	NOAA Form 76-35A	
National	U.S. Department of Commerce Oceanic and Atmospheric Administration National Ocean Survey	
I	DESCRIPTIVE REPORT	
Type of Survey:	Navigable Area	
Registry Number:	H12431	
	LOCALITY	
State:	New York and Rhode Island	
General Locality:	Block Island Sound	
Sub-locality:	10 NM South of Block Island	
	2012	
	CHIEF OF PARTY CDR Lawrence T. Krepp	
	LIBRARY & ARCHIVES	
Date:		

H12431

NOAA FORM 77-28U.S. DEPARTMENT OF COMMERCEREGISTRY NUMBER:(11-72)NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATIONREGISTRY NUMBER:			
HYDROGRAPHIC TITLE SHEETH12431			
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:	New York and Rhode Island		
General Locality:	l Locality: Block Island Sound		
Sub-Locality:	10 NM South of Block Island		
Scale:	cale: 20000		
Dates of Survey:	08/25/2012 to 08/29/2012	08/25/2012 to 08/29/2012	
Instructions Dated:	04/12/2012	04/12/2012	
Project Number:	OPR-B363-TJ-12	OPR-B363-TJ-12	
Field Unit:	NOAA Ship Thomas Jefferson	NOAA Ship Thomas Jefferson	
Chief of Party: CDR Lawrence T. Krepp			
Soundings by:	oundings by: Multibeam Echo Sounder		
Imagery by: Multibeam Echo Sounder Backscatter			
Verification by:	erification by: Atlantic Hydrographic Branch		
Soundings Acquired in: meters at Mean Lower Low Water			

Remarks:

The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via http://www.ngdc.noaa.gov/.

# **Table of Contents**

<u>A. Area Surveyed</u>	<u>1</u>
A.1 Survey Limits	<u>1</u>
A.2 Survey Purpose	<u>3</u>
A.3 Survey Quality	<u>3</u>
A.4 Survey Coverage	<u>3</u>
A.5 Survey Statistics	<u>4</u>
A.6 Shoreline	<u>5</u>
A.7 Bottom Samples	<u>5</u>
B. Data Acquisition and Processing	<u>5</u>
B.1 Equipment and Vessels	<u>5</u>
B.1.1 Vessels	<u>5</u>
B.1.2 Equipment	<u>5</u>
B.2 Quality Control	<u>6</u>
B.2.1 Crosslines	<u>6</u>
B.2.2 Uncertainty	<u>6</u>
B.2.3 Junctions	<u>7</u>
B.2.4 Sonar QC Checks	<u>7</u>
B.2.5 Equipment Effectiveness	<u>7</u>
B.2.6 Factors Affecting Soundings	<u>8</u>
B.2.7 Sound Speed Methods	<u>8</u>
B.2.8 Coverage Equipment and Methods	
B.3 Echo Sounding Corrections	<u>8</u>
B.3.1 Corrections to Echo Soundings	<u>8</u>
B.3.2 Calibrations	<u>8</u>
B.4 Backscatter	<u>8</u>
B.5 Data Processing	<u>9</u>
B.5.1 Software Updates	<u>9</u>
B.5.2 Surfaces	<u>9</u>
C. Vertical and Horizontal Control	
C.1 Vertical Control	
C.2 Horizontal Control	
D. Results and Recommendations	. <u>11</u>
D.1 Chart Comparison	<u>11</u>
D.1.1 Raster Charts	. <u>11</u>
D.1.2 Electronic Navigational Charts	<u>13</u>
D.1.3 AWOIS Items	<u>13</u>
D.1.4 Charted Features	. <u>14</u>
D.1.5 Uncharted Features	. <u>14</u>
D.1.6 Dangers to Navigation	<u>15</u>
D.1.7 Shoal and Hazardous Features	. <u>15</u>
D.1.8 Channels	. <u>15</u>
D.2 Additional Results.	
D.2 Construction and Dredging	. <u>16</u>

D.2.1 Shoreline.	. 15
D.2.2 Prior Surveys	
D.2.3 Aids to Navigation.	
D.2.4 Overhead Features	
D.2.5 Submarine Features	15
D.2.6 Ferry Routes and Terminals.	15
D.2.7 Platforms	16
D.2.8 Significant Features	16
E. Approval Sheet	17
<u>F. Table of Acronyms</u>	

# **List of Tables**

Table 1: Survey Limits	<u>1</u>
Table 2: Hydrographic Survey Statistics.	
Table 3: Dates of Hydrography	
Table 4: Vessels Used	
Table 5: Major Systems Used	
Table 6: Survey Specific Tide TPU Values	
Table 7: Survey Specific Sound Speed TPU Values.	
Table 8: Junctioning Surveys.	
Table 9: Software Updates.	
Table 10: CARIS Surfaces.	
Table 11: NWLON Tide Stations.	
Table 12: Water Level Files (.tid).	
Table 13: Tide Correctors (.zdf or .tc).	
Table 14: USCG DGPS Stations.	
Table 15: Largest Scale Raster Charts	
Table 16: Largest Scale ENCs.	

# **List of Figures**

Figure 1: Extents of survey overview for H12431	2
Figure 2: Area of MBES coverage beyond survey limits due to AWOIS search	
Figure 3: Coverage graphic of H12431, 4m BASE Surface	
Figure 4: H12431 and junction with H12386 to the West.	
Figure 5: Areas of disagreement between H12431 and raster chart 13215	
Figure 6: Areas of disagreement between H12431 and raster chart 13205.	
Figure 7: Areas of disagreement between H12431 and US5RI10M ENC.	
Figure 8: Bow and stacks of wrecks visible in 50cm BASE surface; assigned AWOIS wreck verified by	
H12431	.14
Figure 9: Subset view of AWOIS wreck verified by H12431	

## **Descriptive Report to Accompany Survey H12431**

Project: OPR-B363-TJ-12 Locality: Block Island Sound Sublocality: 10 NM South of Block Island Scale: 1:20000 August 2012 - August 2012 **NOAA Ship Thomas Jefferson** Chief of Party: CDR Lawrence T. Krepp

## A. Area Surveyed

Survey is 3 nautical miles south of Block Island, R.I.

## A.1 Survey Limits

Data was acquired within the following survey limits:

Northeast Limit	Southwest Limit
41.107 N	41.038 N
71.515 W	71.667 W

Table 1: Survey Limits

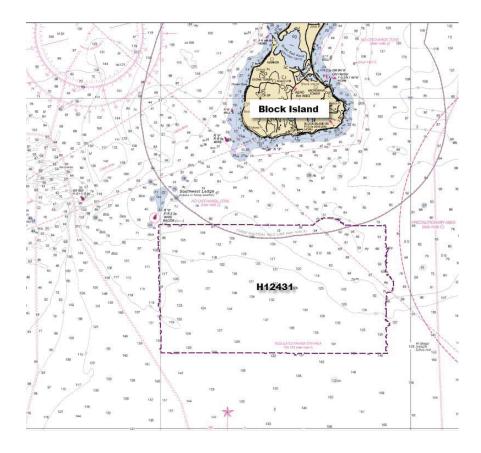


Figure 1: Extents of survey overview for H12431

MBES data was acquired outside of the survey limits where AWOIS search radii exist.

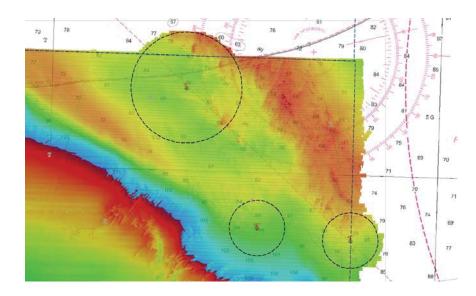


Figure 2: Area of MBES coverage beyond survey limits due to AWOIS search.

## A.2 Survey Purpose

The purpose of this survey is to support safe navigation by updating nautical charting products with contemporary hydrographic data.

## A.3 Survey Quality

The entire survey is adequate to supersede previous data.

This hydrographic survey was completed as specified by Hydrographic Survey Letter Instructions OPR-B363-TJ-12, dated 12th April, 2012. No additional work is needed to complete this survey. No changes significant to navigation have been noted and it is recommended that this survey receive normal processing priority.

## A.4 Survey Coverage

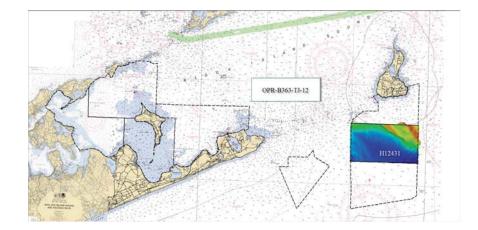


Figure 3: Coverage graphic of H12431, 4m BASE Surface.

Survey Coverage was in accordance with the requirements in the Project Instructions and the HSSD.

## A.5 Survey Statistics

The following table lists the mainscheme and crossline acquisition mileage for this survey:

	HULL ID	<i>S222</i>	Total
	SBES Mainscheme	0	0
	MBES Mainscheme	567.86	567.86
Lidar Mainscheme		0	0
	SSS Mainscheme	0	0
SBES/MBES Combo LNM Mainscheme		0	0
	SBES/SSS Combo Mainscheme	0	0
	MBES/SSS Combo Mainscheme	0	0
	SBES/MBES Combo Crosslines	24.67	24.67
	Lidar Crosslines	0	0
Numb Sampl	er of Bottom es		15
Numb	er of DPs		0
Number of Items Items Investigated by Dive Ops			0
Total Number of SNM			26.9

Table 2: Hydrographic Survey Statistics

The following table lists the specific dates of data acquisition for this survey:

Survey Dates
08/25/2012
08/26/2012
08/27/2012
08/28/2012
08/29/2012

Table 3: Dates of Hydrography

### A.6 Shoreline

Shoreline was investigated in accordance with the Project Instructions and the HSSD.

## **A.7 Bottom Samples**

Bottom Samples were acquired in accordance with the Project Instructions or the HSSD.

## **B.** Data Acquisition and Processing

## **B.1 Equipment and Vessels**

Refer to the Data Acquisition and Processing Report (DAPR) for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods. Additional information to supplement sounding and survey data, and any deviations from the DAPR are discussed in the following sections.

#### **B.1.1 Vessels**

The following vessels were used for data acquisition during this survey:

Hull ID	S222
LOA	208 feet
Draft	14 meters

Table 4: Vessels Used

#### **B.1.2** Equipment

The following major systems were used for data acquisition during this survey:

Manufacturer	Model	Туре
Reson	7125 ROV	MBES
Applanix	POSMV	Vessel Attitude System
Brooke Ocean	MVP 100	Sound Speed System

Table 5: Major Systems Used

NOAA Ship Thomas Jefferson (S222) used the Reson 7125 multibeam echo sounder (MBES) and Brooke Ocean MVP 100 to acquire soundings and sound velocity profiles, respectively. Vessel configuration, equipment operation and data acquisition and processing were consistent with specifications described in the DAPR.

## **B.2 Quality Control**

#### **B.2.1** Crosslines

Crossline comparison was conducted using the difference surface method in CARIS BathyDataBase. Crosslines agreed very well with main scheme bathymetry, in most cases less than 10cm of difference was noticed. Computed statistics from the difference surface: mean: 0.032m, stdev: 0.045m.

#### **B.2.2 Uncertainty**

The following survey specific parameters were used for this survey:

Measured	Zoning
Ometers	0.2meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
S-222	N/Ameters/second	1meters/second	.2meters/second

Table 7: Survey Specific Sound Speed TPU Values

Total Propagated Uncertainty values for survey H12431 were derived from a combination of fixed values for equipment and vessel characteristics, as well as field assigned values for water level and sound speed uncertainties. Uncertainty stemming from survey equipment and vessel configuration were set by the field unit in accordance with the NOAA Field Procedure Manual (ed 2011), Appendix 4, table 4.9. Sound speed uncertainty was based on the frequency and location of MVP casts, in accordance with the guidance set by Appendix 4 of the FPM. Tidal uncertainties were not provided by NOAA's Center for Operational Oceanographic Products and Services (CO-OPS), and were derived by the field based on historical trends. The uncertainty values were applied to the depth soundings via the Tide Value section of the CARIS Compute TPU function.

#### **B.2.3 Junctions**

There was one contemporary survey that junctions with survey H12431.

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H12386	1:20000	2011	NOAA Ship THOMAS JEFFERSON	W

Table 8: Junctioning Surveys

#### <u>H12386</u>

H12386 agreed well with H12431 with an average difference of 0.3 meters, standard deviation of 0.1 meters and a maximum difference of 0.8 meters.

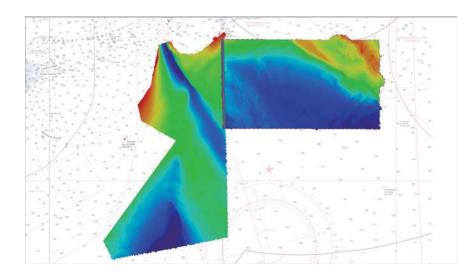


Figure 4: H12431 and junction with H12386 to the West.

#### **B.2.4 Sonar QC Checks**

Sonar system quality control checks were conducted as detailed in the quality control section of the DAPR.

#### **B.2.5 Equipment Effectiveness**

#### B.2.5.1None Exist

There were no conditions or deficiencies that affected equipment operational effectiveness.

#### **B.2.6 Factors Affecting Soundings**

#### B.2.6.1 None Exist

There were no other factors that affected corrections to soundings.

#### **B.2.7 Sound Speed Methods**

Sound Speed Cast Frequency: For H12431, operations were conducted 24 hours per day. During night operations the MVP towfish was removed from the water to avoid fouling with fishing gear. This led to a cast frequency of approximately 90 minutes during night operations. During the daylight, S-222 conducts Moving Vessel Profiler casts approximately every 20 minutes. All sound velocity correctors were applied to the data using the "nearest in time" option in CARIS HIPS/SIPS.

Data was processed often during acquisition and special attention was given to sound velocity issues. No significant sound velocity issues existed in H12431.

#### **B.2.8** Coverage Equipment and Methods

99.80% of nodes in H12431 contained 5 or more soundings.

## **B.3 Echo Sounding Corrections**

### **B.3.1** Corrections to Echo Soundings

Lines for H12431 use verified tides from COOPS instead of TCARI or ERS / Vdatum.

### **B.3.2** Calibrations

All sounding systems were calibrated as detailed in the DAPR.

## **B.4 Backscatter**

Backscatter was logged as an 7k file and submitted directly to the Hydrographic Processing Branch. It is not included with the data submitted to the Branch.

## **B.5 Data Processing**

### **B.5.1 Software Updates**

The following software updates occurred after the submission of the DAPR:

Manufacturer	Name	Version	Service Pack	Hotfix	Installation Date	Use
Caris	HIPS/SIPS	7.1	2	6	02/07/2013	Processing

Table 9: Software Updates

The following Feature Object Catalog was used: NOAA Profile Field V5.2

#### **B.5.2 Surfaces**

The following CARIS surfaces were submitted to the Processing Branch:

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12431_50cm_MLLW_CUBE_Final	CUBE	50 centimeters	0 meters - 20 meters	NOAA_0.5m	Object Detection
H12431_2m_MLLW_CUBE_Final	CUBE	2 meters	18 meters - 40 meters	NOAA_2m	Complete MBES
H12431_4m_MLLW_CUBE_Final	CUBE	4 meters	35 meters - 80 meters	NOAA_4m	Complete MBES
H12431_4m_MLLW_CUBE_ Final_Combined	CUBE	4 meters	0 meters - 80 meters	N/A	Complete MBES

Table 10: CARIS Surfaces

Per section 5.2.2.1 of the NOAA HSSD Manual (2012 ed), all MBES data was gridded according to depth: 0.5m resolution for depths ranging from 0-20m, 2m resolution for depths ranging 18-40m, and 4m resolution for depths ranging 35-80m.

## **C. Vertical and Horizontal Control**

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying HVCR.

## **C.1 Vertical Control**

The vertical datum for this project is Mean Lower Low Water.

Standard Vertical Control Methods Used:

Discrete Zoning

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID		
Newport, RI	8452660		

Table 11: NWLON Tide Stations

File Name	Status
8452660.tid	Final Approved

Table 12: Water Level Files (.tid)

File Name	Status	
B363TJ2012CORP.zdf	Final	

 Table 13: Tide Correctors (.zdf or .tc)

A request for final approved tides was sent to N/OPS1 on 09/19/2012. The final tide note was received on 10/05/2012.

## C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

The following DGPS Stations were used for horizontal control:

DGPS Stations Moriches, NY (293kHz)

Table 14: USCG DGPS Stations

## **D.** Results and Recommendations

## **D.1 Chart Comparison**

#### **D.1.1 Raster Charts**

The following are the largest scale raster charts, which cover the survey area:

Chart	Scale	Edition	Edition Date	LNM Date	NM Date
13215	1:40000	20	02/2011	02/08/2011	02/19/0011
13205	1:80000	39	12/2010	12/18/2010	12/14/2010

Table 15: Largest Scale Raster Charts

<u>13215</u>

Generally, surveyed soundings agreed within 2 feet of charted soundings. In one area, in the northeastern portion of the sheet, differences of up to 8 feet between surveyed and charted soundings were discovered. The surveyed soundings in this area were shoaler than the charted soundings, but deemed insignificant to navigation.

81 72 79 76 75 73 83 84 85 86 84 VA 69 63 65 74 64 69 71 77 83 84 85 81 78 77 86 78 80 78 72 74 76 76 83 862 83 80 77 79 79 81 91 82 82 79 68 62 71 65 72 69 73 78 74 72 73 81 78 80 82 86rkas 83 68 63 6473 81 83 81 73 85 86 82 77 69 78 79 882 83 69 72 83 81 83 80 77 65 50 68 67 71 82 64 655 78 75 83 81 72 84 81-83 61 72 67 68 76 77 82 73 71 76 82 83 63 65 84 75 76 76 77 78 71 61 69 82 82 82 83 83 84 76 73 59 68 69 68 67 62 64 70 74 75 76 76 72 76 70/ 73 82 84 81 83 79 81 79 15 61 61 65 66 70 70 7169 69 74 84/83 68 65 82 83 81 82 78 68 69 68 72 55 83 76 68 67 82/ 70 81 83 82 SOLV 68 70 79 73 25 139/133/76 71 71 69 668 68 171 891 1 73 771 79 173 651 68 116 71 68 64 63 6664 73 75 84 83 82 85 84 81 85 85 65 70 85 84 83 83 79 65 70 85 89 84 85 77 81 74 72 86 87 83 87 86 81 81 76 71 67 68 86 63 76 87 85 67 BAP 73 70 63 70 85 84 86 83 72 89 90 90 90 64 65 88 89 88 88 89 88 86 82 80 72 72 65 55 76 89 76 69 70 67 71 63 18880 70 90 70 90 89 90 85/ 89 90, 85 1, 188, 88 88 87 85 83 86 68 88 88 87 60 68 8910

Figure 5: Areas of disagreement between H12431 and raster chart 13215.

<u>13205</u>

Generally, surveyed soundings agreed within 2-3 feet of charted soundings. Disagreement by up to 12 feet occurred in isolated instances, but in all cases of discrepancy, charted depths were shoaler than surveyed depths.

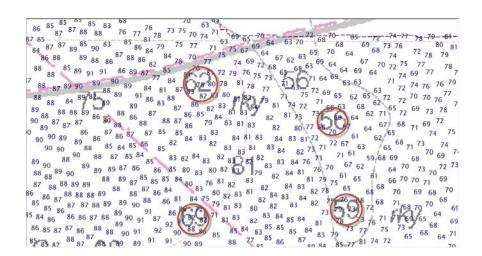


Figure 6: Areas of disagreement between H12431 and raster chart 13205.

#### **D.1.2 Electronic Navigational Charts**

The following are the largest scale ENCs, which cover the survey area:

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US5RI10M	1:40000	7	01/16/2013	01/16/2013	NO

Table 16: Largest Scale ENCs

#### US5RI10M

Generally, surveyed soundings agreed within 3 feet of charted soundings. Maximum disagreement of 21 feet occurred in the northeast corner of the sheet, with the charted sounding being shoaler than soundings from H12431.

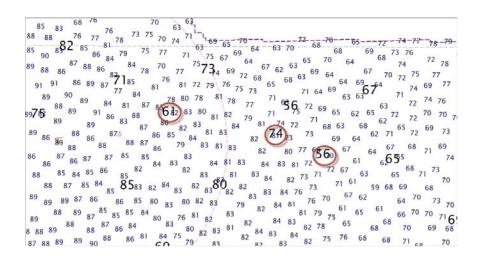


Figure 7: Areas of disagreement between H12431 and US5R110M ENC.

#### **D.1.3 AWOIS Items**

Number of AWOIS Items Addressed: 3 Number of AWOIS Items Not Addressed: 0

Two assigned AWOIS items were disproved by H12431 and one was found. Neither of the disproved AWOIS items were charted on raster chart 13205, 13215 or ENC US5RI10M. AWOIS item #7207, the 1932 wreck of the steam ship Grecian, was found by H12431 and the hydrographer recommends retaining the feature's position and updating the charted depth to 81ft.



Figure 8: Bow and stacks of wrecks visible in 50cm BASE surface; assigned AWOIS wreck verified by H12431.

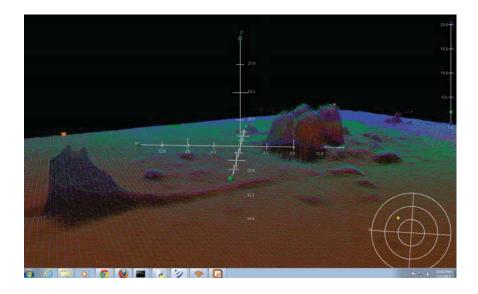


Figure 9: Subset view of AWOIS wreck verified by H12431.

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

Other than the aforementioned AWOIS items, no charted features exist for this survey.

#### **D.1.5 Uncharted Features**

No uncharted features exist for this survey.

#### **D.1.6 Dangers to Navigation**

No Danger to Navigation Reports were submitted for this survey.

#### **D.1.7 Shoal and Hazardous Features**

No shoals or potentially hazardous features exist for this survey.

#### **D.1.8 Channels**

No channels exist for this survey. There are no designated anchorages, precautionary areas, safety fairways, traffic separation schemes, pilot boarding areas, or channel and range lines within the survey limits.

### **D.2 Additional Results**

#### **D.2.1 Shoreline**

Shoreline was not assigned in the Hydrographic Survey Project Instructions or Statement of Work.

#### **D.2.2 Prior Surveys**

No prior survey comparisons exist for this survey.

#### **D.2.3** Aids to Navigation

Aids to navigation (ATONs) do not exist for this survey.

#### **D.2.4 Overhead Features**

Overhead features do not exist for this survey.

#### **D.2.5 Submarine Features**

Submarine features do not exist for this survey.

#### **D.2.6 Ferry Routes and Terminals**

No ferry routes or terminals exist for this survey.

#### **D.2.7 Platforms**

No platforms exist for this survey.

## **D.2.8 Significant Features**

No significant features exist for this survey.

## **D.2** Construction and Dredging

There is no present or planned construction or dredging within the survey limits.

# E. Approval Sheet

As Chief of Party, Field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Field Procedures Manual, Standing and Letter Instructions, and all HSD Technical Directives. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required with the exception of deficiencies noted in the Descriptive Report.

Approver Name	Approver Title	Approval Date	Signature
ENS Andrew Clos	Sheet Manager	03/25/2013	Andrew A Clos
LT William Winner	Field Operations Officer	03/25/2013	Witteen & Winner
CDR Lawrence Krepp	Commanding Officer	03/25/2013	famer 7 Krym

# APPENDIX I

# TIDE NOTE AND GRAPHICS



UNITED STATES DEPARMENT OF COMMERCE National Oceanic and Atmospheric Administration National Ocean Service Silver Spring, Maryland 20910

#### TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : October 4, 2012

HYDROGRAPHIC BRANCH: Atlantic HYDROGRAPHIC PROJECT: OPR-B363-TJ-2012 HYDROGRAPHIC SHEET: H12431

LOCALITY: 10 NM South of Block Island, Block Island Sound, NY TIME PERIOD: August 25 - 29, 2012

TIDE STATION USED: 8452660 Newport, RI

Lat. 41° 30.3'N Long. 71° 19.6' W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters **HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 1.099 meters

#### REMARKS: RECOMMENDED ZONING

Preliminary zoning is accepted as the final zoning for project OPR-B363-TJ-2012, H12431, during the time period between August 25 and August 29, 2012.

Please use the zoning file B363TH2012CORP submitted with the project instructions for OPR-B363-TJ-2012. Zones BIS1A, NA629, NA630, NA640, NA642, and NA643 are the applicable zones for H12431.

#### Refer to attachments for zoning information.

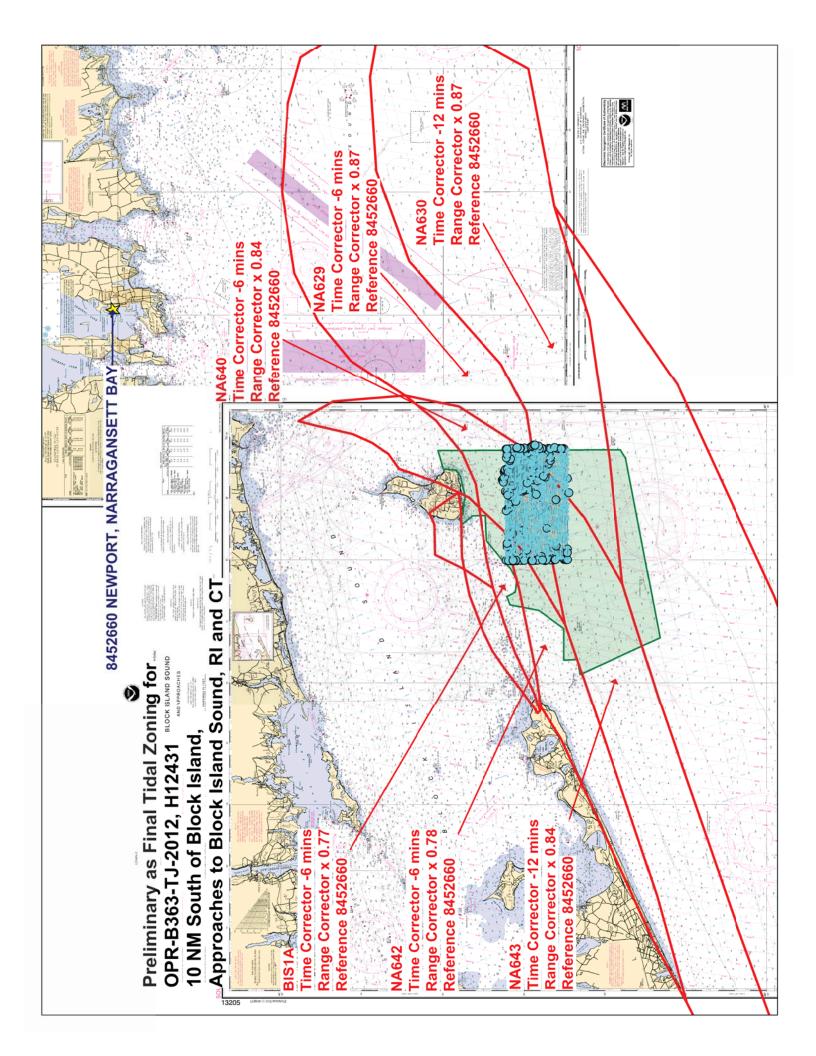
Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).



Digitally signed by HOVIS.GERALD.THOMAS.1365860250 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=OTHER, cn=HOVIS.GERALD.THOMAS.1365860250 Date: 2012.10.05 14:33:36 -04'00'

CHIEF, PRODUCTS AND SERVICES BRANCH





# APPENDIX II

# SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE



Marilyn Schluter - NOAA Federal <marilyn.l.schluter@noaa.gov>

NOAA Hydrographic Surveys H12414, H12417, H12431

2 messages

Marilyn Schluter - NOAA Federal <marilyn.l.schluter@noaa.gov>

Mon, May 20, 2013 at 2:39 PM

To: Christina Rieth <crieth@mail.nysed.gov>, ruth.pierpont@oprhp.state.ny.us Cc: Bruce Terrell - NOAA Federal <br/>
Struce terrell@noaa.gov>, Marc Moser - NOAA Federal <Marc.S.Moser@noaa.gov>, Michael Davidson - NOAA Federal <Michael.Davidson@noaa.gov>, Frank Cantelas - NOAA Federal <frank.cantelas@noaa.gov>, Abigail Higgins - NOAA Federal <Abigail.Higgins@noaa.gov>, Castle Parker - NOAA Federal <Castle.E.Parker@noaa.gov>, Marilyn Schluter - NOAA Federal <marilyn.l.schluter@noaa.gov>, Brian.Jordan@boemre.gov, Lawrence Krepp - NOAA Federal <Lawrence.T.Krepp@noaa.gov>

Dear Madam,

The National Oceanic and Atmospheric Administration's Office of Coast Survey (OCS) may have previously contacted you regarding hydrographic surveys in Long Island Sound and Block Island Sound, NY. These surveys have been completed. The complete Descriptive Reports for these surveys are available for your review on NOAA's public ftp web site. Please provide any comments regarding these surveys (please reference the survey numbers H12414, H12417, H12431) within 30 days to:

LT Abigail Higgins

Chief, Atlantic Hydrographic Branch

Work: 757-441-6746 Ext.200

Fax: 757-441-6601

E-Mail: Abigail.Higgins@noaa.gov

439 W. York St.

Norfolk, VA 23510

If we have not received a response in 30 days, we will assume that these surveys do not include any data of sufficient historical significance (for instance, an historic shipwreck whose location should not be made public knowledge) to warrant special data handling, and will forward this data for our standard nautical charting process.

You will need to have Winzip compression utility installed on your computer to access these files. The following link

http://www.winzip.com/downwz.htm will take you to the Winzip free evaluation site where you can register for Winzip and access the files.

To access this information follow this link ftp://205.156.4.84/4SHPO to NOAA's public ftp web site and select the aforementioned surveys (H12414, H12417, H12431).

The "Key" for these surveys (i.e. to remove the encryption from the .zip files) is: B340\_NY\_4617

Regards,

Marilyn Schlüter, Data Manager

NOAA/Atlantic Hydrographic Branch

757-441-6746 Ext.113

439 W. York St.

Norfolk, VA 23510

Christina Rieth <CRIETH@mail.nysed.gov> To: Marilyn Schluter - NOAA Federal <marilyn.l.schluter@noaa.gov>

Thank you for requesting the comments of New York State Archaeologist's Office. We have no recorded historic resources in this area and have no concerns regarding the current work

Sincerely,

Christina Rieth New York State Museum

Christina B. Rieth, Ph.D. State Archaeologist and Director, Sun, May 26, 2013 at 11:49 AM

Cultural Resource Survey Program New York State Museum Cultural Education Center 3122 Albany, New York 12230 Phone: (518)402-5975, Fax: (518)486-2149 Email: crieth@mail.nysed.gov http://www.nysm.nysed.gov/research\_collections/

>>> Marilyn Schluter - NOAA Federal <marilyn.l.schluter@noaa.gov> 5/20/2013 2:39 PM >>> [Quoted text hidden]

# APPENDIX III

# SURVEY FEATURES REPORT

DToNs - none AWOIS - three Wrecks - none Maritime Boundaries - none

## H12431 AWOIS

Registry Number: H12431 State: New York and Rhode Island Locality: Block Island Sound Sub-locality: 10 NM South of Block Island Project Number: OPR-B363-TJ-12 Survey Date: 08/25/12 - 08/29/12

Edition	Date	Scale (RNC)	RNC Correction(s)*
18th	08/01/2004	1:40,000 (13215_1)	[L]NTM: ?
38th	02/01/2007	1:80,000 (13205_1)	[L]NTM: ?
40th	02/01/2008	1:80,000 (13218_1)	[L]NTM: ?
47th	05/01/2008	1:400,000 (12300_1)	[L]NTM: ?
34th	05/01/2007	1:675,000 (13006_1)	[L]NTM: ?
13th	10/01/2003	1:1,058,400 (5161_1)	[L]NTM: ?
49th	04/01/2007	1:1,200,000 (13003_1)	[L]NTM: ?
	18th           38th           40th           47th           34th           13th	18th         08/01/2004           38th         02/01/2007           40th         02/01/2008           47th         05/01/2008           34th         05/01/2007           13th         10/01/2003	18th         08/01/2004         1:40,000 (13215_1)           38th         02/01/2007         1:80,000 (13205_1)           40th         02/01/2008         1:80,000 (13218_1)           47th         05/01/2008         1:400,000 (12300_1)           34th         05/01/2007         1:675,000 (13006_1)           13th         10/01/2003         1:1,058,400 (5161_1)

## **Charts Affected**

\* 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 #7207 - 80 ft Wreck	AWOIS	24.44 m	41° 04' 27.5" N	071° 32' 18.5" W	7207
1.2	Uncharted AWOIS 7666 - APPLETREE	AWOIS	[no data]	[no data]	[no data]	7666
1.3	Uncharted AWOIS 1784	AWOIS	[no data]	[no data]	[no data]	1784

## 1.1) AWOIS #7207 - 80 ft Wreck - GRECIAN

## No Primary Survey Feature for this AWOIS Item

Search Position:	41° 04' 27.5" N, 071° 32' 18.7" W
Historical Depth:	24.20 m
Search Radius:	500
Search Technique:	SSS, MB
Technique Notes:	[None]

#### **History Notes:**

SURVEY REQUIREMENT COMMENTS

SEARCH AROUND THE LORAN RATES LISTED BELOW UNDER 195 AND 206.

#### HISTORY

NM23/32-- USCG REPORTS THAT THE WRECK OF THE STEAMER GRECIAN ì WITH TWO MASTS SHOWING ABOUT 10 FT. ABOVE WATER LIES SUNK 5 MILES ì 183 DEGREES FROM BLOCK ISLAND SOUTHEAST LIGHT; PA LAT 41-04N, ì LONG 71-33W.

NM24/32--BUOY ESTABLISHED 250 FT. SOUTH BY WEST FROM WRECK OF ì GRECIAN WHICH LIES NORTHWEST AND SOUTHEAST AND HAS TWO MASTS ì SHOWING ABOUT 15 FT. ABOVE THE WATER; BUOY LOCATED IN PA LAT ì 41-04N, LONG 71-32W; WRECK IN PA LAT 41-04-02N, LONG 71-31-59W. NM19/33--BUOY DISCONTINUED; WRECK WHICH SANK ABOUT 5 MILES, 173 ì DEGREES FROM BLOCK ISLAND SOUTHEAST LIGHT HAS BEEN REMOVED TO A CLEARED ì DEPTH OF 55 FT. MLW; PA LAT 41-04N, LONG 71-32W. (ENTERED MSM 4/89) FE364SS/91--OPR-B660-RU; WRECK WAS LOCATED BY SIDE SCAN SONAR ì AND FOUND TO HAVE A LEAST DEPTH OF 24.2M (79.4FT) IN POS. ì LAT.41-04-27.52N, LONG.71-32-18.66W (NAD 83). (UPDATED 9/93 MCR)

#### DESCRIPTION

24 NO.301; 2827 NT; 41-06, 71-33; 1-3 MILE ACCURACY 27 NO.183; 2827 NT; SUNK BEFORE WW II; 41-06N, 71-33W; POSITION ì FROM OLD COAST GUARD RECORDS; A REFERENCE WRECK CHART WAS ì COMPILED ON CHART 12300 IN THE 1940'S SHOWING ALL WRECKS IN THIS AREA ì FROM THE 1945 WRECK LIST; THIS WRECK CHART ALSO IDENTIFIED ì WRECKS BY NAME, WHERE KNOWN; THIS WRECK WAS IDENTIFIED AS GRECIAN; ì WRECK SYMBOL WAS ADDED TO PUBLISHED CHART IN 1953 FROM THIS ì SOURCE UNDER CHARTING POLICY ESTABLISHING A SERIES OF WRECK CHARTS. 195 LORAN C RATES PROVIDED BY MR. RICHARD TARACKA, GREENWICH, ì CT. POLICE DEPARTMENT, TEL NO. 203-622-8007; 9960-Y 43838.8,, ì 9960-X 25823.8; LAT 41-04-26.75N, LONG 71-32-18.71W (COMPUTED FROM ì LORAN RATES); THIS POSITION IS ON TOP OF BOILER; BOW IS i NORTHWEST OF THIS POSITION; BOW RISES APPROXIMATELY 23 FT. OFF ì THE BOTTOM. (ENTERED MSM 3/89) 206 STEEL FREIGHTER, GRECIAN, STRUCK BY STEAMSHIP, CITY OF ì CHATTANOOGA, ON MAY 27,1932; STRUCK ON PORT SIDE JUST AFT OF THE SMOKESTACK, ì CUTTING A HOLE ABOUT 2 OR 3 FT. DEEP; IMPACT WAS SLIGHT AND SEAS ì WERE MODERATE; LORAN C RATES: 9960-W 14546.7, ì 9960-Y 43839.7; PA 41-04.35N, 71-32.14W; IN 100 FT. OF WATER; ì 2827 GROSS TONS; 263 FT. LONG, 42 FT. BEAM; BUILT IN 1900 BY ì HARLAND AND HOLLINGSWORTH CO., WILMINGTON, DELAWARE. (ENTERED MSM ì 2/90)

## Survey Summary

Charts Affected: 13215\_1, 13205\_1, 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck of Grecian found by MBES WRECKS/invreq: Type: GRECIAN, Itemstatus: ASSIGNED, Searchtype: FULL, Technique: SSS, MB

## **Feature Correlation**

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7207	0.00	000.0	Primary

## Hydrographer Recommendations

Update charted depth and position.

Cartographically-Rounded Depth (Affected Charts):

```
80ft (1321_1, 13205_1, 13218_1)
13fm (12300_1, 13006_1,
24m (5161_1)
```

## S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

NINFOM - Add wreck

QUASOU - 6:least depth known

SORDAT - 20120829

SORIND - US, US, graph, H12431

TECSOU - 3:found by multi-beam

VALSOU - 24.442 m

WATLEV - 3:always under water/submerged

## **Office Notes**

SAR NOTE. (AWIOS 7207) feature found at surveyed lat/lon. Updated charted depth and location. AWOIS 7207 database entry should be updated with H12431 results.

COMPILATION: Concur. Delete charted non-dangerous wreck, least depth 79 feet. Chart non-dangerous wreck, least depth 80.19 feet in the present survey position.

## Feature Images



Figure 1.1.1

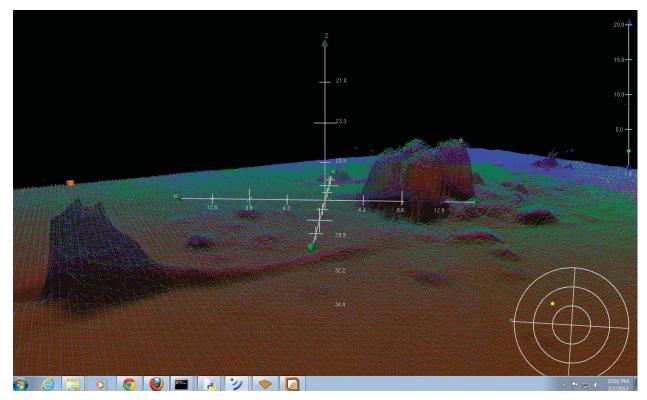


Figure 1.1.2

## 1.2) AWOIS #1784 - Uncharted AWOIS 1784

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

Search Position:	41° 05' 48.4" N, 071° 33' 16.2" W
Historical Depth:	[None]
Search Radius:	1000
Search Technique:	SSS, MB
Technique Notes:	[None]

#### History Notes:

HISTORY

NM9/49--F/V, 2.5 MI S OF BLOCK ISLAND, MARKED W/WHISTLE BUOY AT POSITION ì

LAT 41-05-48N, LONG 71-33-18W.

FE364SS/91--OPR-B660-RU; A 200% SIDE SCAN SONAR INVESTIGATION ì

DID NOT LOCATE THE WRECK; CONSIDERED DISPROVED BY ì

HYDROGRAPHER AND EVALUATOR. (UPDATED 9/93 MCR)

DESCRIPTION

24 NO.570; TRAWLER; SUNK 1949; POSITION ACCURACY WITHIN 1 ì

MILE.

## Survey Summary

Charts Affected: 13215\_1, 13205\_1, 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

History of item shows a previous disproval. Entire search radius investigated with MBES. No evidence of a wreck was found. Assigned AWOIS item disproved.

## **Feature Correlation**

Source	Feature	Range	Azimuth	Status	
AWOIS_EXPORT	AWOIS # 1784	0.00	000.0	Primary	

## Hydrographer Recommendations

Delete from AWOIS database.

## S-57 Data

[None]

## **Office Notes**

SAR: (AWOIS 1784) Ensonified with CC MBES. No evidence of this feature was found.

COMPILATION: Concur. No evidence of the uncharted AWOIS item was found during present survey operations. It is recommended the AWOIS database is updated based on the present survey findings.

## 1.4) AWOIS #7666 - Uncharted AWOIS 7666 - APPLETREE

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

 Search Position:
 41° 04' 21.8" N, 071° 31' 06.3" W

 Historical Depth:
 [None]

Search Radius: 500 Search Technique: SSS, MB

Technique Notes: [None]

#### History Notes:

SURVEY REQUIREMENT COMMENTS SEARCH AROUND THE LORAN COORDINATES RATHER THAN THE GEOGRAPHIC Ì POSITION.

HISTORY

FE364SS/91--OPR-B660-RU; WRECK WAS NOT LOCATED BY 200% SIDE SCAN ì SONAR INVESTIGATION AND IS CONSIDERED DISPROVED BY ì HYDROGRAPHER/EVALUATOR. (ENTERED 9/93 MCR)ì

DESCRIPTION

195 LORAN C COORDINATES PROVIDED BY MR. RICHARD TARACKA, ì GREENWICH, CT. POLICE DEPARTMENT, TEL NO 203-622-8020; 9960-W ì 14540.0, 9960-Y 43836.5; LAT 41-04-21.4N, LONG 71-31-08.1W ì (NAD27)(COMPUTED FROM LORAN RATES); IDENTIFIED AS THE APPLETREE. Ì (ENTERED MSD 8/91)

## Survey Summary

Charts Affected: 13215\_1, 13205\_1, 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

History shows item has been previously disproved. Entire search radius investigated with MBES. No evidence of a wreck was discovered. Assigned AWOIS item disproved.

## **Feature Correlation**

Source	Feature	Range	Azimuth	Status
AWOIS_EXPORT	AWOIS # 7666	0.00	000.0	Primary

## Hydrographer Recommendations

Delete from AWOIS database.

## S-57 Data

[None]

## **Office Notes**

SAR: (AWOIS 7666) Ensonified with CC MBES. No evidence of this feature was found.

COMPILATION: Concur. No evidence of the uncharted AWOIS item was found during present survey operations. It is recommended the AWOIS database is updated based on the present survey findings.

#### APPROVAL PAGE

#### H12431

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NGDC for archive

- H12431\_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12431\_GeoImage.pdf

The survey evaluation and verification has been conducted according to current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: \_\_\_\_

**LCDR Abigail Higgins** Chief, Atlantic Hydrographic Branch