

H11996

NOAA FORM 76-35A

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

**DESCRIPTIVE REPORT**

*Type of Survey:* **Navigable Area**

*Registry Number:* **H11996**

**LOCALITY**

*State:* Rhode Island

*General Locality:* Approaches to Buzzards Bay

*Sub-locality:* 10 NM South-east of Point Judith

**2008**

CHIEF OF PARTY  
**CDR P. Tod Schattgen**  
NOAA

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NOVEMBER, 2008

**HYDROGRAPHIC TITLE SHEET**

**H11996**

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: **Rhode Island**

General Locality: **10 NM South-east of Point Judith**

Sub-Locality: **Approaches to Buzzards Bay**

Scale: **1:10,000** Date of Survey: **09/07/2008 to 10/01/2008**

Instructions Dated: **24 June 2008** Project Number: **OPR-B307-TJ-08**

Vessel: **NOAA Ship *Thomas Jefferson***

Chief of Party: **CDR P. Tod Schattgen**

Surveyed by: ***Thomas Jefferson* Personnel**

Soundings by: **Reson 7125 and 8125 multibeam echosounders.**

Graphic record scaled by: **N/A**

Graphic record checked by: **N/A**

Protracted by: **N/A** Automated Plot: **N/A**

Verification by:

Soundings in: **Meters at MLLW**

Remarks:  
**1) All Times are in UTC.**  
**2) This is a Navigable Area Hydrographic Survey.**  
**3) Projection is NAD83, UTM Zone 19.**

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**Descriptive Report to Accompany Hydrographic Survey H11996**

**Project OPR-B307-TJ-08  
 10 NM south-east of Point Judith  
 Approaches to Buzzards Bay, Rhode Island  
 Scale 1:10,000  
 September 7<sup>th</sup> to October 1<sup>st</sup>, 2008  
 NOAA Ship *Thomas Jefferson***

**A. AREA SURVEYED**

This hydrographic survey was completed as specified by Hydrographic Survey Letter Instructions OPR-B307-TJ-08, dated 24 June, 2008. The survey area includes the approaches to Buzzards Bay and Narragansett Bay. See table A-1 and figure A-1 for approximate survey area.

North-east corner	North-west corner	South-east corner	South-west corner
41° 17' 47.1" N	41° 15' 41.3" N	41° 15' 19.8" N	41° 13' 01.8" N
71° 15' 50.8" W	71° 23' 36.7" W	71° 14' 28.1" W	71° 22' 09.8" W

*Table A-1: Approximate Survey Area H11996.*

Data acquisition was conducted from September 7<sup>th</sup> to October 1<sup>st</sup>, 2008, see table A-3.

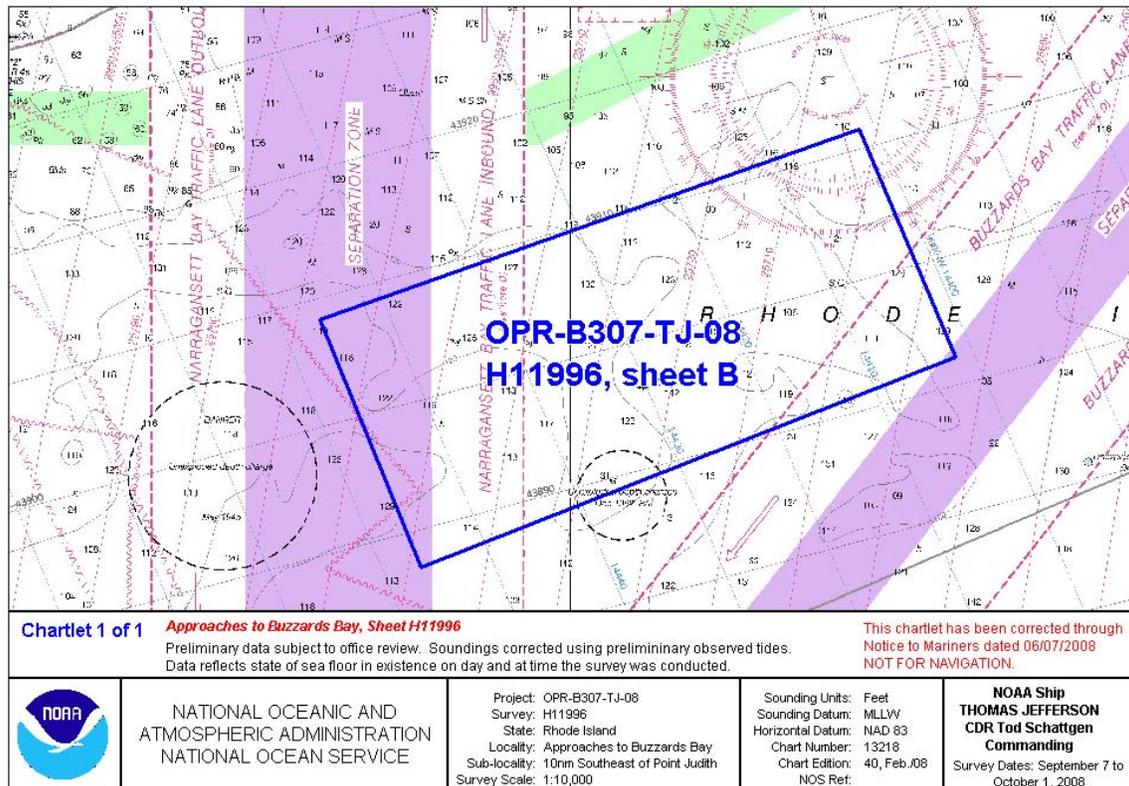
This is a navigable area survey in accordance with NOS *Hydrographic Surveys Specifications and Deliverables Manual (HSSDM)* and *Field Procedures Manual (FPM)* for hydrographic surveying.

	Lineal Nautical Miles
Single beam mainscheme only	N/A
Multibeam mainscheme only	397
Side Scan Sonar mainscheme only	N/A
Crosslines	19.9
Developments	N/A
Shoreline/nearshore investigations	N/A
Number of Bottom Samples	5
Number of AWOIS items Investigated	2

*Table A-2: Survey Statistics.*

Calendar Date	Julian Day	Calendar Date	Julian Day
07-Sept-2008	251	12-Sept-2008	256
08-Sept-2008	252	29-Sept-2008	273
10-Sept-2008	254	30-Sept-2008	274
11-Sept-2008	255	1-Oct-2008	275

**Table A-3: Dates of Data Acquisition for Survey H11996.**



**Figure A-1: Survey Area.**

**B. DATA ACQUISITION AND PROCESSING**

Refer to *Thomas Jefferson Data Acquisition and Processing Report (DAPR)*, Spring-addendum, 2008 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 included in this descriptive report.

**B 1. EQUIPMENT AND VESSELS**

Data were acquired by a Reson 7125 multi-beam echo sounder (MBES) on the NOAA ship *Thomas Jefferson* and a Reson 8125 MBES on NOAA launch *3101*. Water column sound velocity data were collected with a Brook Ocean Technology, Ltd. MVP-100 moving vessel profiler and a Sea Bird Electronics, Inc. 19-plus Conductivity, Temperature and Depth (CTD) profiler. Vessel configurations, equipment operation and data acquisition and processing were consistent with specifications described in the DAPR. Five bottom samples were collected from launch *3101* with a Khalisco Mud Snapper.

**B 2. QUALITY CONTROL**

**B 2.1 System Certification and Calibration**

Refer to NOAA Ship *Thomas Jefferson* DAPR and *Hydrographic Systems Readiness Report (HSRR)* for a complete description of system integration and initial calibration results for equipment and sensors used for this survey.

**B.2.2 Sounding Coverage**

As per the Letter Instructions, this survey was conducted using complete multi-beam echo sounding. The water depth over the entire survey area is greater than 20 meters.

**B 2.3 Crosslines**

A total of 19.9 lineal nautical miles of cross line MBES data were collected by the ship, see table A-2. This equals 5% of the total main scheme collected by the ship and survey launch *3101*. Crosslines were acquired only with the ship S222 which also collected the vast majority of the main scheme data. During Crossline acquisition, both launches were aboard the *Thomas Jefferson*, which caused a squat in the draft of approximately -8 cm. All other data in the survey was collected while launches were deployed. The mainscheme data show high internal consistency therefore, it is recommended that crossline data be excluded from final gridded surfaces. Each finalized surface has been generated without crossline data. As per HSSD 2008, Section 5.4.1.3, a surface difference between crosslines and mainscheme data was generated using CARIS Base Editor as the means to analyze the variation in draft and is included in separates under *Crossline Comparisons*.

**B 2.4 Junctions and Prior Surveys**

The following contemporary surveys junction with H11996:

<b>Registry #</b>	<b>Scale</b>	<b>Date</b>	<b>Field Party</b>	<b>Junction side</b>
H11995	1:10,000	2008	<i>Thomas Jefferson</i>	East
H11321		2004	<i>Rude</i>	North
H11322		2004	<i>Rude</i>	North

Survey H11995 junctions the current survey (H11996) to the east (see figure B-1 for chart of junction surveys). H11995 was surveyed by the *Thomas Jefferson* immediately before H11996 using the same systems and standards. The surfaces between the two surveys line up within 0.1 meter along the entire junction. Surveys H11321 and H11322 to the north, completed in 2004 by the NOAA ship *Rude* were in a format unreadable by the current software aboard the *Thomas Jefferson*. Current chart soundings are considered adequate to provide surrounding comparison data and the northern edge of H11996 data are all within 2 feet of the charted soundings.

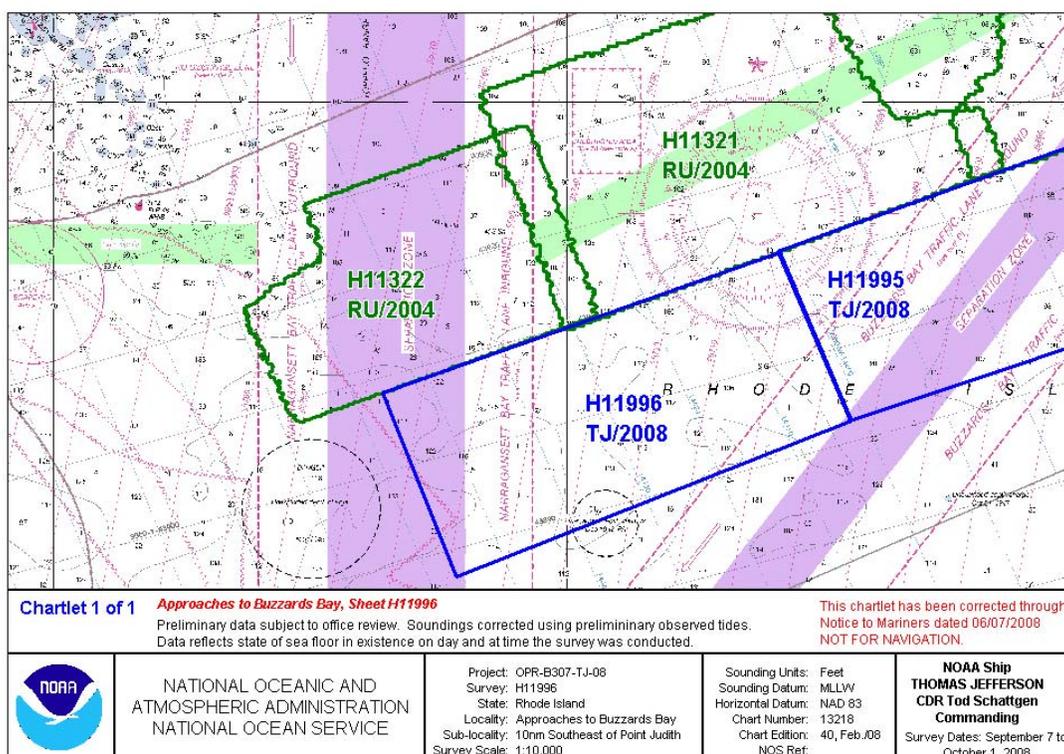
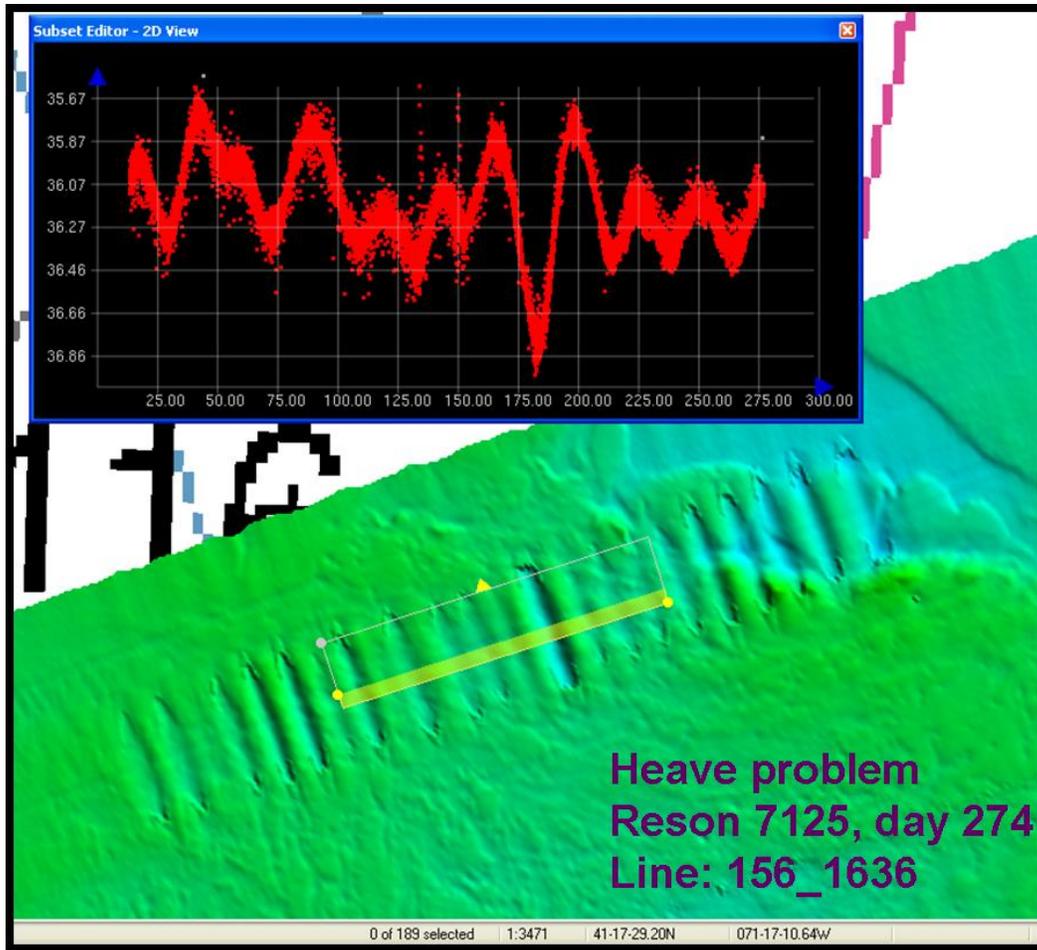


Figure B-1: H11996 Junction Surveys.

### B 2.5 Systematic Errors

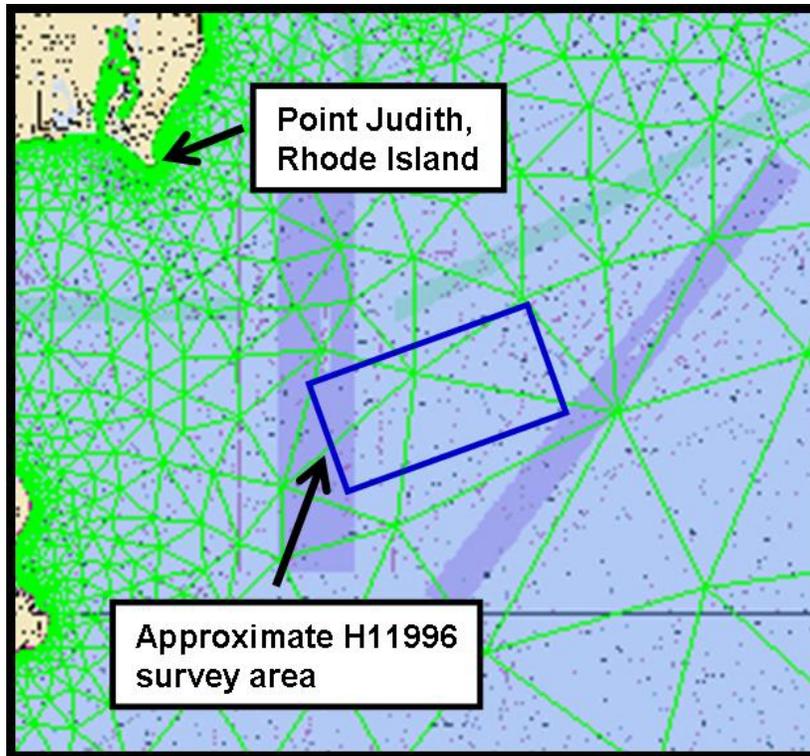
On day 274 there was ship motion related artifact along a portion of one line. Line 156\_1636 would not accept the heave correction, see figure B-2. The heave error is as much as plus or minus 0.6 meters. This error is within 2% of the water depth but is greater than the maximum allowable heave error of 0.2 meters stated in section 5.1.3.5 of the *HSSD*. Re-converting the line and not applying POS true heave correctors fixed this problem. With no true heave applied the heave artifact was less than 0.2 meters which is within the *HSSD* budget and is in line with the rest of the survey.



*Figure B-2: heave artifact line 156\_1636.*

**B 3. CORRECTIONS TO ECHO SOUNDING**

HDCS sounding data were reduced to mean lower-low water (MLLW) on 11/17/2008 using verified tides from the primary station 845-2660 at Newport, RI and secondary station 844-8725 at Menemsha Harbor, MA for the dates of the survey. These tides were adjusted for tidal constituents and residuals provided by CO-OPS as specified in the Letter Instructions; tide zones are illustrated in Figure B-3.



*Figure B-3: Final Tide Zoning*

All other datum reduction procedures conform to those outlined in the *DAPR*. All methods and instruments used for sound velocity correction were as described in the *DAPR*. A file detailing all sound velocity casts is located in Separate II of this Descriptive Report.

**B 4. DATA PROCESSING**

**B 4.1 Total Propagated Error**

For the 2008 field season, Total Propagated Error (TPE) parameters for sound speed and tides are calculated separately for each project. The project-specific parameters for OPR-B307-TJ-08, Survey H11996 are as illustrated in table B-1. All ship profiles were made with MVP.

<i>Vessel</i>	<i>Tide Values</i>		<i>Sound Speed Values</i>	
	<i>Measured</i>	<i>Zoning</i>	<i>Measured</i>	<i>Surface</i>
<b>3101</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0.2</b>
<b>S222 MVP</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0.2</b>
<b>S222 CTD</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0.2</b>

*Table B-1: TPE parameters.*

**B 4.2 BASE Surfaces and Mosaics**

The submitted base surfaces for survey H11996 are listed in table B2.

<i>Name of Fieldsheet</i>	<i>Resolution</i>	<i>Type</i>	<i>Purpose</i>
<b>H11996_E_CUBE_2m_Deep</b>	<b>2 meters</b>	<b>CUBE</b>	<b>Coverage check</b>
<b>H11996_E_CUBE_2m_Deep_Final</b>	<b>2 meters</b>	<b>CUBE- Finalized</b>	
<b>H11996_W_CUBE_2m_Deep</b>	<b>2 meters</b>	<b>CUBE</b>	<b>Coverage check</b>
<b>H11996_W_CUBE_2m_Deep_Final</b>	<b>2 meters</b>	<b>CUBE- Finalized</b>	
<b>H11996_Combined_2m</b>	<b>2 meters</b>	<b>Above combined</b>	<b>Coverage check</b>
<b>H11996_Combined_2m_Final</b>	<b>2 meters</b>	<b>Combined Finalized</b>	<b>Basis for PSS, not a deliverable</b>

*Table B-2: Compiled Field Sheets*

This survey was processed using the Combined Uncertainty and Bathymetric Estimator (CUBE) algorithm. The CUBE configuration was set to ‘Deep’ and ‘IHO order 1’ for this entire survey. Refer to the spring 2008 *Data Acquisition and Processing Report*, 2008 *Field Procedures Manual*, and *CARIS HIPS/SIPS 6.1 Users Manual* for further discussion of data processing procedures.

**C. HORIZONTAL AND VERTICAL CONTROL**

As per FPM section 5.2.3.2.3 guidance a HVCR report was not filed as no horizontal control stations were established by the field party for this survey. A summary of horizontal and vertical control for this survey follows.

**C 1.1 Horizontal Control**

The horizontal datum for this project is the North American Datum of 1983 (NAD83), Universal Transverse Mercator (UTM) zone 19. Differential GPS (DGPS) was the sole method of positioning. Differential corrections from U.S. Coast Guard beacons at Moriches, NY (293 KHz), and Acushnet, MA (306 KHz), were used during this survey.

No horizontal control stations were established by the field party for this survey.

**C 1.2 Vertical Control**

The vertical datum for this project is Mean Lower-Low Water (MLLW). The operating National Water Level Observation Network (NWLON) station 8452660 at Newport, RI and secondary station 8448725 at Menemsha Harbor, MA serve as datum control for H11996. Revised-B307TJ2008-TCARI zoning were applied as the final tide zoning to all sounding data.

A request for delivery of final approved (verified) tides for this survey was forwarded to N/OPS1 October 2, 2008 in accordance with the FPM and project letter instructions.

## **D. RESULTS AND RECOMMENDATIONS**

### **D.1 Chart Comparison**

Survey H11996 was compared with chart 13218 (40<sup>th</sup> Ed.; February, 2008) and Electronic Navigational Chart US4MA23M (9<sup>th</sup> edition, May 30, 2008). Chart comparisons were performed in MapInfo using survey-scale and chart-scale excess soundings exported from Pydro.

#### **D.1.1 Chart 13218 40<sup>th</sup> edition, February, 2008 Comparison**

Depths from charts 13218 generally agree with the current survey, with differences generally 2 feet or less with the exception of three significant features. A rock located at 41°15'35"N, 071°15'27"W is approximately 18 feet shoal of the nearest charted sounding. The least depth over this contact is 93 feet and does not require a Danger to Navigation report. An uncharted wreck appears in the survey data at position 41° 17' 28.0" N, 071° 16' 26.7" W. See Appendix II for detailed information.

#### **D.1.3 ENC USMA23M, 9<sup>th</sup> edition, May 30, 2008 comparison**

Soundings are generally comparable with charted depths, with differences in charted and survey soundings of 1 meter or less. Exceptions are as noted in section D.1.1 above.

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

#### **D.2.1 Automated Wreck and Obstruction Information Service (AWOIS) Items**

There are two AWOIS items within the limits of survey H11996. The first is reported to be the sunken 38 foot boat *Beatrice R.* No discernable wreckage could be found within the AWOIS circle around this item. The second AWOIS item is described as a lost depth charge. Many small contacts are visible in the MBES record within the area but there is no evidence to conclude that any of these is the item. See Appendix II for detailed information.

#### **D.2.4 Shoreline**

There is no shoreline within the sheet limits of survey H11996.

#### **D.2.5 Charted Features**

All charted features and item investigations are described in detail in Appendix II of this report.

### **D.2.6 Charted Pipelines and Cables**

There is one charted submarine cable near the west edge of the survey area. This cable does not show up in the MBES data and, if it exists, is likely buried. The hydrographer has no recommendations regarding this cable.

### **D.2.7 Bridges, Ferry Routes, and Overhead Cables**

There are no ferry routes, bridges, or overhead cable crossings within the limits of survey H11996.

## **D.3 Dangers to Navigation and Shoals**

### **D 3.1 Dangers to Navigation**

No dangers to navigation were found within the survey area H11996.

### **D 3.2 Shoals**

There is no evidence of significant, hazardous shoals in this survey.

## **D.4 Aids to Navigation**

There are no charted Aids to Navigation (ATON) within the limits of H11996.

## **D.5 Coast Pilot Information**

The Hydrographer has no recommendations for changes to the Coast Pilot.

## **D.6 Miscellaneous**

Five bottom samples were collected in accordance with NOAA Hydrographic Survey Specifications and Deliverables. A complete description of all bottom samples acquired during Survey H11996 is contained in the Pydro PSS and appendix V of this report.

## **D.7 Adequacy of Survey**

This survey is considered complete and adequate to supersede charted depths within the common area as per requirements specified in the Project Letter Instructions.

## **Summary and Recommendations for Additional Work**

The hydrographer has no recommendations for additional work in this survey area at this time.

**E. APPROVAL**

As Lead Hydrographer, I have ensured that standard field surveying and processing procedures were followed in producing this examination in accordance with the Office of Coast Survey Hydrographic Surveys Division’s *Field Procedures Manual*, and NOS *Hydrographic Surveys Specifications and Deliverables*. Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to N/CS33, Atlantic Hydrographic Branch.

Survey H11996 is adequate to supersede charted soundings in their common areas.

Listed below are supplemental reports submitted separately that contain additional information relevant to this survey:

<u>Title</u>	<u>Date</u>	<u>Office</u>
<i>Data Acquisition and Processing Report-Spring-addendum</i>	4 Feb 09	N/CS33
<i>Horizontal and Vertical Control Report for OPR-307-TJ-08</i>	N/A	N/CS33
Tides and Water Levels Package for OPR-307-TJ-08	N/A	N/OPS1
Coast Pilot Report for OPR-307-TJ-08	N/A	N/CS26

Approved and Forwarded:

LT Jasper D. Schaer, NOAA Field Operations Officer	CDR P. Tod Schattgen., NOAA Commanding Officer
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In addition, the following individuals were also responsible for overseeing data acquisition and processing of this survey:

Survey Managers:

ENS Megan Nadeau, NOAA Junior Officer	SST Douglas Wood Senior Survey Tech
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## **Appendix I**

### **Dangers to Navigation**

There were no new Dangers to Navigation found while conducting survey H11996.

# **Appendix II**

## **Survey Features Report**

# H11996 Feature Report

**Registry Number:** H11996  
**State:** Rhode Island  
**Locality:** Rhode Island Sound and Approaches, RI MA  
**Sub-locality:** 10 NM Southeast of Point Judith  
**Project Number:** OPR-B307-TJ-08  
**Survey Dates:** Sept 7, 2008 - Sept 30, 2008

## Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
13218	40th	02/01/2008	1:80,000 (13218_1)	USCG LNM: 05/20/2008 (06/03/2008) NGA NTM: 11/15/2003 (06/07/2008)
12300	47th	05/01/2008	1:400,000 (12300_1)	[L]NTM: ?
13006	34th	05/01/2007	1:675,000 (13006_1)	[L]NTM: ?
5161	13th	10/01/2003	1:1,058,400 (5161_1)	[L]NTM: ?
13003	49th	04/01/2007	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	Rock	Rock	28.55 m	41° 15' 34.9" N	071° 15' 26.7" W	---
1.2	Barge	Wreck	32.91 m	41° 17' 28.0" N	071° 16' 26.7" W	---
1.3	Rock 120	Rock	36.53 m	41° 15' 29.1" N	071° 21' 34.6" W	---
1.4	Rock 120	Rock	36.68 m	41° 15' 44.5" N	071° 21' 26.5" W	---
2.1	BEATRICE R	AWOIS	[no data]	[no data]	[no data]	---
2.2	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---

## **1 - New Features**

## 1.1) Rock

### Survey Summary

**Survey Position:** 41° 15' 34.9" N, 071° 15' 26.7" W  
**Least Depth:** 28.55 m (= 93.67 ft = 15.612 fm = 15 fm 3.67 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.003$  m ; **TVU (TPEv)**  $\pm 0.238$  m  
**Timestamp:** 2008-254.17:42:05.157 (09/10/2008)  
**Survey Line:** h11996 / tj\_s222\_reson7125\_port / 2008-254 / 111\_1738  
**Profile/Beam:** 1567/156  
**Charts Affected:** 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Rock, substantially shoal of charted depth near this location.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11996/tj_s222_reson7125_port/2008-254/111_1738	1567/156	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

93ft (13218\_1)

15fm (12300\_1, 13006\_1, 13003\_1)

29m (5161\_1)

### S-57 Data

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

**Attributes:** QUASOU - 1:depth known  
 RECDAT - sept 10 2008  
 SORDAT - sept 10, 2008  
 SORIND - US  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam

VALSOU - 28.552 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### Feature Images

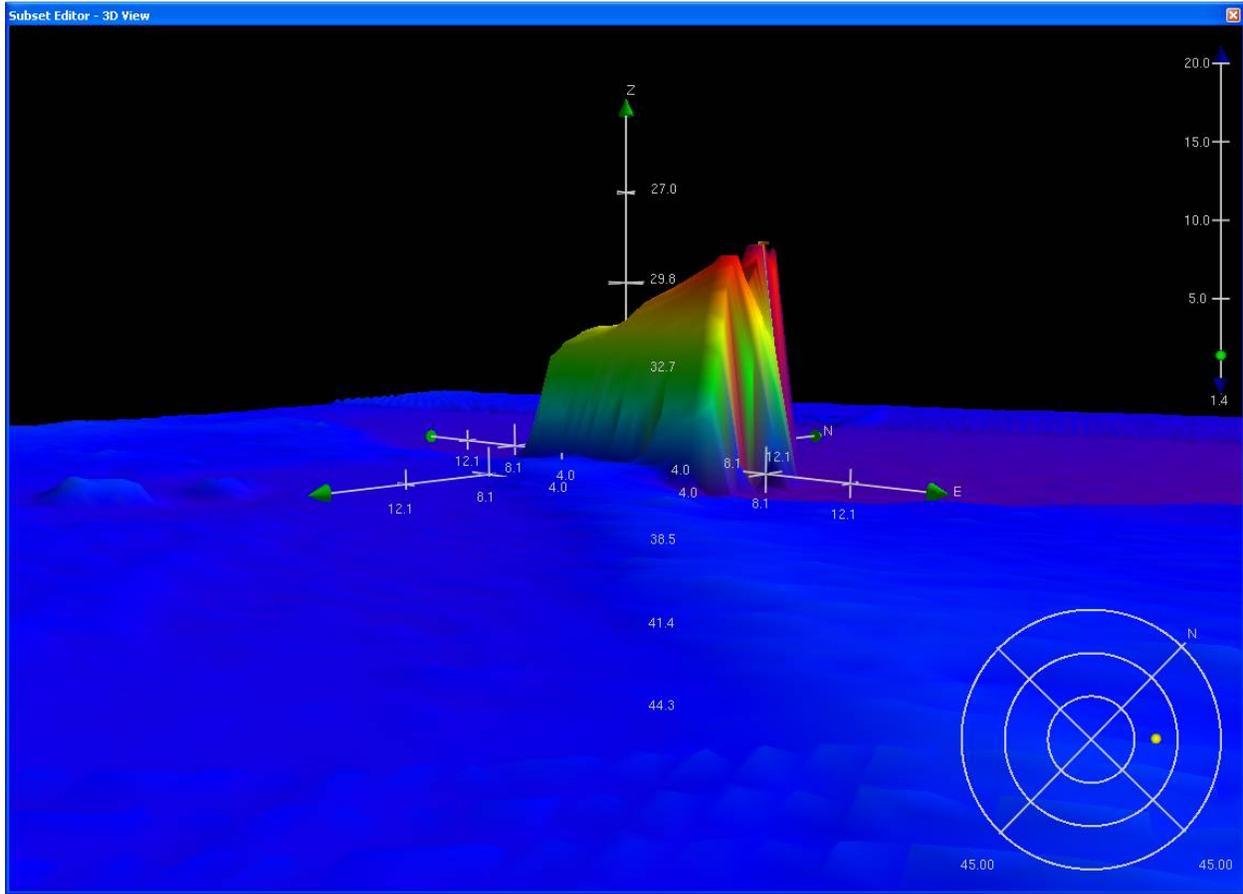


Figure 1.1.1

## 1.2) Barge

### Survey Summary

**Survey Position:** 41° 17' 28.0" N, 071° 16' 26.7" W  
**Least Depth:** 32.91 m (= 107.98 ft = 17.997 fm = 17 fm 5.98 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh)  $\pm 1.009$  m ; TVU (TPEv)  $\pm 0.221$  m  
**Timestamp:** 2008-274.11:36:29.608 (09/30/2008)  
**Survey Line:** h11996 / tj\_s222\_reson7125\_port / 2008-274 / 153\_1132  
**Profile/Beam:** 2169/68  
**Charts Affected:** 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Sunken 100 foot barge.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11996/tj_s222_reson7125_port/2008-274/153_1132	2169/68	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

108ft (13218\_1)

18fm (12300\_1, 13006\_1, 13003\_1)

33m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 QUASOU - 1:depth known  
 SORDAT - sept 30 , 2008  
 SORIND - US  
 STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 32.912 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### Feature Images

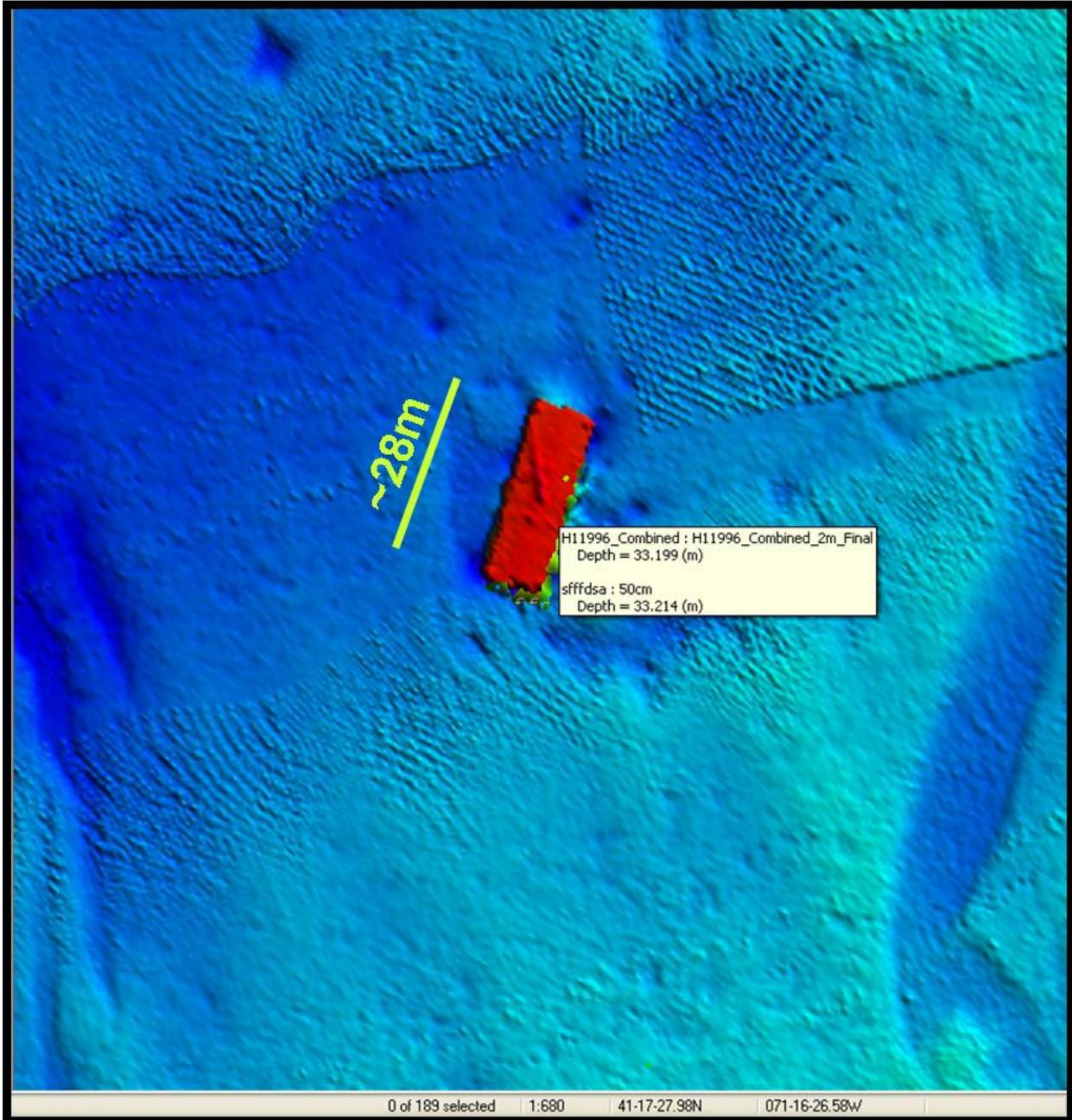


Figure 1.2.1

## 1.3) Rock 120

### Survey Summary

**Survey Position:** 41° 15' 29.1" N, 071° 21' 34.6" W  
**Least Depth:** 36.53 m (= 119.86 ft = 19.976 fm = 19 fm 5.86 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.008$  m ; **TVU (TPEv)**  $\pm 0.228$  m  
**Timestamp:** 2008-274.07:17:06.176 (09/30/2008)  
**Survey Line:** h11996 / tj\_s222\_reson7125\_port / 2008-274 / 144\_0703  
**Profile/Beam:** 6877/76  
**Charts Affected:** 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Rock, minimum depth is shoal of charted sounding.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11996/tj_s222_reson7125_port/2008-274/144_0703	6877/76	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

120ft (13218\_1)

20fm (12300\_1, 13006\_1, 13003\_1)

37m (5161\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** VALSOU - 36.532 m  
 WATLEV - 3:always under water/submerged

## 1.4) Rock 120

### Survey Summary

**Survey Position:** 41° 15' 44.5" N, 071° 21' 26.5" W  
**Least Depth:** 36.68 m (= 120.35 ft = 20.059 fm = 20 fm 0.35 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)**  $\pm 1.012$  m ; **TVU (TPEv)**  $\pm 0.225$  m  
**Timestamp:** 2008-274.10:26:44.958 (09/30/2008)  
**Survey Line:** h11996 / tj\_s222\_reson7125\_port / 2008-274 / 148\_0952  
**Profile/Beam:** 6915/197  
**Charts Affected:** 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Rock, minimum depth is shoal of nearest charted sounding.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11996/tj_s222_reson7125_port/2008-274/148_0952	6915/197	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

120ft (13218\_1)

20fm (12300\_1, 13006\_1, 13003\_1)

37m (5161\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** VALSOU - 36.684 m  
 WATLEV - 3:always under water/submerged

## **2 - AWOIS Features**

## 2.1) AWOIS #2419 - BEATRICE R

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 41° 15' 00.4" N, 071° 18' 58.2" W  
**Historical Depth:** [None]  
**Search Radius:** 1500  
**Search Technique:** S2, MB  
**Technique Notes:** [None]

**History Notes:**

LN38/76--1ST CGD; 38 FT. L/B BEATRICE R HAS BEEN REPORTED SUNK IN 115 FT. OF WATER IN PA LAT 41-15N, LONG 71-19W AFTER APPARENTLY STRIKING A SUBMERGED OBJECT. (ENTERED MSM 3/89)

### Survey Summary

**Charts Affected:** 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

Only coverage MB acquired, run out of time to cover a 1500m radius circle with 200% SSS. Although there are several obstructions (probable rocks) found in the MBES record, there was no evidence found of wreckage within this AWOIS area.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_B307-TJ-08	AWOIS # 2419	0.00	000.0	Primary

### Hydrographer Recommendations

#### S-57 Data

[None]

## 2.2) AWOIS #1837 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 41° 13' 48.4" N, 071° 19' 16.2" W  
**Historical Depth:** [None]  
**Search Radius:** 0  
**Search Technique:** [None]  
**Technique Notes:** [None]

**History Notes:**

NM44/52--ON OCTOBER 15, 1952 A PATTERN OF ARMED UNEXPLODED DEPTH CHARGES WAS DROPPED IN PA LAT 41-14-13N, LONG 71-17-12W. NM46/52--US NAVY ADVISES THAT AN AREA OF 2 MILES RADIUS AROUND THE PATTERN OF ARMED UNEXPLODED DEPTH CHARGES IS DANGEROUS AND WILL CONTINUE TO BE SO UNTIL FURTHER NOTICE. CL831/52-- NM52/52; US NAVY ADVISES THAT A DANGER AREA WITH A RADIUS OF 1 MILE EXISTS AROUND UNEXPLODED DEPTH CHARGES WITH ITS CENTER IN PA LAT 41-13-18N, LONG 71-19-18W. (ENTERED MSM 3/89) NM14/53--POSITION REVISED TO LAT 41-13-48N, LONG 71-19-18W. NM24/53--BUOY ESTABLISHED IN 122 FT. IN PA LAT 41-13-48N, LONG 71-19-18W TO MARK A DANGEROUS AREA OF UNEXPLODED DEPTH CHARGES WITHIN A RADIUS OF 1/2 MILE OF BUOY. DESCRIPTION 24 NO.1275; DEPTH CHARGES, POSITION ACCURACY WITHIN 1 MILE; REPORTED THRU NM.

### Survey Summary

**Charts Affected:** 13218\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

Only coverage MB covered. Many small obstructions in evidence within this AWOIS radius. Specific feature could not be determined.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS_B307-TJ-08	AWOIS # 1837	0.00	000.0	Primary

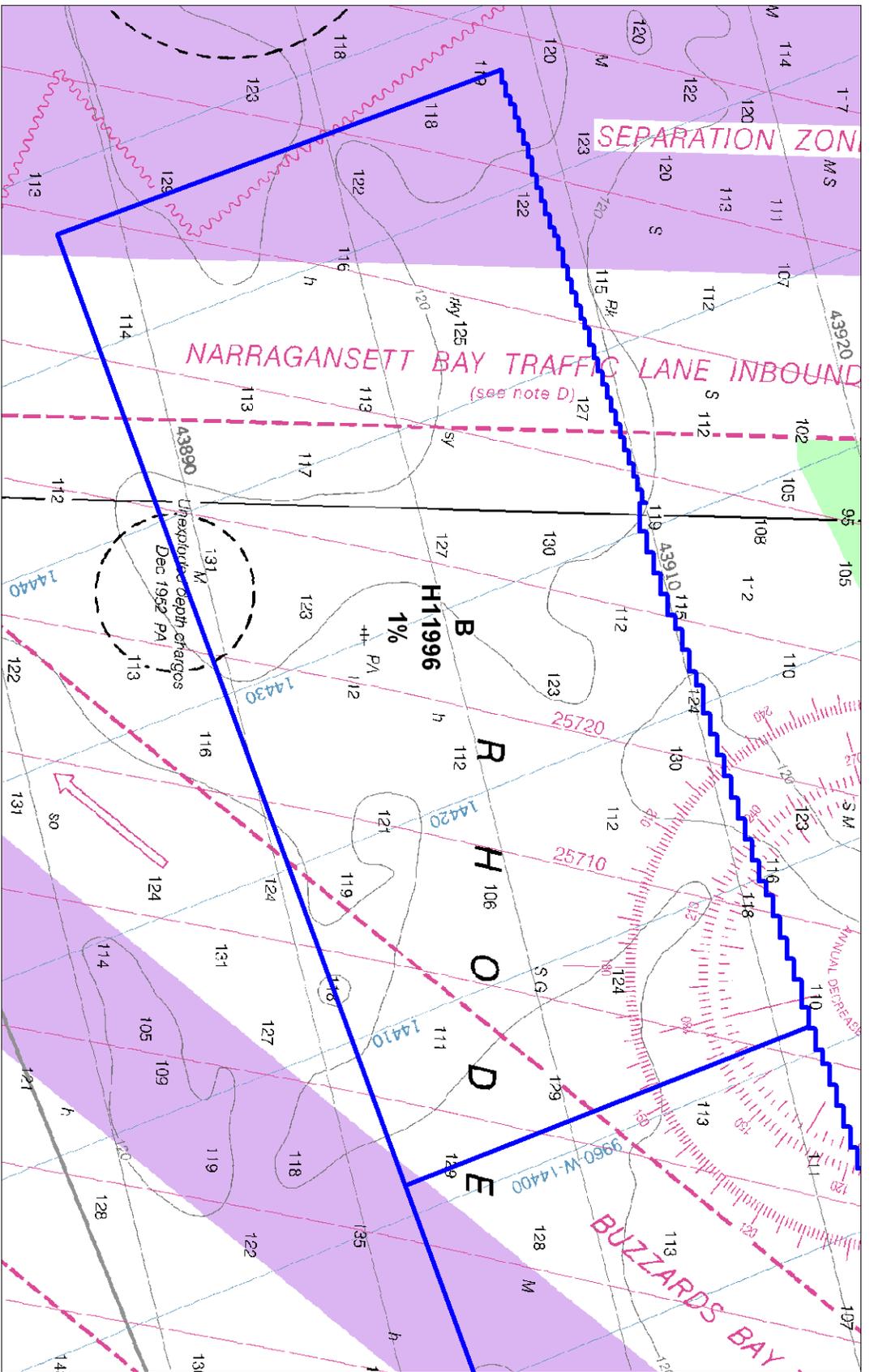
### Hydrographer Recommendations

The hydrographer has no recommendations.

## **S-57 Data**

[None]

**Appendix III**  
**Progress Sketch**



Project	Sheet Letter	H_num	HQ_Est_SNM	CumPercCompPrev	CumPercCompCur	SNM_CompCurV	CumSNMcomf
B307-TJ-08	F	H11921	5	99	1	0	5
B307-TJ-08	E	H11920	15	99	1	0	15
B307-TJ-08	D	H11922	28	100	0	0	28
B307-TJ-08	B	H11996	17	99	1	1	17
B307-TJ-08	C	H11995	17	95	5	1	17

Progress Sketch OPR-B307-TJ-08  
September 2008

## **Appendix IV**

### **Tides and Water Levels**

**1. Request for Approved Tides**

**2. Final Tide Notes**



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NOAA Ship THOMAS JEFFERSON (MOA-TJ)  
439 West York St  
Norfolk, VA 23510-1145

October 01, 2008

MEMORANDUM FOR: Chief, Requirements and Development Division, N/OPS1

FROM: CDR P. Tod Schattgen, NOAA, NOAA Ship THOMAS JEFFERSON (MOA-TJ)

SUBJECT: Request for Approved Tides/Water Levels

Please provide the following data:

1. Tide Note
2. Final TCARI grid
3. Six Minute Water Level data (Co-ops web site)

Transmit data to the following:

NOAA/NOS/Atlantic Hydrographic Branch  
N/CS33, Building #2  
439 West York Street  
Norfolk, VA 23510  
ATTN: Chief AHB

These data are required for the processing of the following hydrographic survey:

Project No.: OPR-B307-TJ-08  
Registry No.: H11996  
State: Rhode Island  
Locality: Rhode Island Sound and Approaches, RI & MA  
Sublocality: 10 NM Southeast of Point Judith

Attachments containing:

- 1) an Abstract of Times of Hydrography,
- 2) digital MID MIF files of the track lines from Pydro

cc: N/CS33



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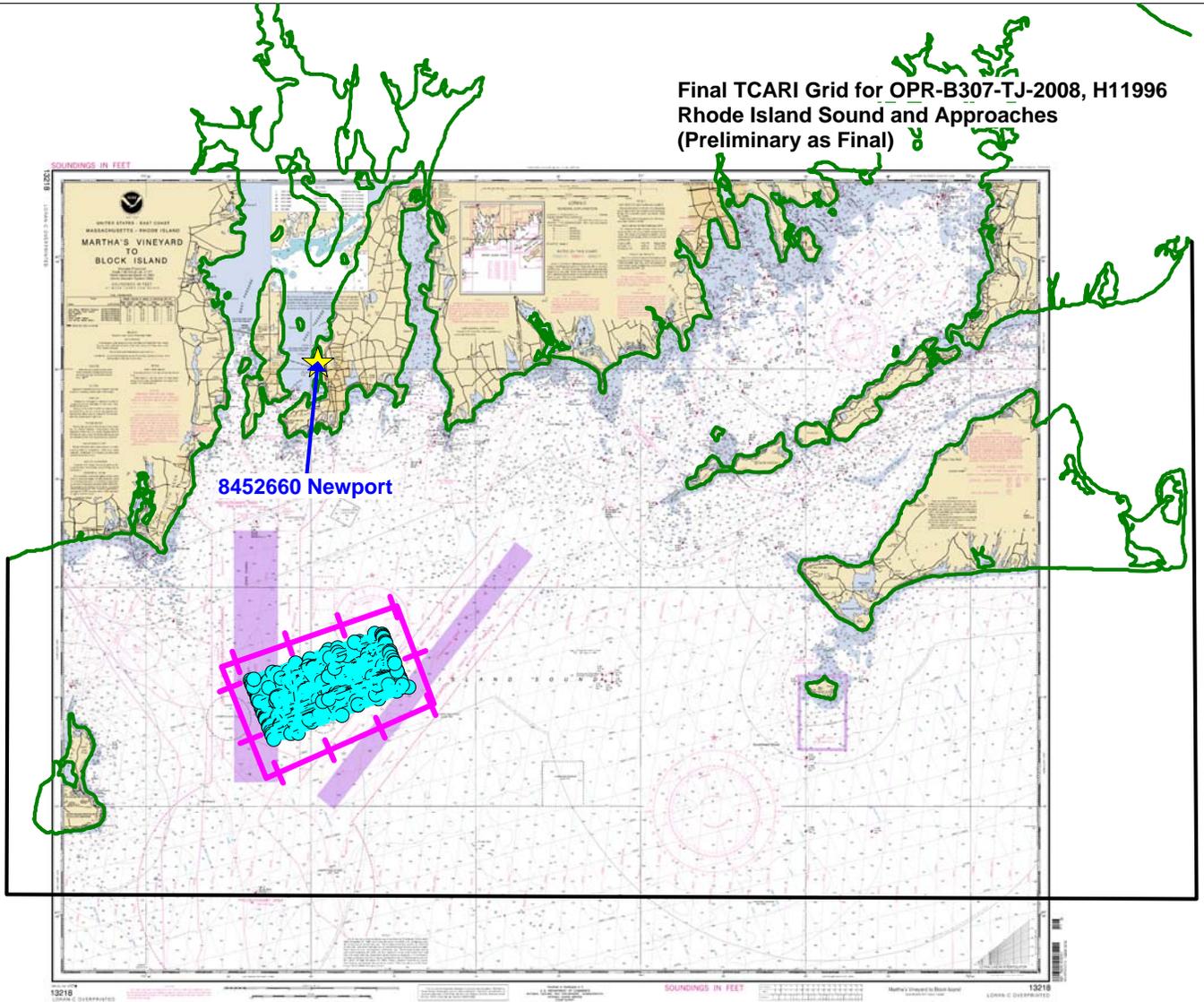
Year_DOY	Min Time	Max Time
2008_251	19:47:24	22:55:04
2008_252	15:03:50	23:35:47
2008_254	15:50:27	22:41:28
2008_255	17:54:23	23:59:57
2008_256	00:00:01	05:08:01
2008_273	20:03:00	23:59:57
2008_274	00:00:02	23:38:17
2008_275	00:37:59	01:17:40



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



**Final TCARI Grid for OPR-B307-TJ-2008, H11996  
Rhode Island Sound and Approaches  
(Preliminary as Final)**



## **Appendix V**

### **Supplemental Survey Records & Correspondence**



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Office of Coast Survey  
Silver Spring, Maryland 20910-3282

31 March 2008

Mr. William A. Adler  
Executive Director, Massachusetts Lobstermen's Association, Inc  
8 Otis Place  
Scituate, MA 02066

Dear Mr. Adler,  
The National Oceanic and Atmospheric Administration (NOAA) Ship THOMAS JEFFERSON will be conducting hydrographic survey operations in the Rhode Island Sound and approaches from **mid-July thru Late August, 2008.**

A map showing the planned survey areas is enclosed. These planned survey operations are subject to change due to weather and logistical constraints.

It is the intent of the National Ocean Service (NOS) to coordinate with local regulatory authorities and lobstermen so survey operations can be conducted with minimal interference to lobster fishing. The commanding officer of THOMAS JEFFERSON will contact you prior to beginning operations to discuss specific dates and locations of survey work.

A hydrographic survey of this type requires that THOMAS JEFFERSON tow a side scan sonar towfish approximately 20 to 60 feet off the bottom in some areas of this region. The towfish is approximately five feet in length, five inches in diameter, and towed by a cable. Side scan sonar and multibeam sonar systems will acquire detailed data of the bottom, delineating and obtaining least depths of potential hazards to navigation. Multibeam sonar data will be collected by two 29-foot aluminum survey launches. **Please Note: These survey launches do not tow any sonar equipment.** Their sonar equipment is rigidly mounted to the aluminum hulls.

It is understood that a high density of pots may be in the area during the survey operations. The personnel of THOMAS JEFFERSON will exercise every caution while surveying to avoid entanglement of lobster pots. If a lobster pot does become entangled, THOMAS JEFFERSON will immediately take action to stop the vessel and clear the pot lines from the sonar gear. In previous survey projects, coordination with local lobstermen allowed us to postpone certain areas of the survey knowing the lobster traps were to be moved at a later time frame. This coordination works out well for both survey operations and the lobstermen.

If you have any questions on the survey operations or general comments on how we may approach an effective coordination effort, please contact our Navigation Manager for the Northeast, Lt. Matthew J. Wingate, at (401) 782-3252 or via e-mail: [matt.wingate@noaa.gov](mailto:matt.wingate@noaa.gov). Your cooperation is greatly appreciated.

Sincerely,  
Jeremy McHugh, project planner and coordinator for NOAA ship THOMAS JEFFERSON  
phone (301) 713-2698  
email [jeremy.mchugh@noaa.gov](mailto:jeremy.mchugh@noaa.gov)





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Office of Coast Survey  
Silver Spring, Maryland 20910-3282

31 March 2008

Mr. Lanny A. Dellinger  
President, Rhode Island Lobstermen's Association, Inc  
PO Box 421  
Wakefield, RI 02880

Dear Mr. Dellinger,

The National Oceanic and Atmospheric Administration (NOAA) Ship THOMAS JEFFERSON will be conducting hydrographic survey operations in the Rhode Island Sound and approaches from **mid-July thru Late August, 2008.**

A map showing the planned survey areas is enclosed. These planned survey operations are subject to change due to weather and logistical constraints.

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Sincerely,

Jeremy McHugh, project planner and coordinator for NOAA ship THOMAS JEFFERSON  
phone (301) 713-2698  
email [jeremy.mchugh@noaa.gov](mailto:jeremy.mchugh@noaa.gov)



From [Olivia.Hauser@noaa.gov](mailto:Olivia.Hauser@noaa.gov)



Sent Thursday, May 1, 2008 3:10 pm

To [Christiaan.VanWestendorp@noaa.gov](mailto:Christiaan.VanWestendorp@noaa.gov) , [jasper.schaer@noaa.gov](mailto:jasper.schaer@noaa.gov) , [Daniel.Wright@noaa.gov](mailto:Daniel.Wright@noaa.gov) , [Jake.Yoos@noaa.gov](mailto:Jake.Yoos@noaa.gov) , [James.Jacobson@noaa.gov](mailto:James.Jacobson@noaa.gov) , [Matthew.Ringel@noaa.gov](mailto:Matthew.Ringel@noaa.gov) , [Mark.Mcmann@noaa.gov](mailto:Mark.Mcmann@noaa.gov) , [David.Elliott@noaa.gov](mailto:David.Elliott@noaa.gov) , [Kathryn.Simmons@noaa.gov](mailto:Kathryn.Simmons@noaa.gov) , [Lucy.Massimillo@noaa.gov](mailto:Lucy.Massimillo@noaa.gov) , [Matthew.Jaskoski@noaa.gov](mailto:Matthew.Jaskoski@noaa.gov) , "Eric M. Moore" <[Eric.M.Moore@noaa.gov](mailto:Eric.M.Moore@noaa.gov)> , [Michael.Davidson@noaa.gov](mailto:Michael.Davidson@noaa.gov) , [Stephen.Kuzirian@noaa.gov](mailto:Stephen.Kuzirian@noaa.gov) , "Lynnette V. Morgan" <[Lynnette.V.Morgan@noaa.gov](mailto:Lynnette.V.Morgan@noaa.gov)>

Cc [Mark.Vanwaes@noaa.gov](mailto:Mark.Vanwaes@noaa.gov)

Bcc

Subject HVCR

Hi FOOs, CSTs and Team Leads,

A recent discussion made me realize that many of you are still creating some sort of Horizontal and Vertical Control Report (HVCR), even if you have not done any active horizontal control or vertical control. If you have not actively set up a tide gauge or a differential beacon, you are not required to write a HVCR. See FPM section "5.2.3.2.3. Horizontal & Vertical Control Report (HVCR)" Please just state that fact in your DR, and place a txt file in a HVCR folder stating there was not a report required for this survey. This lets the branch know that you do not have a report, and saves you from having to re-write, or copy any information into a separate document. Please email me if you have any questions.

Olivia

From [Olivia.Hauser@noaa.gov](mailto:Olivia.Hauser@noaa.gov)



Sent Thursday, May 1, 2008 3:10 pm

To [Christiaan.VanWestendorp@noaa.gov](mailto:Christiaan.VanWestendorp@noaa.gov) , [jasper.schaer@noaa.gov](mailto:jasper.schaer@noaa.gov) , [Daniel.Wright@noaa.gov](mailto:Daniel.Wright@noaa.gov) , [Jake.Yoos@noaa.gov](mailto:Jake.Yoos@noaa.gov) , [James.Jacobson@noaa.gov](mailto:James.Jacobson@noaa.gov) , [Matthew.Ringel@noaa.gov](mailto:Matthew.Ringel@noaa.gov) , [Mark.Mcmann@noaa.gov](mailto:Mark.Mcmann@noaa.gov) , [David.Elliott@noaa.gov](mailto:David.Elliott@noaa.gov) , [Kathryn.Simmons@noaa.gov](mailto:Kathryn.Simmons@noaa.gov) , [Lucy.Massimillo@noaa.gov](mailto:Lucy.Massimillo@noaa.gov) , [Matthew.Jaskoski@noaa.gov](mailto:Matthew.Jaskoski@noaa.gov) , "Eric M. Moore" <[Eric.M.Moore@noaa.gov](mailto:Eric.M.Moore@noaa.gov)> , [Michael.Davidson@noaa.gov](mailto:Michael.Davidson@noaa.gov) , [Stephen.Kuzirian@noaa.gov](mailto:Stephen.Kuzirian@noaa.gov) , "Lynnette V. Morgan" <[Lynnette.V.Morgan@noaa.gov](mailto:Lynnette.V.Morgan@noaa.gov)>

Cc [Mark.Vanwaes@noaa.gov](mailto:Mark.Vanwaes@noaa.gov)

Bcc

Subject HVCR

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Olivia

**Subject:** Re: H11821 Deliverables

**From:** Shepard Smith <Shep.Smith@noaa.gov>

**Date:** Fri, 30 May 2008 11:56:42 -0400

**To:** daniel wright <Daniel.Wright@noaa.gov>

**CC:** megan nadeau <Megan.Nadeau@noaa.gov>, jasper schaer <jasper.schaer@noaa.gov>, Castle E Parker <Castle.E.Parker@noaa.gov>, Wesley Kitt <Wesley.Kitt@noaa.gov>

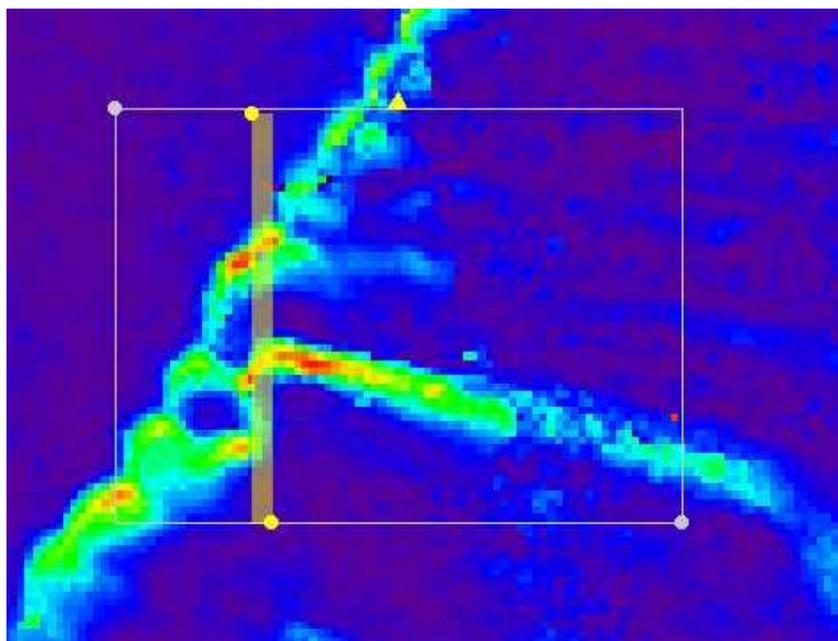
TJ,

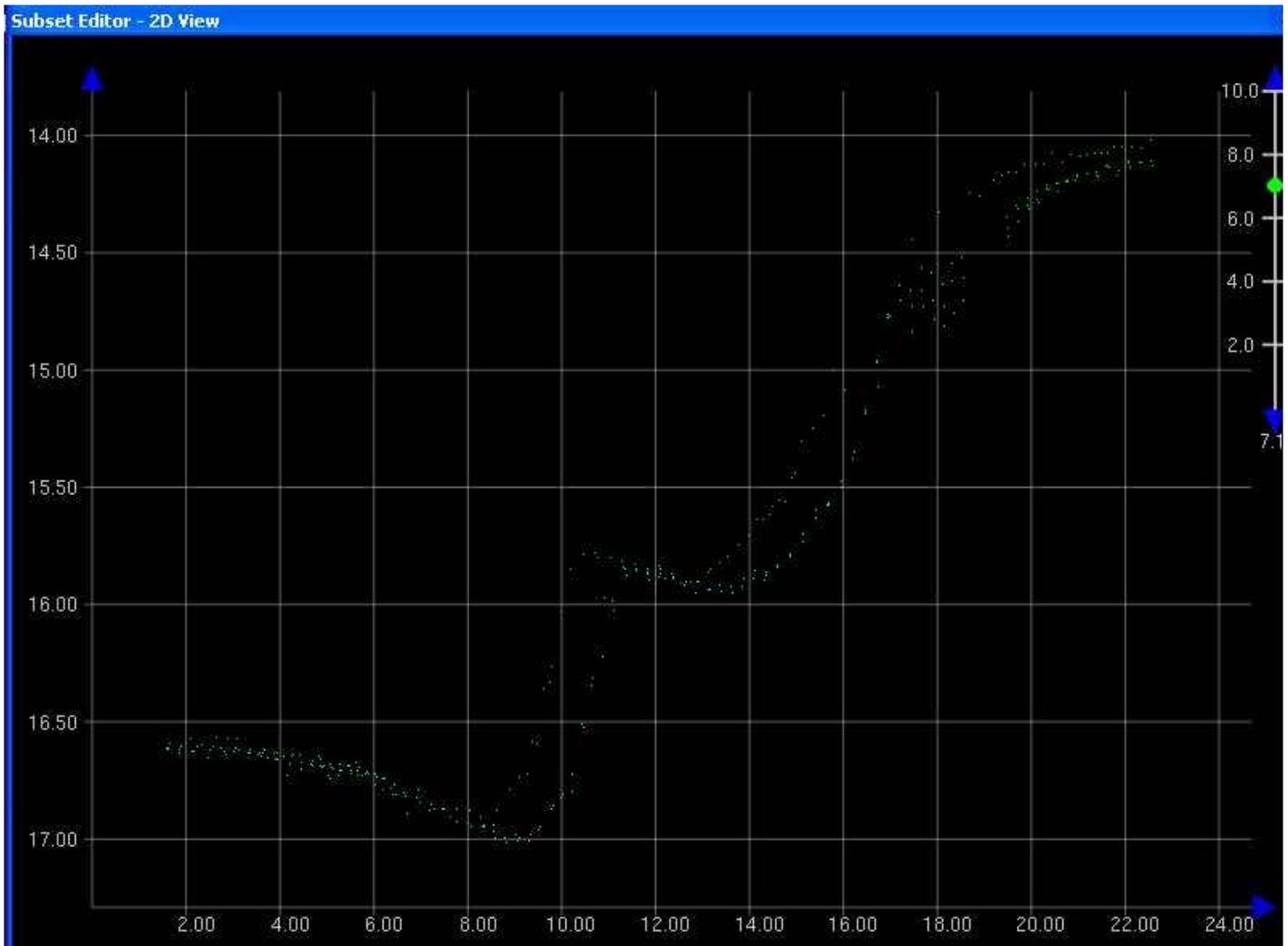
Yes, please.

I envision something along these lines:

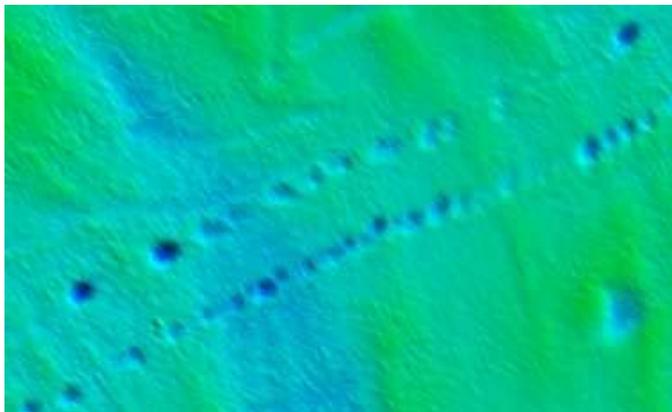
"The standard deviation layer of each grid was examined for areas of unusually high uncertainty that might indicate unresolved systematic errors. The colors in the following screen captures are scaled from 0 to 0.5m (*adjust as appropriate*). Comments to follow:

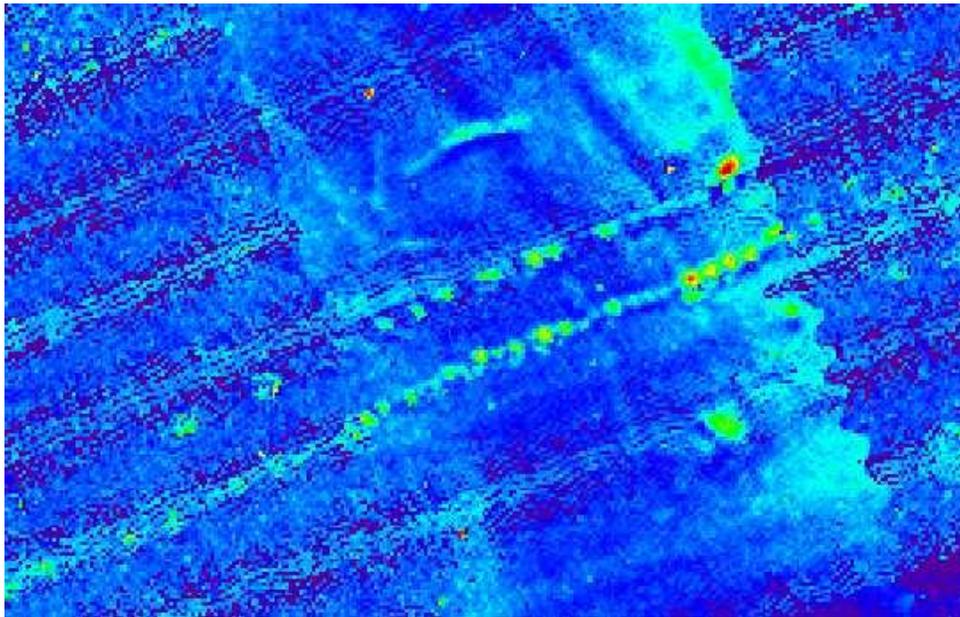
In areas of steep slopes and on the edges of dredged scours, horizontal errors between adjacent lines on the order of 1m caused std deviation of around 0.5m



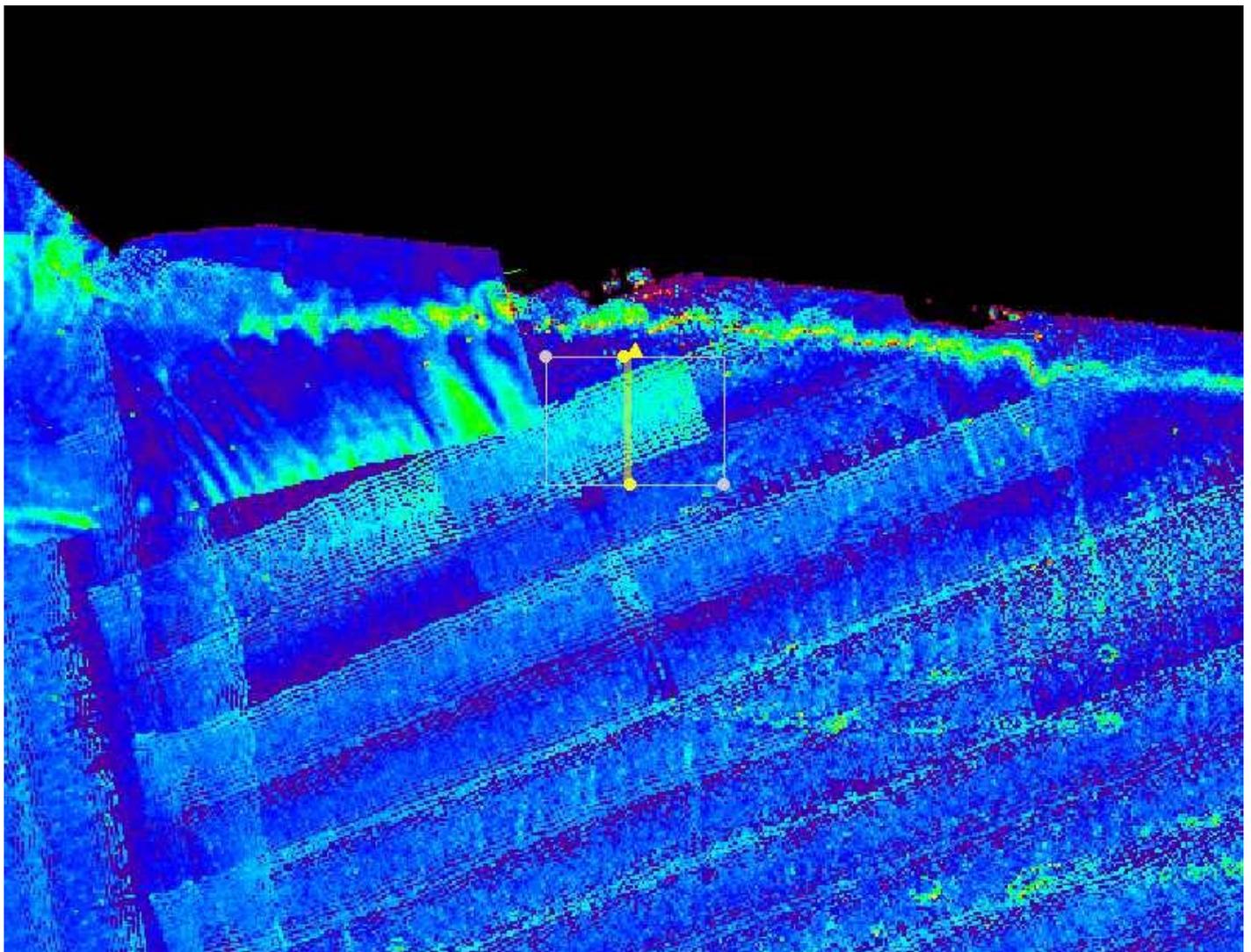


Lines of spudprints show up as lines of high std deviation that happened to coincide with the direction of the mainscheme lines.





Some areas of overlapping mainscheme lines show a std deviation of up to 0.15m, associated with an offset between the lines. We don't fully understand this offset, especially because it is on the same vessel just a few minutes apart.



etc, etc...

daniel wright wrote:

Hello Shep,

We are preparing our deliverables for H11821, Approaches to Jacksonville, and we would like confirmation/clarification on the following:

1. In our discussion regarding crossline comparisons, we agreed that an analysis of areas of high standard deviation in the BASE surface would be preferable over Pydro crossline stats, or a crossline to mainscheme surface differencing. Do you still concur?

2. Section 5.1.2 of the Specs and Deliverables;

"If single beam and multibeam are specified in the Hydrographic Survey Project Instructions or Statement of Work and they both fall in a common area, then a separate single beam surface is required."

In 2 of the 5 field sheets we collected both MB and SB for mainscheme bathy. If the soundings will be generated from the combined data, wouldn't this be better submitted as 1 combined surface? Or would you prefer 2 separate surfaces? Currently we have them combined.

Please let us know your thoughts on this.

Br,  
Dan



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Office of Coast Survey  
Silver Spring, Maryland 20910-3282

4 August 2008

MEMORANDUM FOR: Charlotte Taylor  
State Archaeologist, Rhode Island

Victor Mastone,  
State Underwater Archaeologist, Massachusetts

Bruce Terrell  
Marine Historian with NOAA's National Marine Sanctuary Program

FROM: Jeremy McHugh  
Hydrographic Surveys Division

SUBJECT: Request for Comments on Historic Properties in the Rhode Island  
Sound and Approaches, MA and RI

Dear Charlotte, Victor and Bruce,

The National Oceanic and Atmospheric Administration's Office of Coast Survey (OCS) is currently conducting hydrographic surveys (multibeam and side scan sonar data acquisition) in the Rhode Island Sound through August, 2008.

The purpose of this notice is to request comments regarding historic properties in the area. The information produced by survey operations will be used to provide navigational information and products, including nautical charts, to the public. Except for dangers to navigation, which are made known to the public immediately, it is OCS policy to make information regarding possible historic resources available for SHPO review before public dissemination. If the upcoming survey finds information on features that may be historic, OCS will contact your office when this information is available for your review.

I attached a map showing the area where we plan to survey.

Please do not hesitate to contact me with any questions.

Respectfully,  
Jeremy McHugh



**OPR-B307-TJ-08**

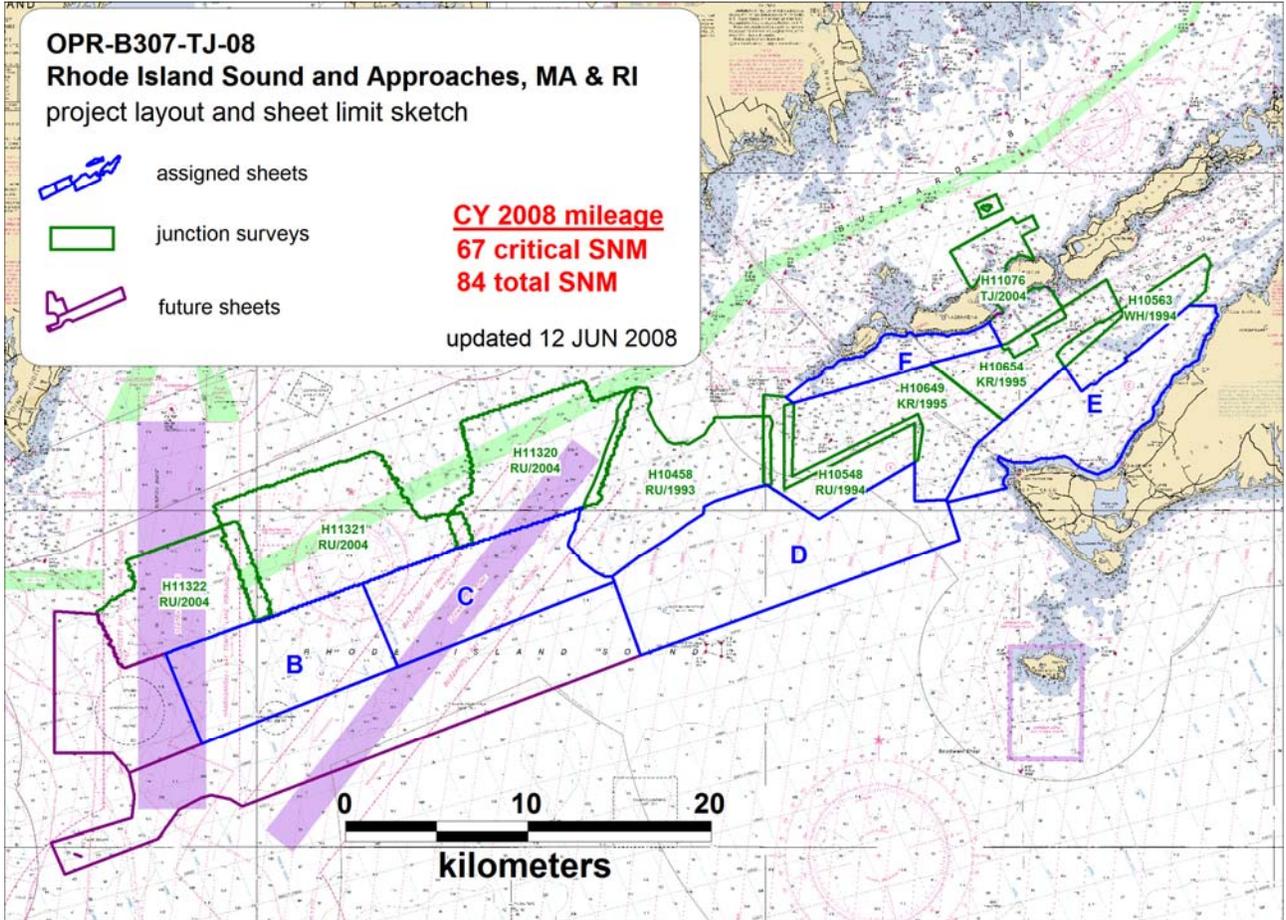
**Rhode Island Sound and Approaches, MA & RI**

project layout and sheet limit sketch

-  assigned sheets
-  junction surveys
-  future sheets

**CY 2008 mileage**  
**67 critical SNM**  
**84 total SNM**

updated 12 JUN 2008



**Subject:** RE: Request for Comments on Historic Properties in the Approaches to the Rhode Island Sound, MA and RI

**From:** "Mastone, Victor (EEA)" <Victor.Mastone@state.ma.us>

**Date:** Fri, 08 Aug 2008 08:00:14 -0400

**To:** Jeremy McHugh <Jeremy.McHugh@noaa.gov>

**CC:** James M Crocker <James.M.Crocker@noaa.gov>, Tod Schattgen <Tod.Schattgen@noaa.gov>, Jasper Schaer <jasper.schaer@noaa.gov>, Bruce Terrell <Bruce.Terrell@noaa.gov>, ctaylor@preservation.ri.gov

Dear Jeremy,

I am taking this opportunity to provide you some very preliminary and informal comments on your survey area.

I have conducted a very preliminary review of literature and BUAR files for the eastern approaches to Rhode Island Sound. The area lies along the main historic vessel transit route. So, we would anticipate a heavy volume of vessel traffic for all historic periods. However, a review of known and reported vessel loss locations in your proposed study area generally show lower numbers of vessel losses, except for the eastern portion (Vineyard Sound and Elizabeth Islands) and extreme western portions (Block Island and approaches to Narragansett Bay) of your study area.

Within or near Massachusetts waters, I offer the following preliminary assessments. For the area of the Vineyard Sound, we would broadly assign a moderate to high probability of shipwreck site occurrence. For the area of Buzzards Bay, we would broadly assign a moderate probability of shipwreck site occurrence for the vicinity of the Elizabeth Islands and the approach to New Bedford with low probability the rest of that area. Similarly, the western half of Areas D and HI0458-RU/1993 have a low probability of shipwreck site occurrence. We have very little information for the areas west of the former Vineyard Sound and Hens & Chickens Lightship stations.

With respect to notifying the MA SHPO, you should contact Brona Simon, SHPO/State Archaeologist, or Ed Bell ([Ed.Bell@state.ma.us](mailto:Ed.Bell@state.ma.us)) on her staff at: Massachusetts Historical Commission, 220 Morrissey Boulevard,

Boston, MA 02125. Please note that while I have provided an email for Ed Bell, the MHC does not typically formally reply to/by emails.

Among important vessel losses in your study area is the Vineyard Sound Lightship (LV-73) which sank during a hurricane on September 14, 1944 with loss of all hands

(<http://www.mass.gov/czm/buar/shipwrecks/ua-vsflightship.htm>). We would be very interested in receiving copies of your images of this as well as other sites. Further, you should consider sending similar information on the LV-73 to Dr. Robert Browning, USCG Historian, at: [RBrowning@comdt.uscg.mil](mailto:RBrowning@comdt.uscg.mil).

Thank you for keeping me informed and providing an opportunity to provide comments. I look forward to further information sharing. Calm waters.

Best regards,

Vic

Victor T. Mastone  
Director and Chief Archaeologist  
Board of Underwater Archaeological Resources  
251 Causeway Street, Suite 800  
Boston, MA 02114  
Direct Line: 617-626-1141  
Fax line: 617-626-1240  
Email: [victor.mastone@state.ma.us](mailto:victor.mastone@state.ma.us)  
Website: [www.mass.gov/czm/buar/index.htm](http://www.mass.gov/czm/buar/index.htm)

-----Original Message-----

From: Jeremy McHugh [<mailto:Jeremy.McHugh@noaa.gov>]

Sent: Tuesday, August 05, 2008 10:27 AM

To: Mastone, Victor (ENV); Bruce Terrell; [ctaylor@preservation.ri.gov](mailto:ctaylor@preservation.ri.gov)

Cc: James M Crocker; Tod Schattgen; Jasper Schaer

Subject: Request for Comments on Historic Properties in the Approaches to the Rhode Island Sound, MA and RI

Hi Charlotte, Victor and Bruce,

I attached a memo requesting comments from you related to an ongoing NOAA hydrographic survey project in the approaches to the Rhode Island Sound.

Details are in the memo. Please send any comments directly to me.

thanks,

Jeremy

--

Jeremy McHugh, Physical Scientist  
NOAA's Office of Coast Survey  
301-713-2702 x117



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Office of Coast Survey  
Silver Spring, Maryland 20910-3282

8 August 2008

MEMORANDUM FOR: Brona Simon  
State Archaeologist / SHPO, Massachusetts Historical Commission

Ed Bell  
Massachusetts Historical Commission

FROM: Jeremy McHugh  
Hydrographic Surveys Division

SUBJECT: Request for Comments on Historic Properties in the Rhode Island  
Sound and Approaches, MA and RI

Dear Brona and Ed,

The National Oceanic and Atmospheric Administration's Office of Coast Survey (OCS) is currently conducting hydrographic surveys (multibeam and side scan sonar data acquisition) in the Rhode Island Sound through August, 2008.

The purpose of this notice is to request comments regarding historic properties in the area. The information produced by survey operations will be used to provide navigational information and products, including nautical charts, to the public. Except for dangers to navigation, which are made known to the public immediately, it is OCS policy to make information regarding possible historic resources available for SHPO review before public dissemination. If the upcoming survey finds information on features that may be historic, OCS will contact your office when this information is available for your review.

I attached a map showing the area where we plan to survey.

Please do not hesitate to contact me with any questions.

Respectfully,  
Jeremy McHugh



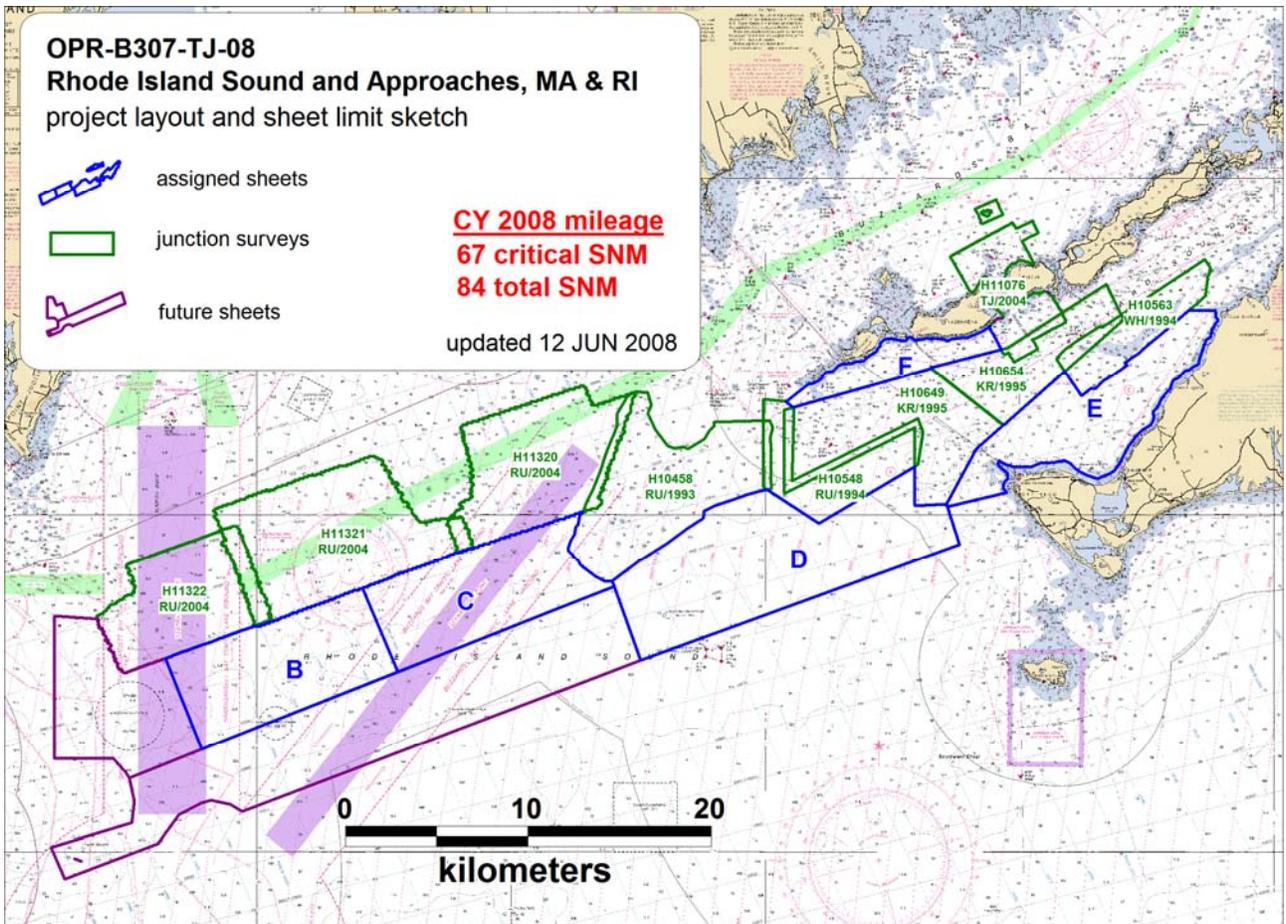
**OPR-B307-TJ-08**

**Rhode Island Sound and Approaches, MA & RI**  
project layout and sheet limit sketch

-  assigned sheets
-  junction surveys
-  future sheets

**CY 2008 mileage**  
**67 critical SNM**  
**84 total SNM**

updated 12 JUN 2008



**Subject:** Re: Request for Comments on Historic Properties in the Approaches to the Rhode Island Sound, MA and RI

**From:** Charlotte Taylor <ctaylor@preservation.ri.gov>

**Date:** Mon, 11 Aug 2008 13:49:00 -0400

**To:** Jeremy McHugh <Jeremy.McHugh@noaa.gov>

Hi Jeremy,

Well, we have quite a few wrecks in the area, and not very good location data. I've shared a database of all the shipwrecks I know about with a person at the Rhode Island Marine Archaeology Project, who is working on getting it into GIS format, and Rod Mather at URI also is working on a GIS database of the shipwrecks. So there might be something useful available now (through Rod) or soonish (through RIMAP).

To give you an idea of what I have, I've attached the access version of the database (which is itself a work in progress). If you need specific information ASAP, I can pull out of that the ones that I think might be in the area of interest. But it won't be that ASAP, because I am on vacation until August 20th....

Let me know!

Charlotte

<b>shipwrecks.mdb</b>	<b>Content-Type:</b> application/msaccess <b>Content-Encoding:</b> base64
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**Subject:** Re: Request for Comments on Historic Properties in the Approaches to the Rhode Island Sound, MA and RI

**From:** "Bruce.Terrell" <Bruce.Terrell@noaa.gov>

**Date:** Wed, 06 Aug 2008 11:59:28 -0400

**To:** Jeremy McHugh <Jeremy.McHugh@noaa.gov>

**CC:** Victor.Mastone@State.MA.US, ctaylor@preservation.ri.gov, James M Crocker <James.M.Crocker@noaa.gov>, Tod Schattgen <Tod.Schattgen@noaa.gov>, Jasper Schaer <jasper.schaer@noaa.gov>

Thank you Jeremy. I have no comments on this area other than generally this was an area of historic navigation and I would expect there to be a strong likelihood of historical shipwrecks in the area.

Bruce Terrell

Jeremy McHugh wrote:

Hi Charlotte, Victor and Bruce,

I attached a memo requesting comments from you related to an ongoing NOAA hydrographic survey project in the approaches to the Rhode Island Sound.

Details are in the memo. Please send any comments directly to me.

thanks,  
Jeremy

**Subject:** Re: B307, Sheet B**From:** Jeremy McHugh <Jeremy.McHugh@noaa.gov>**Date:** Wed, 27 Aug 2008 10:55:11 -0400**To:** jasper.schaer <jasper.schaer@noaa.gov>**CC:** Tod Schattgen <Tod.Schattgen@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>

Hi Jasper,

It will be H11996. The details in Survey Tracker are below:

Success - Survey Added

Survey Number H11996

Project Number OPR-B307-TJ-08

Survey Type H

Locality Rhode Island Sound

Sub Locality 10 NM Southeast of Point Judith

State Rhode Island,

Scale 10000

Sheet B

Max/North Latitude (DDMMSS.S)	411756.0	Min/South Latitude (DDMMSS.S)	411255.0
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Max/West Longitude (DDDMMSS.S)	0732347.0	Min/East Longitude (DDDMMSS.S)	0711420.0
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12300

12354

12363

12364

12370

12371

12372

12373

12374

Affected Charts 12375

13003

13006

13209

13211

13213

13214

13215

13217

13218

5161

ESNM 17

Field Unit NOAA SHIP THOMAS JEFFERSON

Processing Center AHB

Comments Registry number requested by TJ via email on 27 Aug 2008.

jasper schaer wrote:

Jeremy-

Need a registry for sheet B.

r-js

--

Jeremy McHugh, Physical Scientist  
NOAA's Office of Coast Survey  
301-713-2702 x117



**The Commonwealth of Massachusetts**  
William Francis Galvin, Secretary of the Commonwealth  
Massachusetts Historical Commission

August 20, 2008

Jeremy McHugh  
Hydrographic Surveys Division  
United States Department of Commerce  
National Oceanic and Atmospheric Administration  
Office of Coastal Survey  
Silver Spring, MD 20910-3282

RE: Rhode Island Sound Coastal Survey, Massachusetts and Rhode Island, MHC # RC.44967

Dear Mr. McHugh:

Thank you for providing information to the Massachusetts Historical Commission for the survey and mapping project referenced above. The project includes hydrographic surveys utilizing multibeam and sidescan sonar, of coastal waters within Rhode Island Sound and Vineyard Sound, generally between Point Judith in Rhode Island and Cuttyhunk Island in Massachusetts.

Review of the MHC's Inventory of Historic and Archaeological Assets of the Commonwealth determined that there is one recorded historical period archaeological resource adjacent to Survey Area F in the tidal zone of the southwest end of Cuttyhunk Island in the Town of Gosnold, and designated in MHC's files as GOS.HA.2, the 19th-century bark *Wanderer*. There are many ancient and historical period archaeological sites and historic period resources along the present-day coastline at the margins of Survey Areas E and F and further inland.

The sole recorded site in MHC's files for the survey area is not representative of the number and type of historic and archaeological resources expected in the survey area because of the lack of current professional archaeological surveys. Archaeological surveys are typically conducted for specific proposed development or other projects with seabed impacts. The identification of ancient and historical period sites requires advanced technologies and methods developed for that purpose. Recent professional archaeological surveys in the waters of Massachusetts and Rhode Island have used multiple technologies and the examination of soil cores to detect evidence of preserved ancient terrestrial surfaces and historic period shipwrecks and other types of maritime cultural resources.

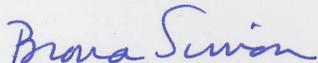
The survey area has a high potential to contain intact significant archaeological resources, including historic maritime resources (chiefly shipwrecks) and ancient Native American occupations on formerly exposed land surfaces that have been submerged. Evidence may be detected of these ancient and historic period activities in the survey area. The preliminary comments provided by the Massachusetts Board of Underwater Archaeological Resources (BUAR) support the sensitivity assessment for the survey areas. The survey area in Massachusetts is within the traditional Wampanoag homelands. Two federally-recognized Indian Tribes have interest in and continue to occupy and use this area: the Mashpee Wampanoag Tribe and the Wampanoag Tribe of Gay Head (Aquinnah).

MHC appreciates the opportunity to consult further about any proposed publication of sensitive archaeological site locational information. NOAA may withhold this data from public disclosure under

Section 304 of the National Historic Preservation Act of 1966 as amended (16 U.S.C. 470w-3(a)). MHC would greatly appreciate the opportunity to review survey reports and/or summaries of findings of potential historic sites in consultation with the BUAR. If these surveys may relate to future projects consultation as part of the Section 106 process (36 CFR 800) should be initiated with the MHC as early as possible in the planning stage of the project.

MHC looks forward to continued consultation with NOAA for this and other survey efforts. Your cooperation to provide the printed color map for MHC review is greatly appreciated. If you have questions or require additional information please contact Jonathan K. Patton at this office.

Sincerely,



Brona Simon  
State Historic Preservation Officer  
Executive Director  
State Archaeologist  
Massachusetts Historical Commission

xc:

Victor T. Mastone, Massachusetts BUAR  
Paul Robinson, SHPO, Rhode Island Historic Preservation Commission

**Subject:** October 2008 data at MENEMSHA HARBOR, MA 8448725 processed.

**From:** Gerald Hovis <Gerald.Hovis@noaa.gov>

**Date:** Tue, 14 Oct 2008 16:59:26 -0400

**To:** Janet Culp <Janet.Culp@noaa.gov>

**CC:** jasper schaeer <jasper.schaer@noaa.gov>, NOS.COOPS.HPT@noaa.gov

Jan,

Would it be possible to have the first two days of October 2008 data at MENEMSHA HARBOR, MA 8448725 processed. OCS needs Oct 1 & 2 to apply verified tides. Sorry for any confusion.

Thanks  
Jerry

jasper schaeer wrote:

Thanks for the response and your explanation. We appreciate all the work you, CO-OPs, do for us so we can survey and stay productive.....

cheers-js

Craig Martin wrote:

Jasper,

The data for Menemsha was processed through the end of the month....I will get in touch with our processing team to have them finish up the first few days of October so you can move forward with your processing, as it should be finished regardless if you have to use it or not. I checked the Tide notes for H11995 and H11996 and both just require Newport for tide control. If the TCARI grid we supplied gives you any issues just using Newport please let us know and we'll work to adjust it appropriately.

thanks,  
Craig

jasper schaeer wrote:

My smooth tides letter requested coverage for DN234 (aug 21) to DN275 (oct 1). I am trying to apply verified tides to H11995 & H11996, which uses Menemsha & Newport Station. I do not have any verified tides to download for Menemsha past 9/30-need a oct 1 data set. I do not think this is a big issue, because the location of H11995 & 96 is in the separation zones to Newport Approaches, therefore I would think Newport Station should take dominance over Menemsha. What are your thoughts on this?

r-js

--  
Jerry Hovis  
Tidal Datums & Hydrographic Support Team  
Center for Operational Oceanographic Products & Services  
Products and Services Division  
National Ocean Service  
National Oceanographic Atmospheric Administration  
<http://www.tidesandcurrents.noaa.gov/>

[gerald.hovis@noaa.gov](mailto:gerald.hovis@noaa.gov)  
SSMC4, Sta. 7200  
1305 East-West Highway  
Silver Spring, MD 20910 USA Work: (301) 713-2890 x109

cell: (240)-997-2651  
Fax: (301) 713-4437

**Subject:** Re: for the Appendix V record, OPR-B307, H11920 & H11921

**From:** "shep.smith" <smith.shepard@gmail.com>

**Date:** Sat, 26 Jul 2008 14:26:28 -0400

**To:** jasper.schaer <jasper.schaer@noaa.gov>

Sounds like a good approach.

jasper.schaer wrote:

Sir,

Will AHB accept object detection MB coverage, in place of complete MB coverage, in the 4-20 meter survey area of the project, which already been covered by 100% SSS?

V/r-js