace, and there was no visual sighting of an exposed wreck.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 10210	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 172	10.14	029.7	Secondary (grouped)

### Hydrographer Recommendations

The hydrographer recommends the item be removed from the chart and AWOIS 10210 be removed from the database.

### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Concur.

## 1.8) AWOIS #10214 - UNKNOWN

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 42° 23' 03.4" N, 071° 03' 00.8" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, SWMB, DI  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ LNM42/1978(9/27/78)--1 ST CGD; DANG. WK, POSITION SCALED FROM CHART IN LAT 42/23/03.4N, LONG 71/03/00.8W (NAD83). A STEEL DECK HOUSE WAS LOCATED IN APPROX 25 FT OF WATER. (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV)

### Survey Summary

**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The search radius was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES. No Item matching that of AWOIS 10214 was seen in the SSS trace or in the bathymetry data.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 10214	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 200	1.42	359.3	Secondary (grouped)

### Hydrographer Recommendations

The hydrographer recommends the object be removed from the chart and AWOIS 10214 be removed from the database.

### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Concur.

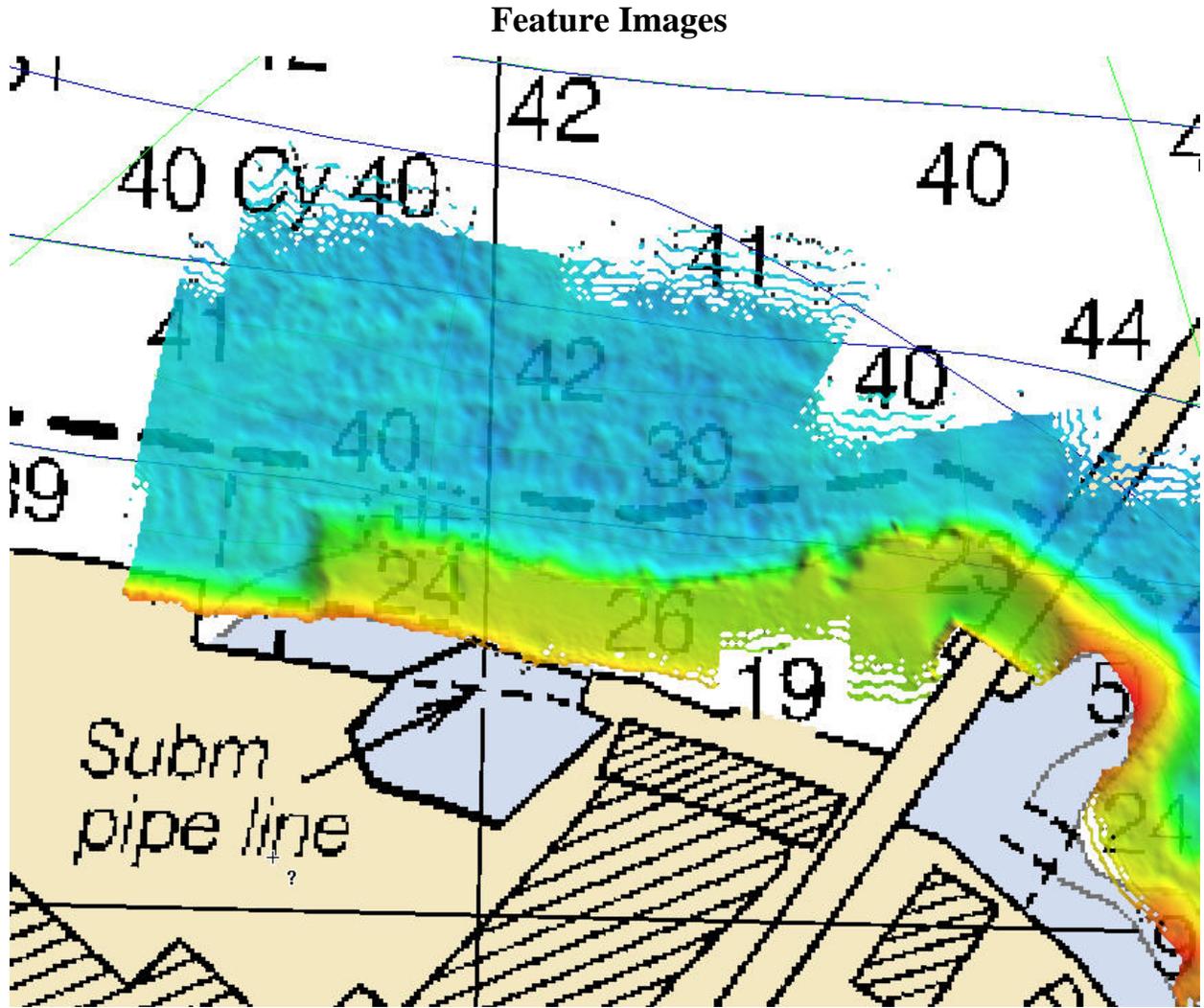


Figure 1.8.1

## 1.9) AWOIS #10237 - UNKNOWN

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 42° 23' 37.6" N, 071° 00' 57.5" W  
**Historical Depth:** [None]  
**Search Radius:** 75  
**Search Technique:** SD, VS, S2, MB  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H7061/1945-- VISIBLE WRECK, POSITION SCALED FROM CHART IN LAT 42/23/37.6N, LONG 71/00/57.5W (NAD83). ■ CL1627/1972--COE MEMO; REMAINS OF SUNKEN BARGE, "ALL WRECKS AWASH", NOTED ON SKETCH PROVIDED. (THIS WRECK SHOULD BE CHARTED AS VISIBLE) (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV) The navigable area of the AWOIS search radius was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES. No item matching that of AWOIS 10237 was seen in the SSS trace or in the bathymetry data. - MJJ

### Survey Summary

**Charts Affected:** 13272\_1, 13270\_1, 13274\_5, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area of the AWOIS search radius was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES. No item matching that of AWOIS 10237 was seen in the SSS trace or in the bathymetry data, and there was no visual sighting of an exposed wreck. The correlated SSS contact appears to be an OBSTN outside both the channel and navigable area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 10237	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 219	4.15	139.2	Secondary (grouped)
h11736/3002sss500k/2007-164/sonar_data070613150600	0001	17.04	246.7	Secondary
h11736/3002sss500k/2007-164/sonar_data070613150600	0008	19.28	279.1	Secondary

### Hydrographer Recommendations

The hydrographer recommends the object be removed from the chart and AWOIS 10237 be removed from the AWOIS database.

## **S-57 Data**

**Geo object 1:** Cartographic symbol (\$CSYMB)

## **Office Notes**

Concur. Remove dangerous wreck, depth unknown, from the chart.

Feature Images

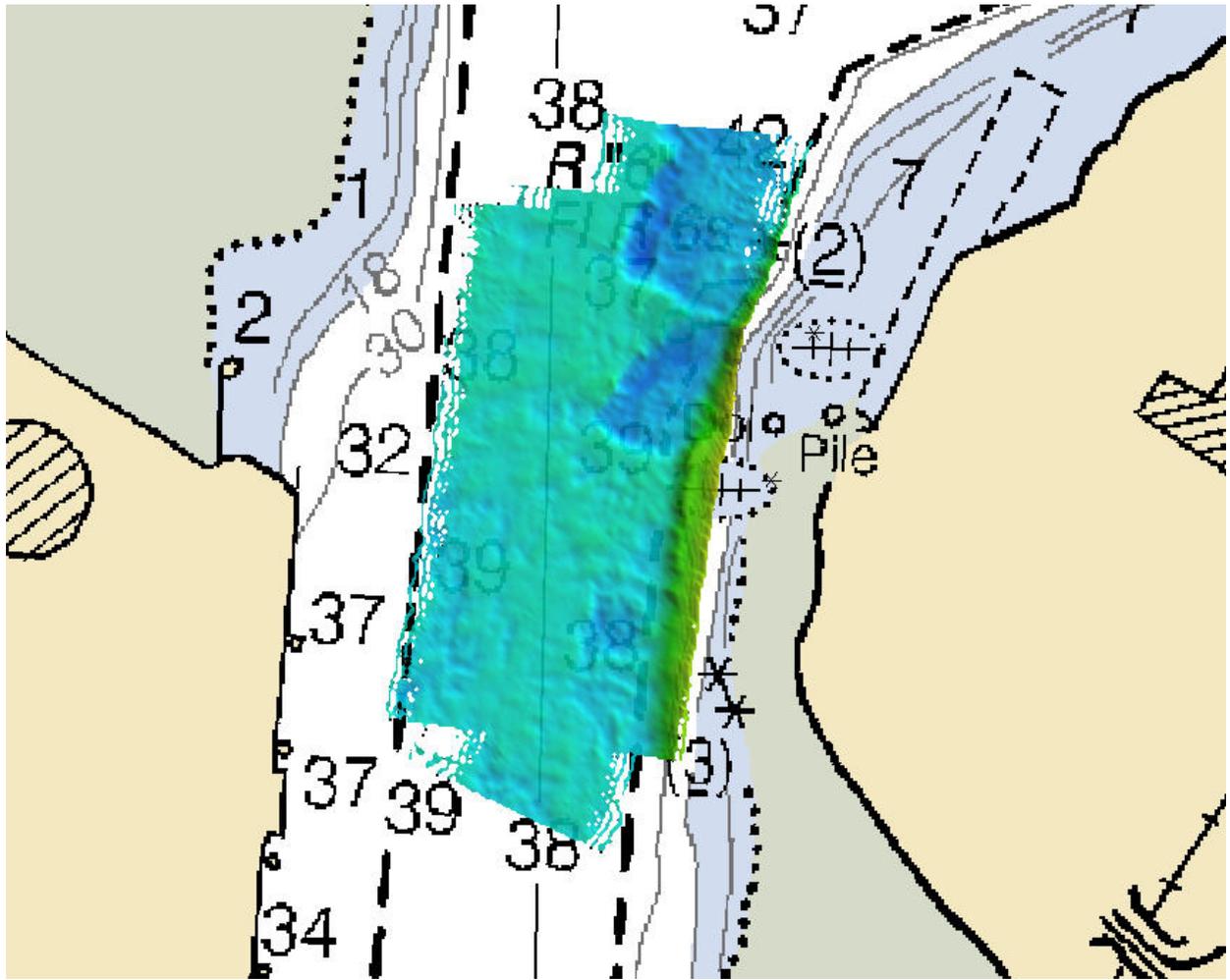


Figure 1.9.1

## 1.10) AWOIS 12443

### Primary Feature for AWOIS Item #12443

**Search Position:** 42° 21' 41.9" N, 071° 02' 36.1" W  
**Historical Depth:** 11.89 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI  
**Technique Notes:** [None]

#### History Notes:

H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT. SWMB LD OF 39 FEET (11.94 METERS) IN LAT. 42-21-41.94N, LONG. 71-02-36.15W. DIVERS DESCRIBE A BLOCK OF RAILROAD TIES LACED (SIC) TOGETHER AS WELL AS OTHER METAL DEBRIS. LD OBTAINED ON A BROKEN RAILROAD TIE STANDING VERTICALLY OFF THE BOTTOM. EVALUATOR RECOMMENDS CHARTING A 39 OBSTN AS SURVEYED. (ENT 5/25/04, SJV)

### Survey Summary

**Survey Position:** 42° 21' 42.0" N, 071° 02' 36.1" W  
**Least Depth:** 12.38 m (= 40.62 ft = 6.771 fm = 6 fm 4.62 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.966$  m ; TVU (TPEv)  $\pm 0.192$  m  
**Timestamp:** 2007-199.13:12:06.405 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 001\_1311  
**Profile/Beam:** 341/69  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is an obstn located within the search radius of AWOIS 12443.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/001_1311	341/69	0.00	000.0	Primary
AWOIS	AWOIS # 12443	0.48	005.3	Secondary
h11736/3002sss500k/2007-164/sonar_data070613170200	0002	10.35	151.0	Secondary
ChartGPs - ENC US5MA11M	Danger 16	13.87	058.9	Secondary (grouped)
h11736/3002sss500k/2007-164/sonar_data070613164900	0001	15.72	334.9	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

40ft (13272\_1, 13270\_1, 13267\_1)

6 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)

## Office Notes

Do not concur. Insignificant object. Remove from chart. Chart present survey soundings.

### Feature Images

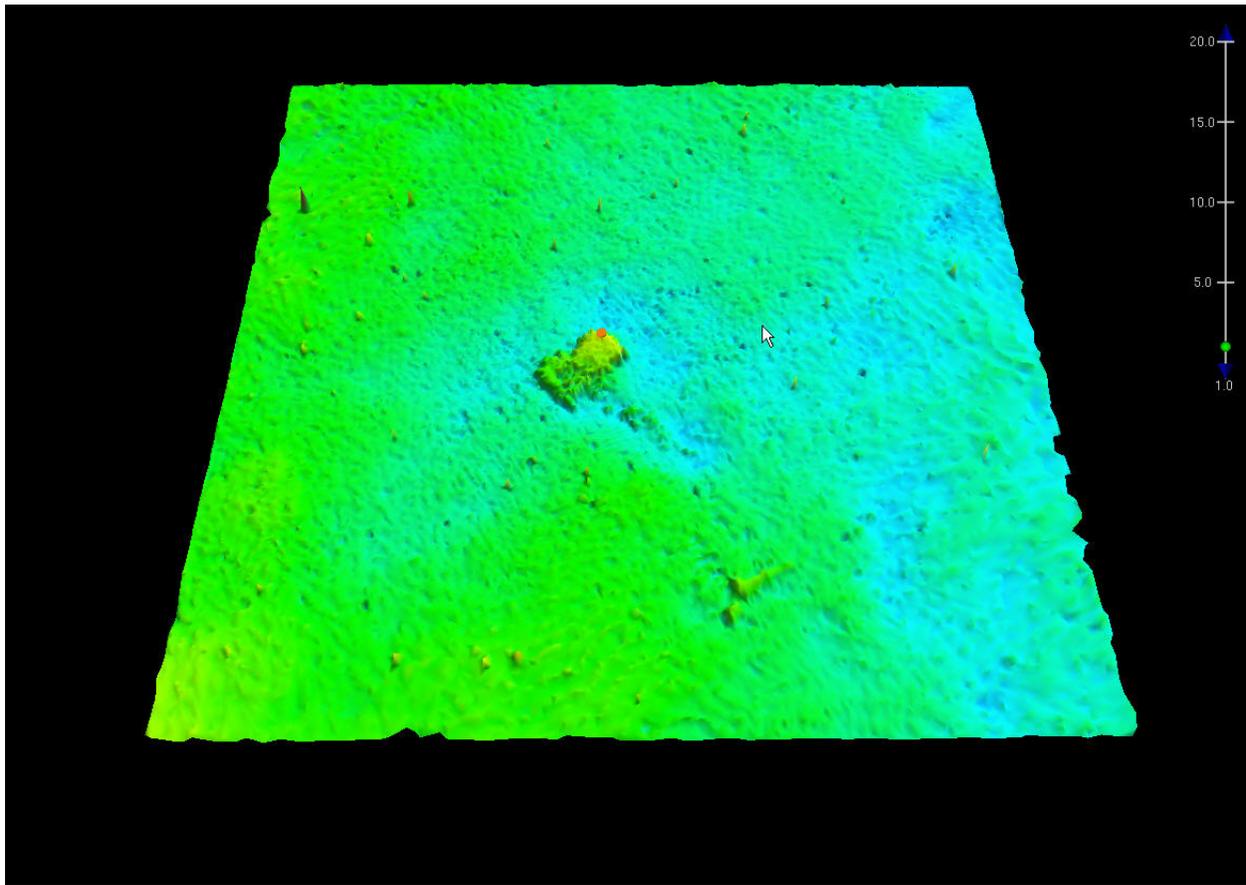


Figure 1.10.1

## 1.11) AWOIS 12439

### Primary Feature for AWOIS Item #12439

**Search Position:** 42° 22' 08.2" N, 071° 03' 10.9" W  
**Historical Depth:** 5.49 m  
**Search Radius:** 50  
**Search Technique:** S2, MB, DI  
**Technique Notes:** [None]

#### History Notes:

HISTORY ■ H10990/01-- OPR-A397-WH; SIDE SCAN SONAR CONTACT IDENTIFIED AS A WRECK. SWMB LD OF 18 FEET (5.53 METERS) IN LAT. 42-22-08.21N, LONG. 71-03-10.88W. EVALUATOR RECOMMENDS CHARTING A 18 WK AS SURVEYED. (ENT 5/25/04, SJV)

### Survey Summary

**Survey Position:** 42° 22' 08.3" N, 071° 03' 11.0" W  
**Least Depth:** 3.14 m (= 10.31 ft = 1.718 fm = 1 fm 4.31 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.213$  m  
**Timestamp:** 2007-207.13:48:38.262 (07/26/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-207 / 013\_1347  
**Profile/Beam:** 1000/124  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-207/013_1347	1000/124	0.00	000.0	Primary
h11736/s3002_mbes/2007-205/046_1751	2268/124	0.65	260.5	Secondary (grouped)
h11736/s3002_mbes/2007-205/046_1751	2262/124	0.89	222.7	Secondary
h11736/s3002_mbes/2007-205/046_1751	2258/124	1.22	222.0	Secondary
AWOIS	AWOIS # 12439	4.82	329.8	Secondary
h11736/3002sss500k/2007-178/sonar_data070627112900	0001	13.37	199.3	Secondary

## Hydrographer Recommendations

[None]

### Cartographically-Rounded Depth (Affected Charts):

10ft (13272\_1, 13270\_1, 13267\_1)

1 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

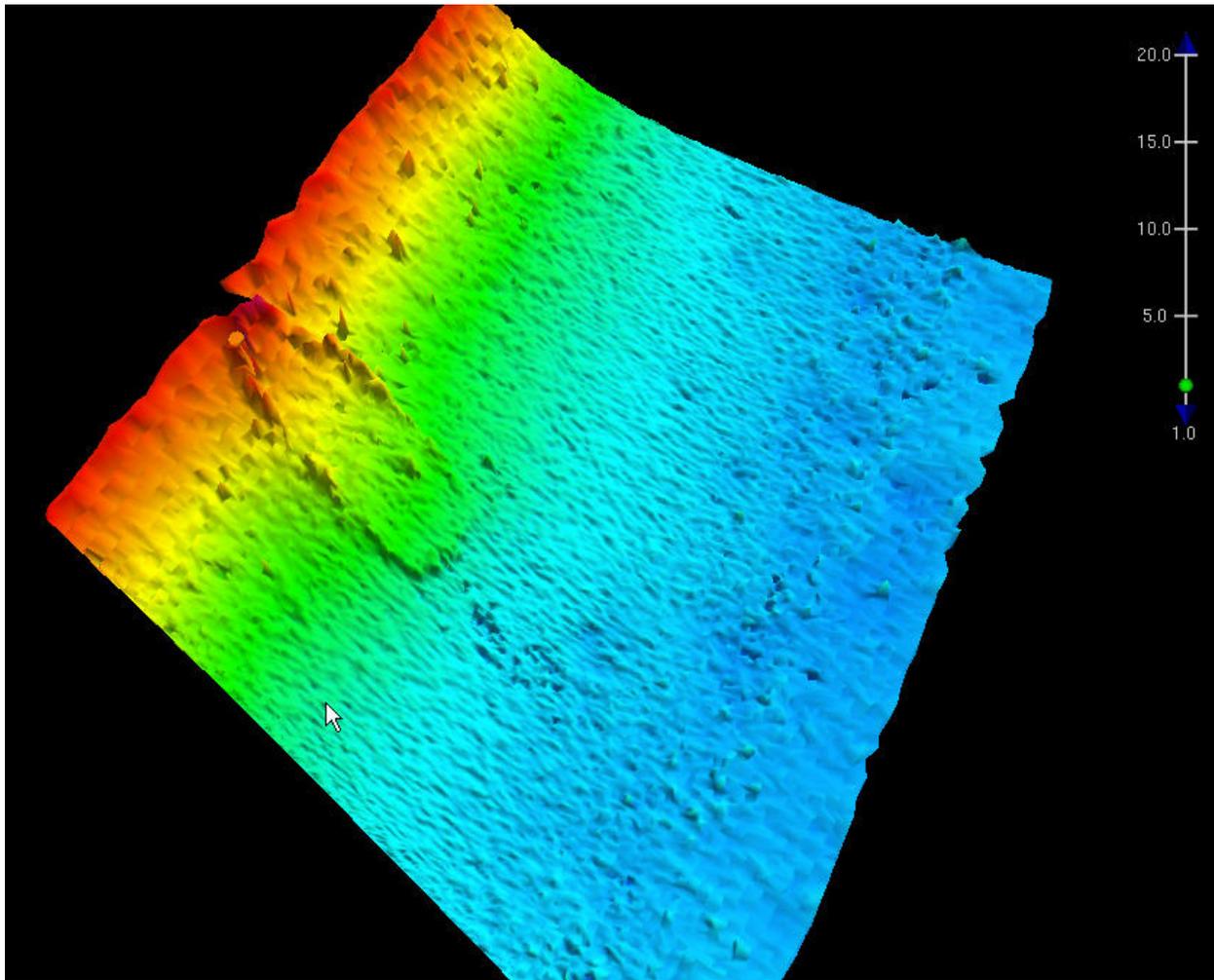
**Geo object 1:** Wreck (WRECKS)

**Attributes:** VALSOU - 3.142 m

## Office Notes

The feature is a charted wreck that was detected with 100% SSS data and MBES data. Revise charted dangerous wreck to surveyed position and least depth.

### Feature Images



*Figure 1.11.1*

**1.12) AWOIS 10207****Primary Feature for AWOIS Item #10207**

**Search Position:** 42° 21' 37.9" N, 071° 01' 50.6" W  
**Historical Depth:** [None]  
**Search Radius:** 50  
**Search Technique:** SD, S2, SWMB, DI  
**Technique Notes:** [None]

**History Notes:**

LNM10/1990(3/7/90)--1 ST CGD; DANG. WK (PA), POSITION SCALED FROM CHART IN LAT 42/21/38.4N, LONG 71/01/51.4W (NAD83). (ENTERED 3/1999 RWD) (NOTE: POSSIBLY COMPLETED BY WHITING). (UP 7/3/03, SJV) ■ H10990/01--OPR-A397-WH; SEVERAL CONTACTS FOUND WITH ONE MATCHING THE AWOIS DESCRIPTION. SWMB OBTAINED A LD OF 12 FEET (3.88 METERS) IN LAT. 42-21-37.94N, LONG. 71-01-50.56W. EVALUATOR RECOMMENDS DELETING CHARTED DANGEROUS SUNKEN WRECK AND CHARTING A 12 WK AS SURVEYED. (UP 5/5/04, SJV)

**Survey Summary**

**Survey Position:** 42° 21' 37.9" N, 071° 01' 50.6" W  
**Least Depth:** 3.84 m (= 12.60 ft = 2.100 fm = 2 fm 0.60 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.963$  m ; TVU (TPEv)  $\pm 0.201$  m  
**Timestamp:** 2007-199.14:45:14.170 (07/18/2007)  
**Survey Line:** h11736 / s3002\_mbes / 2007-199 / 008\_1444  
**Profile/Beam:** 397/124  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

**Remarks:**

AWOIS 10207 search area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. Contact noted in SSS trace, LD obtained with MBES. The object is a wreckage of a tug with charted LD 12 ft.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11736/s3002_mbes/2007-199/008_1444	397/124	0.00	000.0	Primary
AWOIS	AWOIS # 10207	1.13	191.4	Secondary
h11736/s3002_mbes/2007-199/006_1446	194/4	1.44	295.0	Secondary
h11736/3002sss500k/2007-166/sonar_data070615120200	0004	2.25	196.5	Secondary

h11736/3002sss500k/2007-166/sonar_data070615120600	0004	2.83	337.4	Secondary
ChartGPs - ENC US5MA11M	Danger 181	10.88	207.0	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615115900	0001	11.82	354.4	Secondary

## Hydrographer Recommendations

The hydrographer recommends the object LD be updated to reflect current bathy data.

### Cartographically-Rounded Depth (Affected Charts):

12ft (13272\_1, 13270\_1, 13267\_1)

2fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** VALSOU - 3.841 m

## Office Notes

Concur with clarification. Revise the charted dangerous wreck to reflect the surveyed position and least depth.

### Feature Images

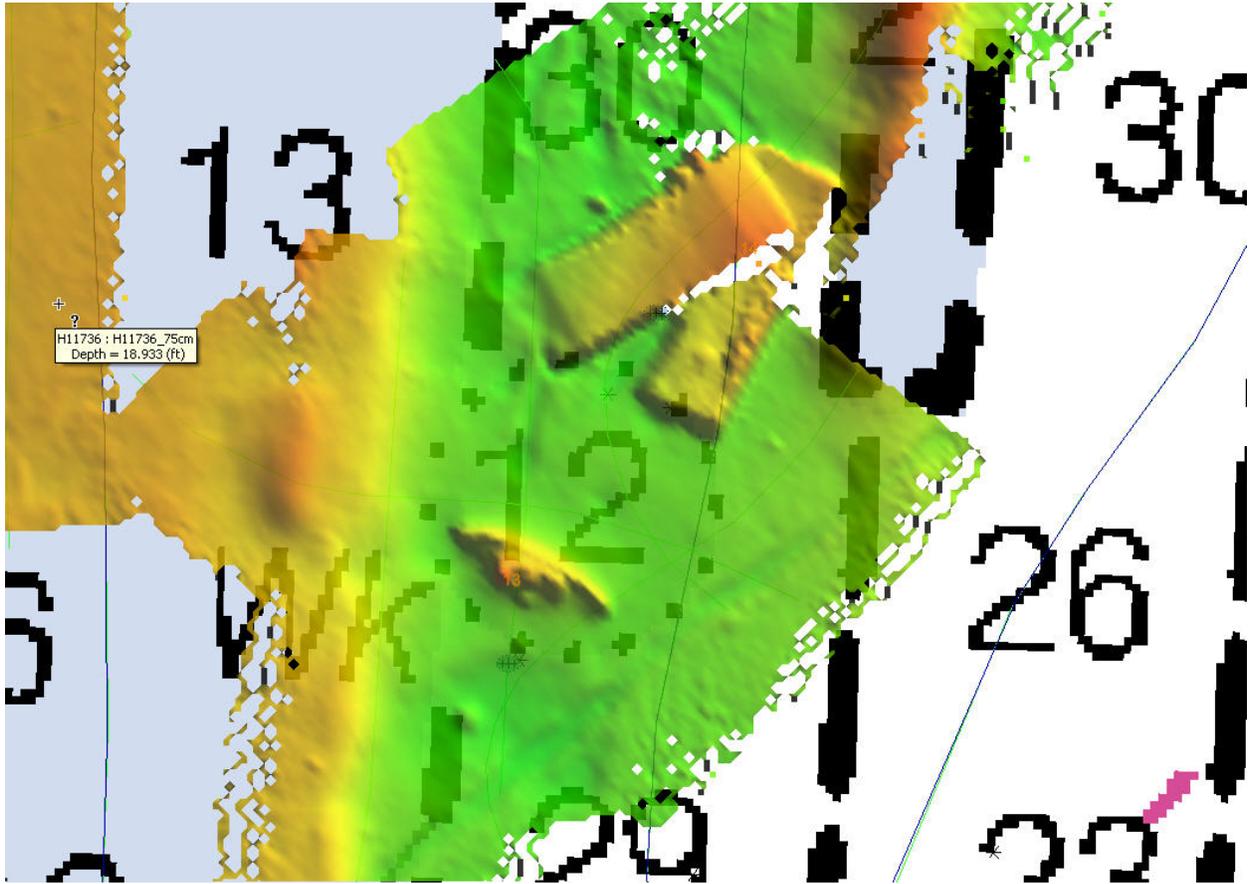


Figure 1.12.1

## 1.13) AWOIS 14035

### Primary Feature for AWOIS Item #14035

**Search Position:** 42° 21' 47.6" N, 071° 02' 16.6" W  
**Historical Depth:** 2.74 m  
**Search Radius:** 50  
**Search Technique:** MB, S2, DI, SD  
**Technique Notes:** [None]

#### History Notes:

L869/02-- A OBSTRUCTION WAS FOUND AT 42/21/47.6 - 71/02/16.6. THE WRECK HAD A LEAST DEPTH OF 9 FOOT.■(ENTERED CEH 6/2007)

### Survey Summary

**Survey Position:** 42° 21' 47.8" N, 071° 02' 16.2" W  
**Least Depth:** 2.49 m (= 8.17 ft = 1.361 fm = 1 fm 2.17 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.961$  m ; **TVU (TPEv)**  $\pm 0.238$  m  
**Timestamp:** 2008-220.14:12:12.038 (08/07/2008)  
**Survey Line:** h11736 / nrt5\_s3002\_em3000\_mbes / 2008-220 / 025\_1411  
**Profile/Beam:** 568/119  
**Charts Affected:** 13272\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1

#### Remarks:

The navigable area was covered with 100% Klein 3000 SSS and 100% Simrad EM3000 MBES, final tides applied. The object is a wreck within search radius of AWOIS 14035. Least depth not obtained due to the presence of a moored vessel over the wreck.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11736/nrt5_s3002_em3000_mbes/2008-220/025_1411	568/119	0.00	000.0	Primary
ChartGPs - ENC US5MA11M	Danger 18	2.59	159.9	Secondary (grouped)
h11736/3002sss500k/2007-166/sonar_data070615122400	0001	6.36	326.1	Secondary
AWOIS	AWOIS # 14035	10.84	051.3	Secondary
h11736/3002sss500k/2007-166/sonar_data070615122400	0002	12.27	010.3	Secondary
h11736/s3002_mbes/2007-199/015_1512	709/4	15.17	025.2	Secondary

## Hydrographer Recommendations

Retain as charted.

### Cartographically-Rounded Depth (Affected Charts):

8ft (13272\_1, 13270\_1, 13267\_1)

1 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** VALSOU - 2.489 m

### Office Notes

Concur with clarification. Feature was developed as part of addendum to H11736. The entire feature was not developed (the eastern facing side of the wreck was not ensonified), but the obtained least depth is shallower than what is charted. Revise charted least depth to 8 feet, and modify charted circular danger curve to reflect the orientation and elongated shape of the observed wreck. Two endpoints of the wreck are 42-21-48.02N, 071-02-16.03W and 42-21-46.97N, 071-02-16.65W. See image of transparent DTM overlaid on chart.

### Feature Images

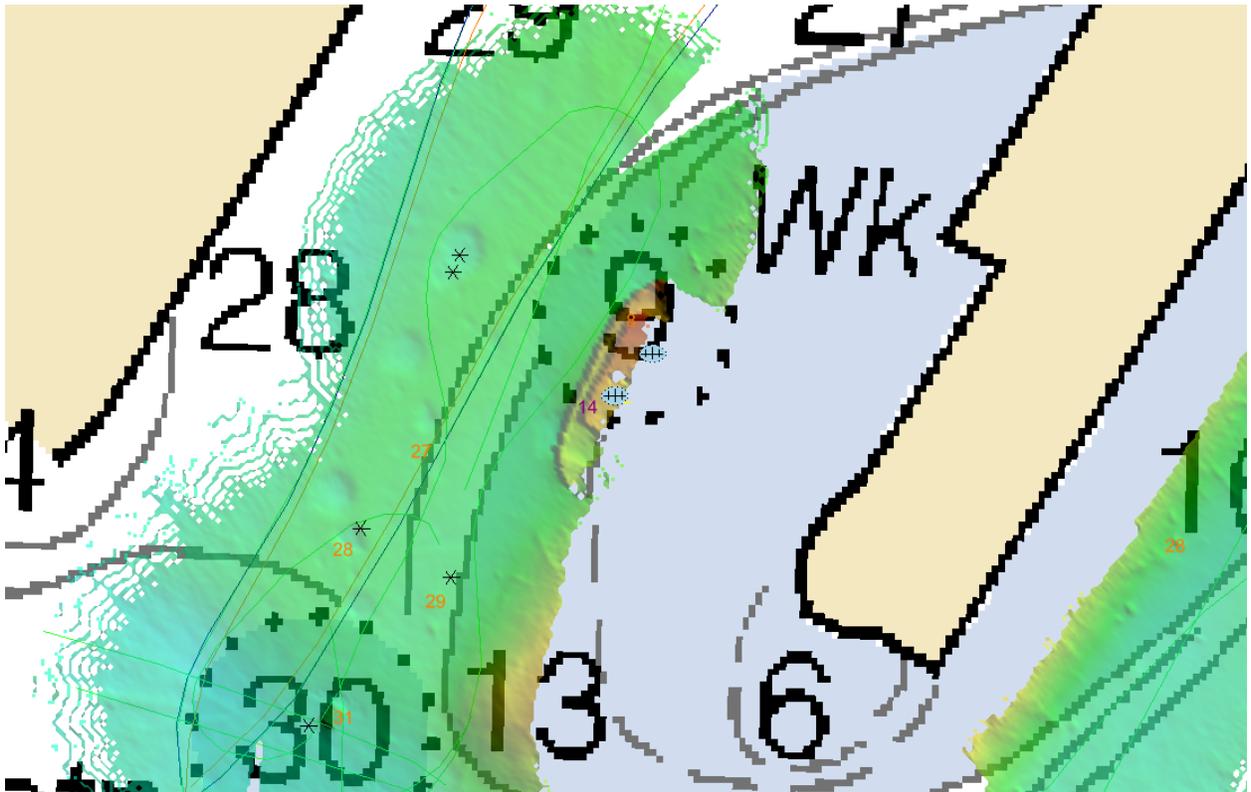


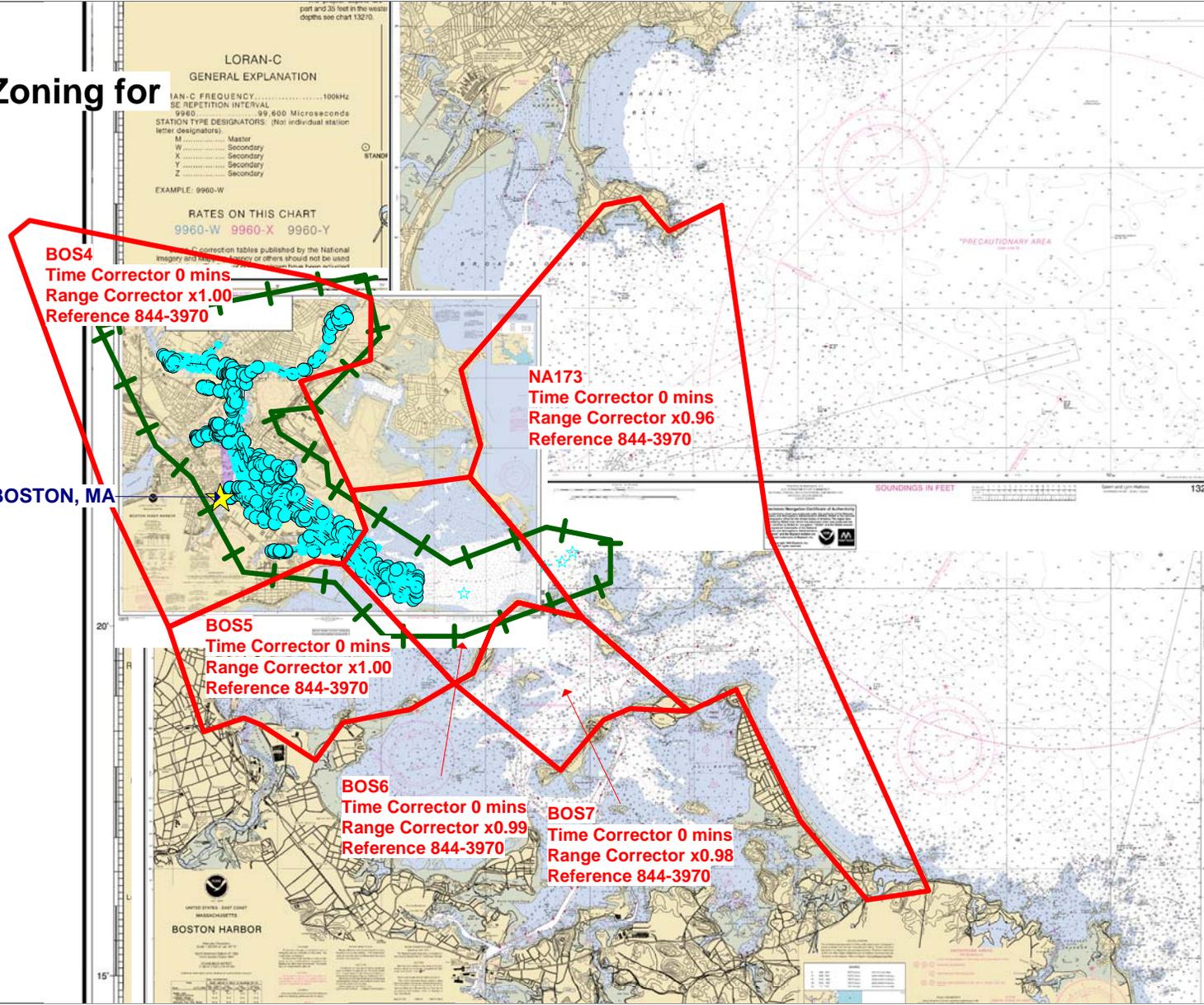
Figure 1.13.1



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
National Ocean Service  
Silver Spring, Maryland 20910



**Preliminary As Final Tidal Zoning for  
OPR-A397-NRT5-2007  
H11736  
Boston Inner Harbor, MA**



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From "[Pothier, Steven](mailto:Steven.R.Pothier@uscg.mil)" <[Steven.R.Pothier@uscg.mil](mailto:Steven.R.Pothier@uscg.mil)>

Sent Tuesday, December 4, 2007 9:20 am

To [Matthew.Jaskoski@noaa.gov](mailto:Matthew.Jaskoski@noaa.gov)

Cc

Bcc

Subject: Reserve Channel Oil Barrier Light

Matt,

I worked with Chief Tim Chase at ANT Boston to verify the position and owner of the aid. We have verified the position and will make the chart correction to relocate the light to 42-20-30.18N 071-02-04.74W. Thanks for bringing it to our attention.

Steven Pothier  
First Coast Guard District  
Waterways Management  
Private Aids to Navigation (PATON)  
408 Atlantic Avenue  
Boston, MA 02110  
(617) 223-8347  
(617) 223-8073 Fax

Mr Mauro,

In processing the hydrographic data acquired in Boston Harbor this summer we've noted a mischarted or relocated AToN in the South Boston Reserve channel. The AToN in question is the private oil barrier light designated as AToN 409 in NOAA's dataset and with current charted position 42°20'31.898" , -071°02'02.198". This light appears to actually be located on a nearby dol (see attached). Does the USCG have any documentation regarding a change to the light location and/or characteristics that you could fwd to me for the purposes of including it in my project report.

Attached is a chartlet of the light in question.

thank you for you help,  
regards,  
Matt Jaskoski

**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT to ACCOMPANY  
SURVEY H11736 (2008)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

**A. AREA SURVEYED**

Survey H11736 was executed 6/13/2007 and concluded on 09/14/2007. All finalized data and reports of survey were submitted to the Atlantic Hydrographic Branch. During the survey acceptance and review process, it was determined additional development was need for under-developed contacts. On 08/07/2008, NRT5 re-developed contacts located in the project area and submitted the data to the Atlantic Hydrographic Branch. Per the addendum memo, a total of 13 contacts were surveyed and least depths were obtained. The final DR body does not contain any descriptive text that makes reference of the addendum survey.

**B. DATA ACQUISITION AND PROCESSING**

**B.1 DATA PROCESSING**

The following software was used to process data at the Atlantic Hydrographic Branch:

HSTP PYDRO version 8.7 (r2586)  
CARIS HIPS/SIPS version 6.1 SP1 HF 1-6  
CARIS Bathy Manager version 2.1 HF 1-3  
CARIS HOM version 3.3  
CARIS S57 Composer version 2.0  
DKART INSPECTOR, version 5.0 Build 732 SP1

**B.2. QUALITY CONTROL**

**B.2.1. H-Cell**

The source depth grids for H11736's nautical chart update include the following products:

<b>Grid Resolution</b>	<b>Source</b>
0.5 meter	MBES data submitted by the field unit. Grid generated at the Atlantic Hydrographic Branch
2 meter	SBES data submitted by the field unit. Grid generated at the Atlantic Hydrographic Branch. This data grid was extracted from the shoal surface and extended to the depth layer
2 meter	Combined grid generated for the AHB 0.5 meter grid and the extracted shoal surface of the 2 meter SBES grid.

The 2m combined grid at was used for the selected sounding set. The selected sounding set was created by extracting a shoal biased, single defined radius of 0.80 millimeters at

chart scale, from and interpolated surface on the combined grid filtering out all interpolated grid nodes. The chart scale selected soundings are a subset of the survey scale selected soundings. A surface model was referenced when selecting the chart scale soundings, to ensure that the selected soundings portrayed the bathymetry within the common area. Chart scale soundings were generated from a Sounding Space Range Table (SSRT) and compared to the ENC soundings for the survey area. It was concluded that results of the SSRT generation was adequate for the compilation and the number of chart scale is 94% of the ENC soundings.

Depth curves were created from a 5m interpolated triangular irregular network (TIN) of the selected sounding set at a scale of 1:10,000 using standard NOAA depth curve intervals and rounding. The 5m interpolated TIN used in the depth curve generation was shifted by -0.229 feet to obtain shoal biasing for contours. The resulting depth curves were utilized during chart scale sounding selection and quality assurance efforts at AHB. The depth curves are forwarded to MCD for reference only. The depth curves are incorporated into the S57 selected soundings deliverable.

The pre-compilation products or components (Stand Alone HOB files (SAHOB)) are detailed in the Pre-Compile Process Log attached at the end of this document. The SAHOB files included depth curves (DEPCNT), sounding selections (SOUNDG), features (SBDARE), Meta objects (M\_COVR and M\_QUAL), and cartographic Blue Notes. The individual SAHOB files were combined into two separate hob files in BASE Manager exported to S57 format in order to create the H-Cell deliverables.

The completed H-Cell was exported as a Base Cell File (ENC.000) in S-57 format with all values in metric units. The metric equivalent ENC.000 file was then converted to NOAA chart units (ENC\_CU.000) with all values measured in feet following NOAA sounding rounding rules.

Chart compilation was performed by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

**The H11736 CARIS H-Cell final deliverables include the following products:**

H11736_CS.000	1: <u>10,000</u> Scale	H11736 H-Cell with Chart Scale Selected Soundings
H11736_SS.000	1: <u>10,000</u> Scale	H11736 Selected Soundings (Survey Scale)

**B.22. Junctions**

Survey H11736 junctions with survey H11737 to the south, as well as prior surveys H10990 and H10991. Present survey soundings compare within 1 to 2 feet with junctioning surveys. Present survey depths are in harmony with the charted hydrography in all other areas.

**C. VERTICAL AND HORIZONTAL CONTROL**

Final vertical correction processing was completed by the field unit/office personnel with no additional correction required by Atlantic Hydrographic Branch. The field

unit/office personnel applied verified water levels in conjunction with the preliminary tidal zoning which was accepted and approved by N/OPSI CO-OPS as the final zoning for H11736. Sounding datum is Mean Lower Low Water (MLLW). Vertical datum is Mean High Water (MHW)

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 19. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements.

## **D. RESULTS AND RECOMMENDATIONS**

**D.1 CHART COMPARISON**                      **13272 (50th Edition, 08/08)**  
Corrected through NM 23/08  
Corrected through LNM 12/08  
Scale 1:10,000

**ENC Comparison**                              **US5MA11M**  
Boston Inner Harbor  
Edition 11  
Application Date 2009-01-15  
Issue Date 2009-02-09  
Chart 13272

**US5MA12M**  
Boston Harbor  
Edition 09  
Application Date 2009-02-10  
Issue Date 2009-02-10  
Chart 13270

### **D.2 Hydrography**

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section “D” and Appendix 1&2 of the Descriptive Report. The following exceptions are noted:

- a. The field unit was not directed to obtain bottom samples in the Letter Instructions, therefore all charted sea bed characteristic (SBDARE) objects were retained as charted. The spatial and feature attributes of the SBDARE point features were carried forward from the ENC US5MA11M.
- b. A *dangerous wreck* exists at 42°21’12.892” N, 071°02’31.659” W with a LD of 2.8 ft. The position of the wreck is approximately 5 meters northwest of a charted gridiron. Side Scan Sonar imagery and multibeam bathymetry confirm an underwater wreck feature however, it does not confirm if the feature is at rest on the gridiron or on the seabed in close proximity to the gridiron. The DR does not elaborate on the feature. The Atlantic Hydrographic Branch recommends charting the area as a wreck area and delete the charted Gridiron feature.
- c. The *rock awash* charted in Latitude 40°23’40.3” N, Longitude 071°00’57.0”W on NOS Chart 13272, 50th edition does not appear in the bathymetric or side scan data. Side scan data collected in correlation with this feature is at 100%

coverage. The field unit makes not reference of this feature therefore, it is recommended to retain this feature as charted as noted in the blue notes submitted with this data.

- d. Numerous *obstructions* dangerous to surface navigation exist in the charted Latitude 42°21'45.201" N, Longitude 071°02'19.473" W in the lower left coordinate and Latitude 42°21'47.636" N, Longitude 071°02'16.657" W in the upper right on NOS Chart 13272, 50th edition. These obstructions were charted as an obstruction area due to there close proximity on the largest scale chart for survey area. The least depth of the obstruction area was found to be 27.501ft however, the obstruction area exists within a depth area and thus was encoded with a VALSOU of UNKOWN according to Nautical Chart Manual volume 3.
- e. Several *submerged ruin* areas were modified from the charted submerged ruin area and noted in the submitted blue notes as well as shown on the submitted H11736\_CS layer.
  1. Two obstructions were located within two meters of the charted submerged ruin area in the Little Mystic Channel centered in Latitude 42°22'49.093" N, Longitude 071°03'04.464"W on NOS Chart 13272, 50th edition . AHB recommends extending the charted submerged pier ruins into the channel to encompass two obstructions submitted by the field unit.
  2. AHB recommends extending the charted submerged ruin area between Pier 10 and Pier 8 on the west side of Boston Inner Harbor centered in Latitude 42°22'33.951" N, Longitude 071°02'55.312"W on NOS Chart 13272, 50th edition to encompass the surveyed position
  3. AHB recommends modifying the position of the charted submerged ruin area adjacent to Pier 2 on the west side of Boston Inner Harbor centered in Latitude 42°21'14.614" N, Longitude 071°02'36.917"W on NOS Chart 13272, 50th edition to the surveyed position.
  4. AHB recommends modifying the position of the charted submerged ruin area adjacent to Pier 6 on the west side of Boston Inner Harbor centered in Latitude 42°21'00.615" N, Longitude 071°02'09.891"W on NOS Chart 13272, 50th edition to the surveyed position and extents.
- f. Several *charted wrecks* were investigated on the eastern shore of the inner Boston Harbor. These wrecks are in the charted in Latitude 42°22'23.579" N, Longitude 071°02'39.774" W in the lower left coordinate and Latitude 42°22'29.783" N, Longitude 071°02'29.722" W in the upper right on NOS Chart 13272, 50th edition . The field unit performed an investigation on these wrecks using side scan sonar in correlation with GPS. These wrecks were not disproved by the field unit however, no bathymetric data exists for these features. It is recommended to retain these features as charted.

## **D.2 ADDITIONAL RESULTS**

### **D.2.1 Aids to Navigation**

The *AToN 409 (Reserved Channel Oil Barrier Light)* charted in Latitude 42°20'30.1" N, Longitude 071°02'04.7" W on NOS Chart 13272, 50th edition was previously charted in Latitude 42°20'31.898" N, Longitude 071°02'02.198" W. This item is correctly shown on the latest edition of the chart. No changes to charting are recommended.

#### **D.2.2 Dangers to Navigation**

AWOIS items 10210 (charted in Latitude 42°22'20.5" N, Longitude 071°03'03.5" W on NOS Chart 13272, 50th edition), 10214 (charted in Latitude 42°23'03.40" N, Longitude 071°03'00.80" W on NOS Chart 13272, 50th edition), 10237 (charted in Latitude 42°23'37.6" N, Longitude 071°00'57.5" W on NOS Chart 13272, 50th edition) were disproved by both the field investigation unit and the Atlantic Hydrographic Branch. It is recommended that these items be deleted from the chart.

AWOIS item 12452 charted in Latitude 42°22'45.574" N, Longitude 071°02'52.644" W on NOS Chart 13272, 50th edition was submitted by the field unit as a DToN. The submitted depth included preliminary tides. The final depth with processed final tides submitted to the Atlantic Hydrographic branch is approximately 1.5 ft. shoaler. It is recommended that the item be updated to the surveyed least depth.

### **D.3. MISCELLANEOUS**

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland. See Section D.1. of this report for a list of the Raster Charts and Electronic Navigation Charts (ENC) used for compiling the present survey:

#### **D.4. ADEQUACY OF SURVEY**

The present survey is adequate to supersede the charted bathymetry within the common area. Any features not specifically addressed either in the H-Cell BASE Cell File or the Blue Notes should be retained as charted. Refer to the Descriptive Report for further recommendations by the hydrographer.

## AHB COMPILATION LOG

General Survey Information	
REGISTRY No.	<a href="#">H11736</a>
PROJECT No.	<a href="#">OPR-A397_NRT5-07</a>
FIELD UNIT	<a href="#">NRT-05</a>
DATE OF SURVEY	<a href="#">09/14/2007; Addendum 08/07/2008</a>
LARGEST SCALE CHART	<a href="#">13272, 50<sup>th</sup> Ed., 21080801</a>
ADDITIONAL CHARTS	<a href="#">N/A</a>
SOUNDING UNITS	<a href="#">feet</a>
COMPILER	<a href="#">SELF</a>

Source Grids	File Name
	H:\Compilation\HXXXXX XXXX XXXX\AHB_HXXXXX\
	<a href="#">E-SAR Final Products\GRIDS\AHB_H11736_MBES_p5m_Final</a>
	<a href="#">E-SAR Final Products\GRIDS\AHB_H11736_VBES_2m</a>
	<a href="#">E-SAR Final Products\GRIDS\AHB_H11736_VBES_2m_Extract</a>
Surfaces	File Name
	H:\Compilation\HXXXXX XXXX-XXXX\AHB_HXXXXX\COMPILE\GRIDS\
<i>Combined</i>	<a href="#">\Combined\AHB_H11736_2m_Combined.hns</a>
<i>Interpolated TIN</i>	<a href="#">AHB_H11736_2m_Interpolated.hns ; AHB_H11736_5m_Interpolated.hns</a>
<i>Shifted Interpolated TIN</i>	<a href="#">H11736__AHB_5m_Interpolated_Shifted.hns</a>
<i>Product Surface</i>	<a href="#">N/A (skunk strip SBES w/ MBES developments)</a>
Final HOBs	File Name
	H:\Compilation\HXXXXX XXXX-XXXX\AHB_HXXXXX\COMPILE\Final_Hobs\
<i>Survey Scale Soundings</i>	<a href="#">H11736_SS_Soundings.hob</a>
<i>Chart Scale Soundings</i>	<a href="#">H11736_CS_Soundings.hob</a>
<i>Contour Layer</i>	<a href="#">H11736_Contours.hob</a>
<i>Feature Layer</i>	<a href="#">H11736_Features.hob</a>
<i>Meta-Objects Layer</i>	<a href="#">H11736_MetaObjects.hob</a>
<i>Blue Notes</i>	<a href="#">H11736_Bluenotes.hob</a>
<i>ENC Retain Soundings</i>	<a href="#">H11736_ENC_Retain_Soundings.hob</a>

Meta-Objects Attribution	
Acronym	Value
<b>M_COVR</b>	
CATCOV	<a href="#">1</a>
SORDAT	<a href="#">20080807</a>
SORIND	<a href="#">US,US,survy,H11736</a>
<b>M_QUAL</b>	
CATZOC	<a href="#">1</a>
INFORM	<a href="#">Registry Number, Project Number, Vessel</a>
POSACC	<a href="#">10</a>
SORDAT	<a href="#">20080807</a>
SORIND	<a href="#">US,US,survy,H11736</a>
SUREND	<a href="#">20080807</a>
SURSTA	<a href="#">20070613</a>
<b>DEPARE</b>	

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This Document is for Office Process use only and is intended to supplement, not supersede or replace, information/recommendations in the Descriptive or Evaluation Reports

DRVALV 1	2.887
DRVALV2	58.038
SORDAT	20080807
SORIND	US,US,survey,H11736
<b>M_CSCL</b>	
CSCALE	N/A
SORDAT	N/A
SORIND	N/A

SPECIFICATIONS:

- I. COMBINED SURFACE:
  - a. Number of ESAR Final Grids: 2
  - b. Resolution of Combined (m): 2 meter resolution
  
- II. SURVEY SCALE SOUNDINGS (SS):
  - a. Radius concur
  - b. Shoal biased concur
  - c. Use Single-Defined Radius (mm at Map Scale): ; Radius Value = 0.80
  - d. Queried Depth of All Soundings
    - i. Minimum: 2.821 ft
    - ii. Maximum: 57.776 ft
  
- III. INTERPOLATED TIN SURFACE:
  - a. Resolution (m): 2 meter, 5 meter
  - b. Linear
  - c. Shifted value: 5 meter [-0.229m (feet), (≤ 10 fathoms)]  
[-1.372m (fathoms), (> 10 fathoms)]

*\*The 5 meter shifted surface was used to produce depth curves*
  
- IV. CONTOURS:
  - a. Use a Depth List: HXXXXX\_NOAA\_depth\_curves\_list.txt
  - b. Line Object: DEPCNT
  - c. Value Attribute: VALDCO
  
- V. FEATURES:
  - a. Total Number of Features: 52
  - b. Number of Insignificant Features: 0
  
- VI. CHART SURVEY SOUNDINGS (CS):
  - a. Number of ENC CS Soundings: 1700
  - b. Radius concur
  - c. Shoal biased concur
  - d. Use Single-Defined Radius: m on the ground
    - i. Radius Value (m):
    - ii. Or use a Sounding Space Range Table (if applicable): H11736\_SSR.txt
  - e. Filter: Interpolated != 1 concur
  - f. Number Survey CS Soundings: 1584
  
- VII. Notes: The CS sounding layer is a sub-set of the SS sounding layer. These soundings (CS soundings) were generated from an interpolated surface of the selected soundings, ensuring that no interpolated grid nodes were used to produce the CS sounding layer

[Type text]

**APPROVAL SHEET**  
**H11736**

**Initial Approvals:**

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, representation of critical depths, cartographic symbolization, and verification or disproval of charted data. All revisions and additions made to the H-Cell files during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with National Ocean Service and Office of Coast Survey requirements except where noted in the Descriptive Report and the Evaluation Report.

All final products have undergone a comprehensive reviews per the Hydrographic surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

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**Vanessa R. Self**  
Physical Scientist  
Atlantic Hydrographic Branch

I have reviewed the H-Cell files, accompanying data, and reports. This survey and accompanying Marine Chart Division deliverables meet National Ocean Service requirements and standards for products in support of nautical charting except where noted.

Approved: \_\_\_\_\_  
**Shepard Smith**  
Commander, NOAA  
Chief, Atlantic Hydrographic Branch