

H11319

NOAA FORM 76-35A

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

## DESCRIPTIVE REPORT

*Type of Survey* BASIC HYDROGRAPHIC

*Field No.*

*Registry No.* H11319

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### LOCALITY

*State* MASSACHUSETTS

*General Locality* BUZZARDS BAY

*Locality* 6 NM SE OF ROUND HILL POINT

2004

CHIEF OF PARTY  
TODD A. HAUPT, LT/NOAA

LIBRARY & ARCHIVES

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DATE

**H11319**

**HYDROGRAPHIC TITLE SHEET**

**INSTRUCTIONS** — The Hydrographic Sheet should be accompanied by this form, filled  
In as completely as possible, when the sheet is forwarded to the Office.

FIELD No.

**State** Massachusetts

**General Locality** Buzzards Bay

**Sub-Locality** 6 NM SE of Round Hill Point

**Scale** 1:10000 **Date of Survey** 90/'04 – 104/'04

**Instructions dated** March 20, 2004 **Project No.** S-B912-RU

**Vessel** NOAA Ship RUDE s590

**Chief of Party** LT Todd Haupt, NOAA

**Surveyed by** LCDR Schattgen, LT Haupt, LT Jg Yoos, ENS Edmundson, SST Kitt, ST Stephens

**Soundings by echo sounder, hand lead, pole** ODOM Echotrak DE3200 Mk II, Reson Seabat 8125

**Graphic record scaled by** RUDE Personnel

**Graphic record checked by** RUDE Personnel **Automated Plot** N/A

*Hewlett Packard Design Jet 2500 CP (Office)*

**Verification by** Atlantic Hydrographic Branch Personnel

**Soundings in** fathoms **feet at MLW MLLW** feet at MLLW

**REMARKS:** All times are in UTC

Soundings have been corrected with verified tides

Projection in UTM zone 19

*NOTE: Red, Bold, Italic notes in the Descriptive Report were made during office processing.*

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## **DESCRIPTIVE REPORT**

To accompany

### **HYDROGRAPHIC SURVEY H11319**

Scale of Survey: 1:10000  
Year(s) of Survey: 2004  
NOAA Ship RUDE  
LT Todd A Haupt, Commanding Officer

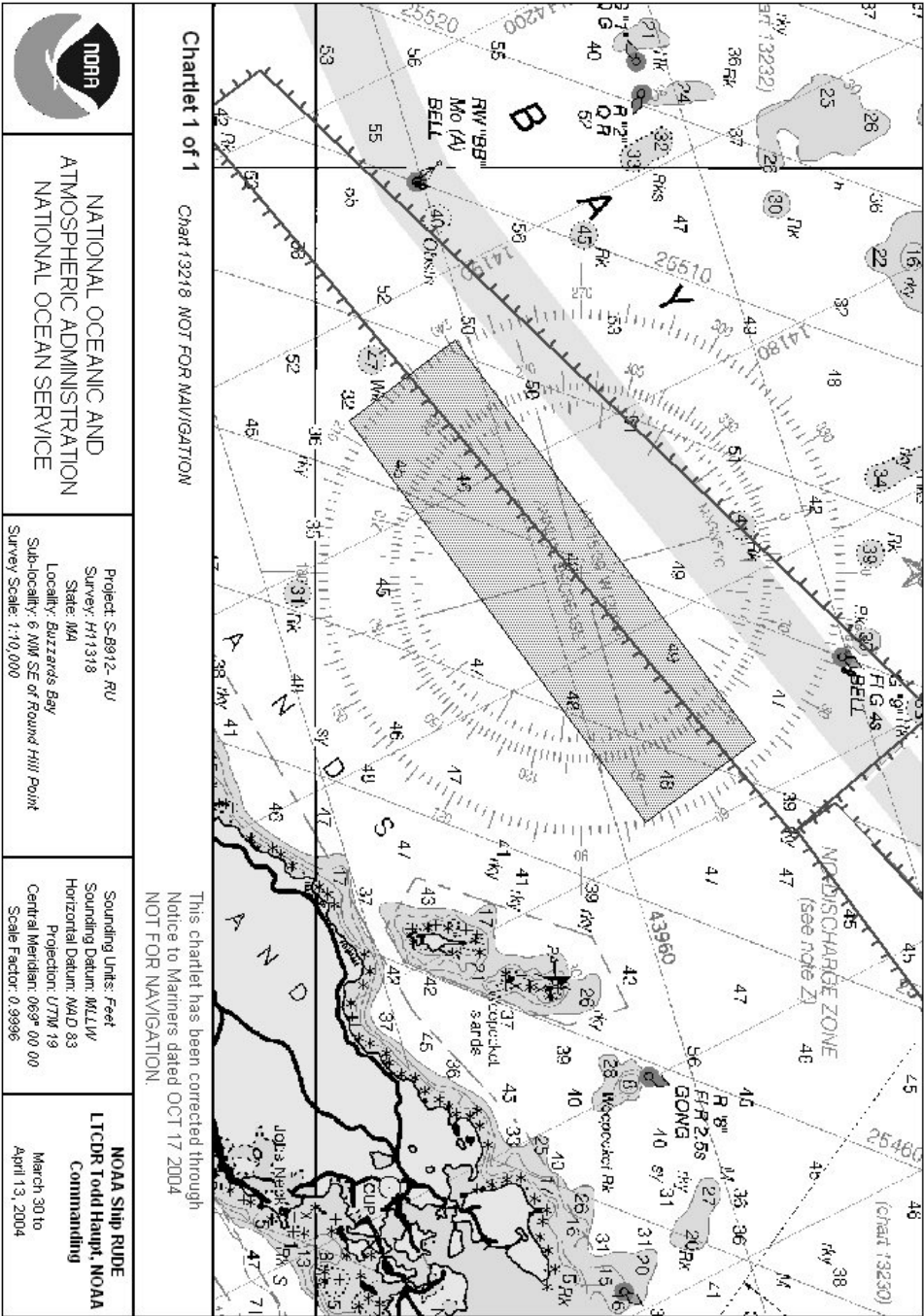
#### **A. Area Surveyed**

This hydrographic survey was conducted in accordance with Hydrographic Survey Letter Instructions for project OPR-B912-RU updated March 30, 2004.

This project is being conducted to provide side scan sonar and/or multibeam data in support of National Ocean Service (NOS) nautical charts, as a response to requests from the Northeast Marine Pilots. This project was conducted in accordance with NOS requirements for side scan sonar and multibeam data acquisition and processing.

Full bottom coverage, consisting of 100% side scan sonar and 100% multibeam sonar coverage was achieved for this entire survey.

For complete survey limits, see the chartlet on the following page.



## **B. DATA Acquisition and Processing Equipment** *See also the Evaluation Report*

### **B.1 Equipment**

Data were acquired by NOAA Ship RUDE (S-590)

The RUDE is 90 feet in length with a 22-foot beam and 7-foot draft

Vertical-beam echo sounding data were acquired on RUDE with an Odom Echotrac dual-beam echo sounder (24 and 200 kHz). RUDE vertical-beam data was used in conjunction with Side Scan Sonar and multibeam (MB) sonar to ensonify objects on the bottom not apparent at side scan nadir and also for crossline checks with the mainscheme lines. No vertical beam data were acquired during multibeam operations. All data is included in the final data set.

RUDE acquired all side scan sonar data using a Klein 5500 towfish. Side scan sonar data was recorded digitally on RUDE using Triton ISIS software and archived in Extended Triton Format.

Single frequency (455 kHz) multi-beam data were acquired with a Reson SeaBat 8125 shallow water sonar system. Positioning and attitude on the RUDE were determined with a TSS POS/MV and utilizing a Trimble DSM-212L DGPS receiver.

Sound velocity data were acquired using a Sea-Bird SBE 19 SEACAT Conductivity, Temperature and Depth (CTD) Profiler.

The RUDE encountered random timing issues throughout this survey which affected both SSS and MB. This random error was evident in the alongtrack resolution of features when comparing adjacent lines of SSS and MB as in the final mosaic and DTM. After investigation into the data, contact resolution was found to still be within NOAA Hydrographic Specs for nautical charting and therefore data acquisition continued. This random timing error was resolved before the next survey. Data acquisition and Processing Report (DAPR) \* for 2002, 2003, and 2004 has been submitted. Please refer to the 2004 DAPR for detailed equipment and vessel configuration.

*\*Data filed at the Atlantic Hydrographic Branch (AHB).*

## B.2 QUALITY CONTROL

### Side Scan Sonar Quality Control

Daily confidence checks were made by observing the outer ranges of the side scan sonar images. A good check consisted of distinguishing contacts, i.e. lobster pots, drag scours, cable lines, or sand waves across the entire range of the side scan trace. Under conditions of questionable data quality due to high refraction or surface noise, these confidence checks were conducted as often as possible. SSS data acquisition was suspended when targets approximately 1 meter in characteristic size could not be resolved to the edge of the range scale in use. The Rude random timing error was evident in the final mosaic but acceptable for object detection.

### Shallow Water Multibeam Quality Control

There were no major faults with the shallow water multibeam system which affected data integrity in this survey. Confidence checks were provided by comparing nadir sounding data to the VBES and ensonification of known side scan contacts. Please refer to the project's DAPR\* for detailed discussion of SWMB system calibrations, patch test, data acquisition, and data processing. The Rude random timing error was evident in the final DTM but within NOAA Hydro Specs for nautical charting.

### Crosslines

The total distance of crosslines is 8.5 linear nautical miles which equates to 03.3% of total mainscheme lines. Crossline to mainscheme line comparison was conducted using MapInfo software. The comparisons are adequate, with the majority of differences being one foot or less. The result of this test is in Separates V\*\*.

### Junctions *See also the Evaluation Report.*

Survey H11319 junctions with survey H11318 (2004) to the north. The soundings in the present survey were in general agreement with those in survey H11318. Their soundings differ no more than 1 foot, please view. *Concur*

..\Pydro\_Proj\B-912\_Buzz\_bay\SheetB\Plots\Junction\ A\_B\_Junction.WOR

## B.3 CORRECTIONS TO ECHO SOUNDINGS

All methods or instruments were implemented as described in the Correction to Echo Sounding section of the DAPR\* for this project. A table detailing all sound velocity profiles is located in Separate III\*\*.

*\*Data filed at AHB.*

*\*\*Data filed with original field records.*

## **C. VERTICAL AND HORIZONTAL CONTROL**     *See also the Evaluation Report.*

### **VERTICAL CONTROL**

The tidal datum for this project is Mean Lower Low Water (MLLW). All soundings are referenced to MLLW. The operating National Water Level Observation Network (NWLON) station at Newport, RI (845-2660) served as datum control for the survey area. All soundings were reduced to Mean Lower Low Water with verified tides. Opening and closing levels were performed by CO-OPS. A Request for Smooth Tides letter was sent to N/OPS1 November 17, 2004 (Appendix IV)\*. Verified tides from the N/OPS1 CO-OPS website were downloaded and applied to all soundings for this sheet. Tide corrections were applied to the soundings using CARIS HIPS and SIPS v5.3.

*\* Approved tides and zones were reapplied in CARIS, during office processing.*

### **HORIZONTAL CONTROL**

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

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

Horizontal dilution of precision (HDOP) was monitored daily. Data were re-acquired if the HDOP value exceeded 2.5. The TSS POS/MV positioning system was also used to monitor the accuracy of the ship's position and orientation. Data were re-acquired if POS M/V's estimated position accuracy exceeded 4 m. Refer to section A.3 of the 2004 field season DAPR for more details regarding RUDE's POS M/V settings and operation.

## **D. Results and Recommendations**     *See also the Evaluation Report.*

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

Charts Affected: All or part of the following NOAA nautical charts are contained within the limits of H11318:

<b>Chart Number</b>	<b>Edition Date</b>	<b>Scale</b>
13218	10 Jun 2004	1:80000
13221	01 Dec 2003	1:40000



# H11319 PYDRO REPORT

**Registry Number:**

**State:**

**Locality:**

**Sub-locality:**

**Project Number:**

**Survey Dates:** 03/30/2004 - 04/13/2004

## Charts Affected

Number	Version	Date	Scale
13232	4th Ed.	06/30/2001	1:20000
13229	28th Ed.	01/01/2004	1:40000
13230	47th Ed.	12/01/2003	1:40000
13233	16th Ed.	04/14/2001	1:40000
13218	39th Ed.	06/01/2004	1:80000
12300	44th Ed.	07/01/2004	1:400000
13200	33rd Ed.	01/19/2002	1:400000
13009	30th Ed.	08/01/2002	1:500000
13006	31st Ed.	06/01/2003	1:675000
5161	13th Ed.	10/01/2003	1:1058400
13003	47th Ed.	06/01/2003	1:1200000

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	40 ft rock	Rock	12.32 m	41° 32' 19.209" N	070° 47' 24.363" W	---
1.2	34 ft rock	Rock	10.48 m	41° 33' 18.526" N	070° 46' 01.479" W	---
2.1	39 ft rock	Rock	12.04 m	41° 32' 57.266" N	070° 46' 36.063" W	---
2.2	41 ft rock	Rock	12.54 m	41° 31' 49.545" N	070° 47' 10.773" W	---
2.3	40 ft rock	Rock	12.33 m	41° 29' 27.516" N	070° 50' 22.234" W	---
2.4	BS - M, Sh	GP	9.70 m	41° 30' 03.234" N	070° 49' 50.788" W	---
2.5	BS - M, Sh	GP	13.80 m	41° 30' 45.836" N	070° 48' 42.845" W	---
2.6	BS - M	GP	16.28 m	41° 30' 45.589" N	070° 47' 48.222" W	---

2.7	BS- M	GP	18.68 m	41° 31' 28.034" N	070° 47' 44.556" W	---
2.8	BS- M (Do Not Chart)	GP	18.89 m	41° 31' 10.968" N	070° 47' 10.920" W	---
2.9	BS- M (Do Not Chart)	GP	20.43 m	41° 31' 26.600" N	070° 46' 40.355" W	---
2.10	BS- M	GP	21.30 m	41° 31' 50.418" N	070° 46' 03.812" W	---
2.11	BS- M (Do Not Chart)	GP	21.49 m	41° 32' 18.974" N	070° 46' 47.843" W	---
2.12	BS- M	GP	21.46 m	41° 32' 47.737" N	070° 45' 53.331" W	---

# **1 - Charted Features**

## 1.1) 40 ft rock

### Survey Summary

**Survey Position:** 41° 32' 19.209" N, 070° 47' 24.363" W  
**Least Depth:** 12.32 m  
**Timestamp:** 2004-091.01:18:37.408 (03/31/2004)  
**Survey Line:** h11319\_s-b912-ru / ru00\_mb / 2004-091 / 841\_0117  
**Profile/Beam:** 737/15  
**Charts Affected:** 13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1, 12300\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Charted Rk

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11319_s-b912-ru/ru00_mb/2004-091/841_0117	737/15	0.00	000.0	Primary
ChartGPs - Digitized	1	2.64	256.1	Secondary (grouped)
h11319_s-b912-ru/ru00_sss/2004-090/121_2157	0004	6.84	130.5	Secondary

### Hydrographer Recommendations

remove charted 41ft rk and chart as 40ft rk

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

40ft (13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1)

6 ¾fm (12300\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

12.3m (5161\_1)

### S-57 Data

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

**Attributes:** INFORM - 40 FT ROCK

QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 12.325 m

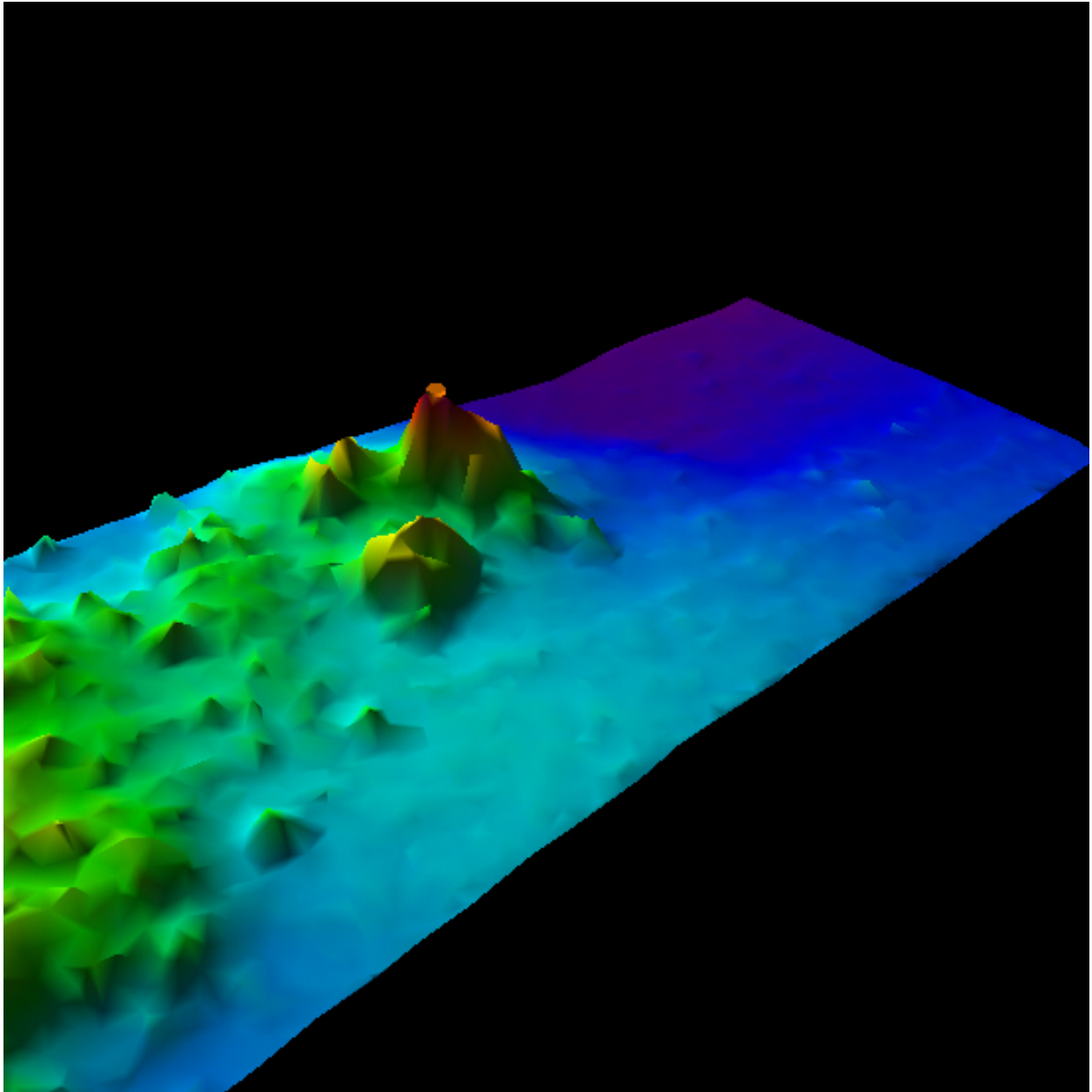
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur, remove Charted 41' dangerous rock and chart a 40' dangerous rock in present survey location.

## Feature Images



*Figure 1.1.1*

## 1.2) 34 ft rock

### Survey Summary

**Survey Position:** 41° 33' 18.526" N, 070° 46' 01.479" W  
**Least Depth:** 10.48 m  
**Timestamp:** 2004-091.00:34:34.040 (03/31/2004)  
**Survey Line:** h11319\_s-b912-ru / ru00\_mb / 2004-091 / 844\_0033  
**Profile/Beam:** 705/213  
**Charts Affected:** 13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1, 12300\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Rk

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11319_s-b912-ru/ru00_mb/2004-091/844_0033	705/213	0.00	000.0	Primary
h11319_s-b912-ru/ru00_sss/2004-090/122_2144	0002	10.63	011.1	Secondary
h11319_s-b912-ru/ru00_sss/2004-090/122_2144	0001	12.85	304.3	Secondary
ChartGPs - Digitized	2	65.14	076.0	Secondary (grouped)

### Hydrographer Recommendations

Remove charted 33ft rk and chart as 34ft rk

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

34ft (13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1)

5 ¾fm (12300\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

10.5m (5161\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 34 FOOT ROCK  
 QUASOU - 6:least depth known  
 TECSOU - 3:found by multi-beam

VALSOU - 10.482 m

VERDAT - 12:Mean lower low water

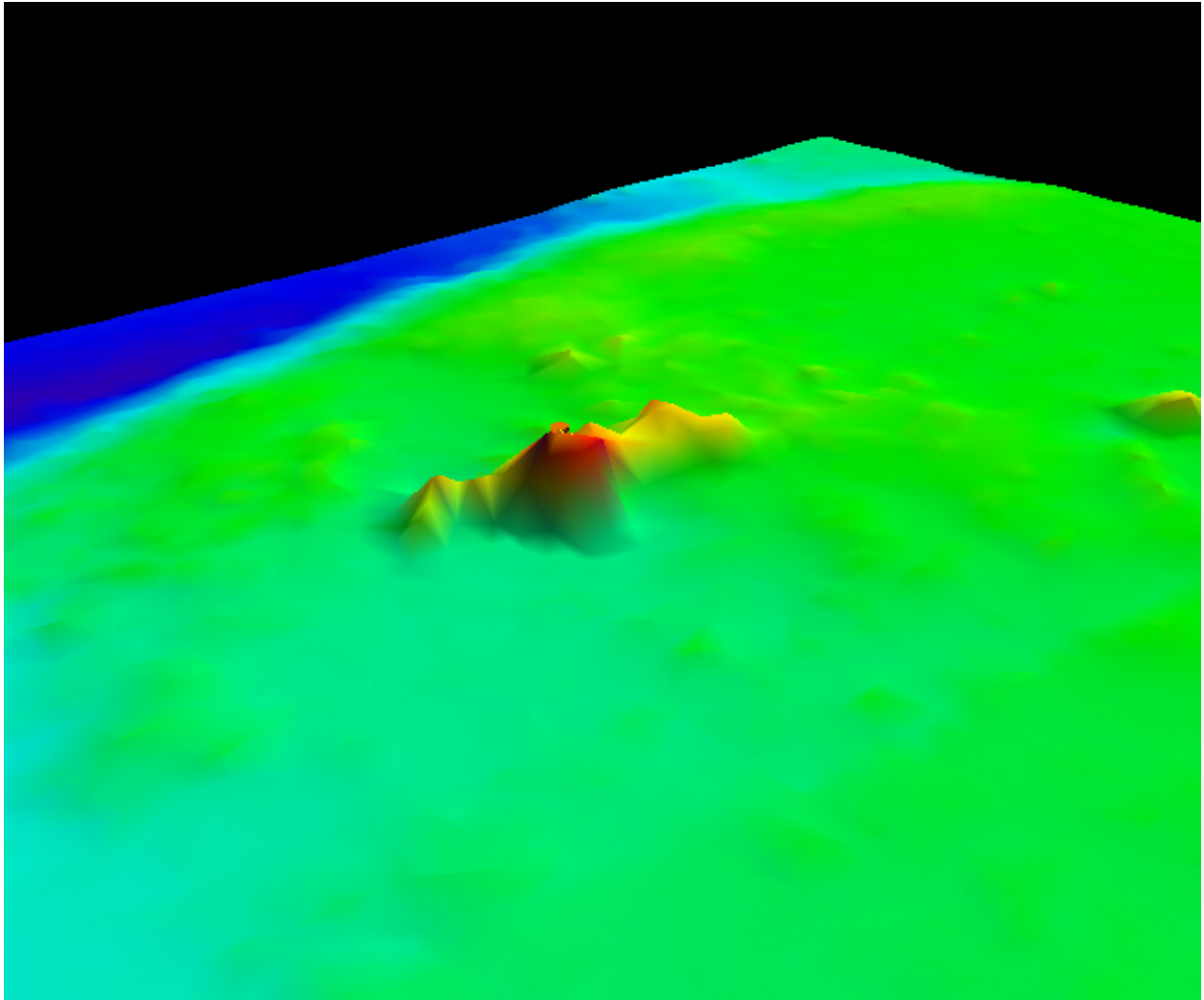
WATLEV - 3:always under water/submerged

### **Office Notes**

Concur, remove charted 33' dangerous rock and chart a 34' dangerous rock in present survey location.



### Feature Images



*Figure 1.2.1*

## **2 - New Features**

## 2.1) 39 ft rock

### Survey Summary

**Survey Position:** 41° 32' 57.266" N, 070° 46' 36.063" W  
**Least Depth:** 12.04 m  
**Timestamp:** 2004-090.23:14:05.455 (03/30/2004)  
**Survey Line:** h11319\_s-b912-ru / ru00\_mb / 2004-090 / 845\_2308  
**Profile/Beam:** 3163/133  
**Charts Affected:** 13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1, 12300\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Rk

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11319_s-b912-ru/ru00_mb/2004-090/845_2308	3163/133	0.00	000.0	Primary
h11319_s-b912-ru/ru00_sss/2004-090/123_2135	0001	19.73	299.0	Secondary
h11319_s-b912-ru/ru00_sss/2004-090/122_2144	0003	53.19	352.8	Secondary (grouped)

### Hydrographer Recommendations

Remove adj 30ft snd. Chart as 39ft Rk

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

39ft (13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1)

6 ½fm (12300\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

12.0m (5161\_1)

### S-57 Data

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

**Attributes:** INFORM - 39 FOOT ROCK

QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 12.042 m

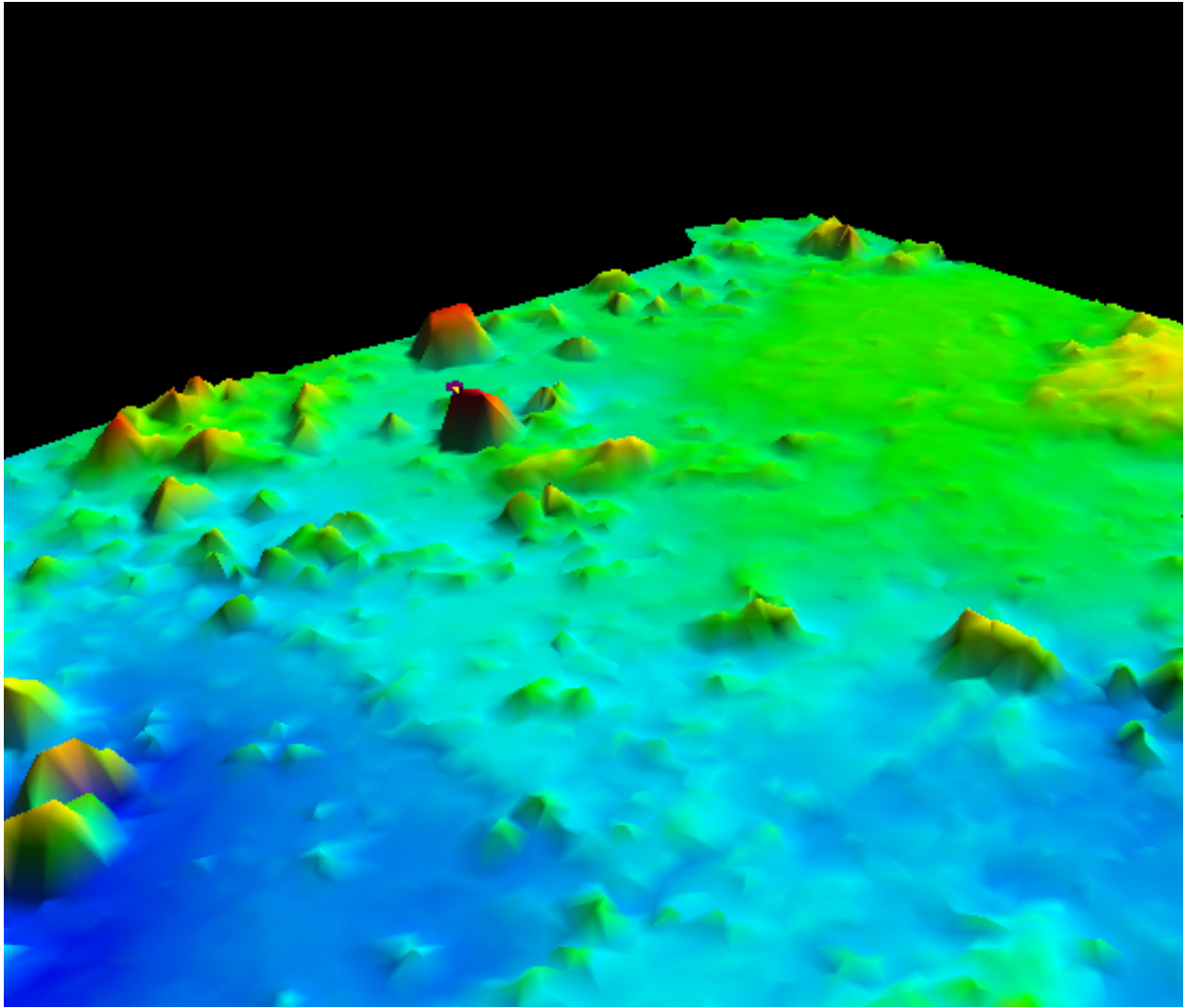
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. Add a 39 foot dangerous rock in the present survey location where charting scale permits.

## Feature Images



*Figure 2.1.1*

## 2.2) 41 ft rock

### Survey Summary

**Survey Position:** 41° 31' 49.545" N, 070° 47' 10.773" W  
**Least Depth:** 12.54 m  
**Timestamp:** 2004-092.09:19:32.645 (04/01/2004)  
**Survey Line:** h11319\_s-b912-ru / ru00\_mb / 2004-092 / 819\_0853  
**Profile/Beam:** 15299/118  
**Charts Affected:** 13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1, 12300\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Big Rk

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11319_s-b912-ru/ru00_mb/2004-092/819_0853	15299/118	0.00	000.0	Primary
h11319_s-b912-ru/ru00_sss/2004-091/104_1832	0001	12.81	241.1	Secondary

### Hydrographer Recommendations

chart as 41ft rk

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

41ft (13232\_1, 13229\_10, 13229\_15, 13230\_1, 13218\_1)

6 ¾fm (12300\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

12.5m (5161\_1)

### S-57 Data

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

**Attributes:** INFORM - 41 FOOT ROCK

QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 12.536 m

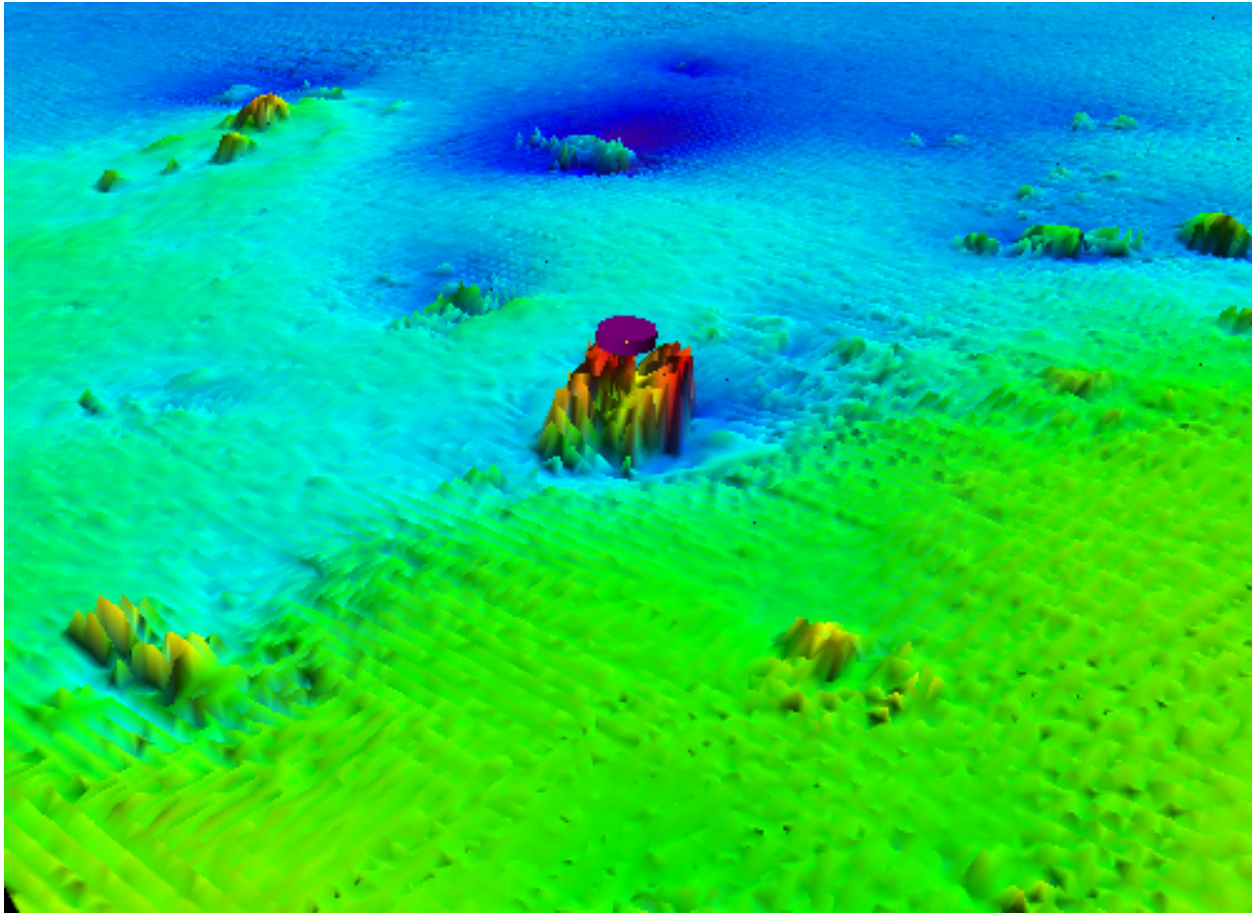
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart a dangerous 41 ft rock.

## Feature Images



*Figure 2.2.1*



## 2.3) 40 ft rock

### Survey Summary

**Survey Position:** 41° 29' 27.516" N, 070° 50' 22.234" W  
**Least Depth:** 12.33 m  
**Timestamp:** 2004-104.01:53:58.812 (04/13/2004)  
**Survey Line:** h11319\_s-b912-ru / ru00\_mb / 2004-104 / 010\_0153  
**Profile/Beam:** 284/185  
**Charts Affected:** 13229\_9, 13230\_1, 13233\_1, 13218\_1, 12300\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

rk adj to 42ft snd

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11319_s-b912-ru/ru00_mb/2004-104/010_0153	284/185	0.00	000.0	Primary
h11319_s-b912-ru/ru00_sss/2004-091/106_1702	0001	30.23	035.7	Secondary

### Hydrographer Recommendations

Chart as 40ft rk

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

40ft (13229\_9, 13230\_1, 13233\_1, 13218\_1)

6 ¾fm (12300\_1, 13200\_1, 13009\_1, 13006\_1, 13003\_1)

12.3m (5161\_1)

### S-57 Data

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

**Attributes:** INFORM - 40 FOOT ROCK

QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 12.334 m

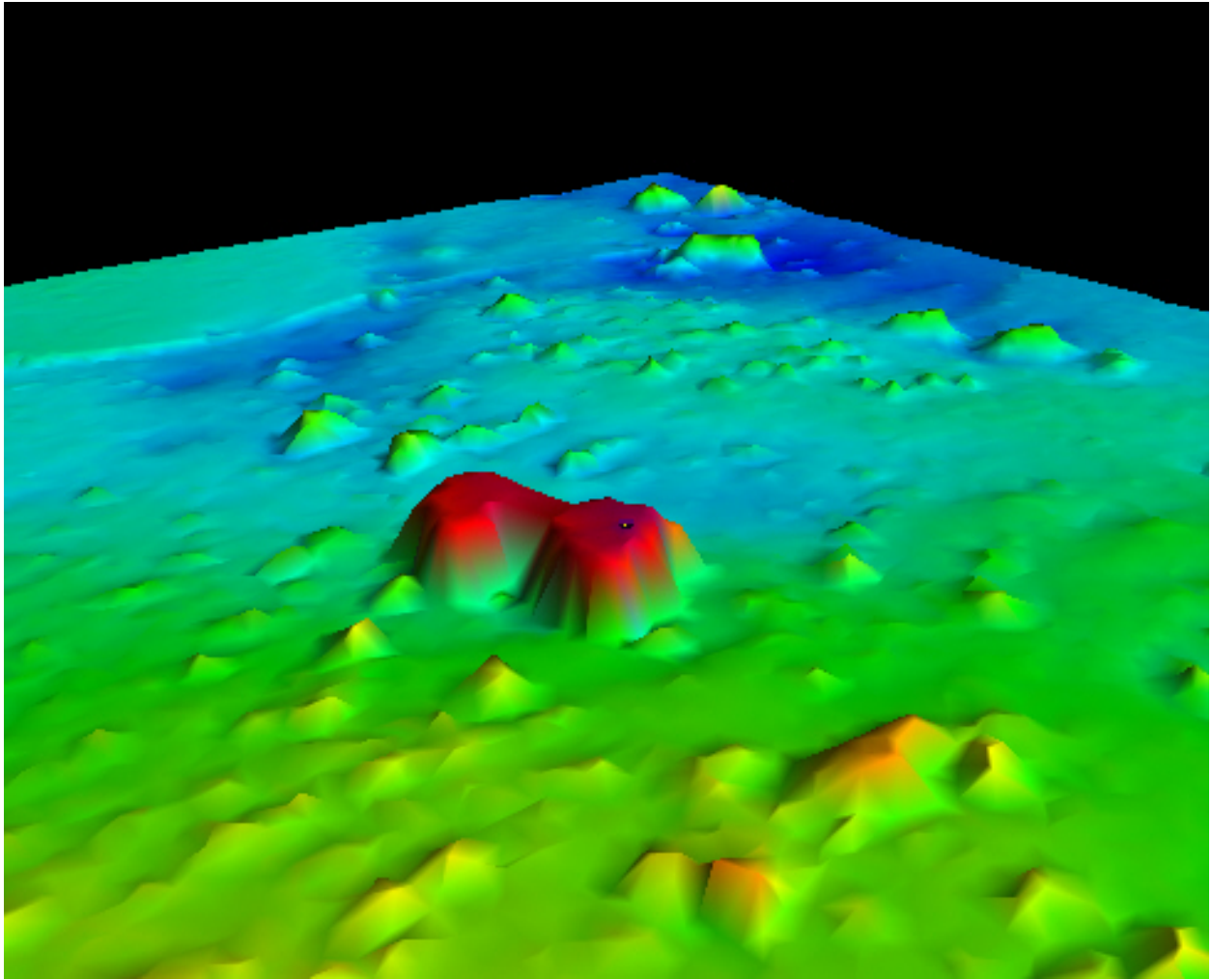
VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart a 40ft dangerous Rk

## Feature Images



*Figure 2.3.1*

13229	01 Jan 2004	1:40000
13230	01 Dec 2003	1:40000
13232	30 Jun 2001	1:20000
13233	14 Apr 2001	1:40000

United States Coast Guard Notice to Mariners and Local Notice to Mariners corrections were applied through 01 Sep 2004. *Concur*

Current survey soundings and features were compared to charted depths and features on NOAA chart 13218. *Concur*

The hydrographer recommends that the current multibeam soundings should supersede all previous charted depths. *Concur*

## D.2 Additional Results

### Item Investigation

There were no AWOIS items assigned to this sheet. There was no Danger to Navigation Reports (DTONs) submitted for this survey. One hundred percent multibeam coverage was achieved for this survey. All significant contacts from the Side Scan Sonar survey were investigated. There were three uncharted items, four charted items, no AWIOS items, and no DTONs to be submitted in this Descriptive Report. Please refer to appendix VI\* for the AWOIS information and Separates II \*\* for all the investigated items to be submitted.

*Concur*

### General Description of Surveyed Area and Sounding Comparison

H11319 covers an area approximately 6.78 square nautical miles which lies between green buoy #9 and RW “BB” buoy in Buzzards Bay. The bottom is uniform with various rocky areas. Few uncharted trenches are visible throughout the survey. This is visible in the half-meter grid. In the north end of the survey, anchor drags scour the sea floor, which is quite evident on the half-meter grid. The multibeam soundings should supercede all affected charted soundings. *Concur* For a complete list of uncharted features, please view ..\Pydro\_Proj\B-912\_Buzz\_bay\SheetB \Descriptive\_Report \ DR Body\ H11319\_DR.pdf and ..\Pydro\_Proj\B-912\_Buzz\_bay\SheetB \PSS\H11319.xml

### Shoreline

Shoreline investigation was not required.

### Bottom Samples

Bottom sediment samples were collected at nine sites within the survey area. All the bottom sediment samples were mud in various forms. The hydrographer recommends updating the *\*Data filed with original field records. \*\* Data appended to this report.*

charts with the given characteristics from the bottom samples is Appendix V, Supplemental Survey Records and Correspondence.

**E. APPROVAL SHEET**

**LETTER OF APPROVAL**

**REGISTRY NO. H11319**

Data acquisition, processing, and analysis contributing to the accomplishment of this navigable area survey were conducted under my direct supervision with frequent personal checks of progress and adequacy. All data, field sheets, this Descriptive Report, and accompanying records were reviewed in their entirety and are approved.

This survey is adequate to supersede all prior surveys in common areas and is considered complete and adequate for nautical charting.

Respectfully Submitted:

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Richard A Edmundson  
ENS, NOAA  
Field Operations Officer  
NOAA Ship RUDE

Approved:

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Todd A. Haupt  
Lieutenant, NOAA  
Commanding Officer  
NOAA Ship RUDE

**E. APPROVAL SHEET**

**LETTER OF APPROVAL**

**REGISTRY NO. H11319**

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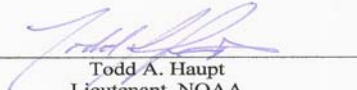
Respectfully Submitted:



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Richard A Edmundson  
ENS, NOAA  
Field Operations Officer  
NOAA Ship RUDE

Approved:



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Todd A. Haupt  
Lieutenant, NOAA  
Commanding Officer  
NOAA Ship RUDE



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SERVICE  
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: March 1, 2005

HYDROGRAPHIC BRANCH: Atlantic  
HYDROGRAPHIC PROJECT: S-B912-RU-2004  
HYDROGRAPHIC SHEET: H11319

LOCALITY: 6 NM SE of Round Hill Point  
Buzzards Bay, MA

TIME PERIOD: March 30 - April 13, 2004

TIDE STATION USED: 845-2660 Newport, RI  
Lat. 41° 30.3'N Lon. 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  
Use zone(s) identified as: SCM9 & SCM110

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 new 1983-2001 National Tidal Datum Epoch (NTDE).

*Thomas V. Gero 3/8/05*

CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION



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**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT FOR H11319 (2004)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

**B. DATA ACQUISITION AND PROCESSING**

The following software was used to process data at the Atlantic Hydrographic Branch:

Hydrographic Processing System  
MicroStation J, version 7.1  
I/RAS B, version 5.01  
MapInfo, version 6.5  
CARIS HIPS/SIPS 2000  
PYDRO, version 2.8.2

The smooth sheet was plotted using a Hewlett Packard DesignJet 2500CP plotter.

**JUNCTIONS**

Survey H11319 (2004) junctions with Survey H11318 (2004) to the north. Present survey soundings compare well with the junctional survey. Present survey depths are in harmony with the charted hydrography to the south, east and west.

**D. COMPARISON WITH CHART 13232 ( 4<sup>th</sup> Edition, Jun. 2001)  
13233 (17<sup>th</sup> Edition, Sep. 2005)  
13218 (39<sup>th</sup> Edition, Jun. 2004)**

**Hydrography**

The charted hydrography originates with the prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in Section D. of the Descriptive Report.

The present survey is adequate to supersede the charted hydrography within the common area.

**Dangers to Navigation**

No Danger to Navigation reports were submitted to the Marine Chart Division, N/CS3x1, Silver Spring, Maryland.

The present survey is adequate to supersede the charted hydrography within the common area.

**MISCELLANEOUS**

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

The following NOS Charts were used for compilation of the present survey:

13232 ( 4<sup>th</sup> Edition) 1:20,000 Scale  
13233 (17<sup>th</sup> Edition) 1:40,000 Scale  
13218 (39<sup>th</sup> Edition) 1:80,000 Scale

**ADEQUACY OF SURVEY**

This is an adequate hydrographic/side scan sonar/multibeam survey. No additional field work is recommended.

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**Deborah A. Bland**  
Cartographer  
Verification of Field Data  
Evaluation and Analysis

**APPROVAL SHEET**  
**H11319**

**Initial Approvals:**

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Date: \_\_\_\_\_

\_\_\_\_\_  
Norris Wike  
Cartographer  
Atlantic Hydrographic Branch

I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Approved: \_\_\_\_\_ Date: \_\_\_\_\_

Shepard Smith  
Lieutenant Commander, NOAA  
Chief, Atlantic Hydrographic Branch