

**H10993**

ONOA FORM 76-35A

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

**DESCRIPTIVE REPORT**

*Type of Survey*      **Basic Hydrographic**

*Registry No.*      **H10993**

**LOCALITY**

*State*      Massachusetts

*General Locality*      Approaches to Boston

*Sub-locality*      4.5 miles East of Pt. Allerton

**2003**

CHIEF OF PARTY  
**Donald W. Haines, LCDR, NOAA**

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DATE

NOAA FORM 77-28  
U.S. DEPARTMENT OF COMMERCE  
(11-72)  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTRY NUMBER:

**H10993**

**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.

State: **Massachusetts**

General Locality: **Approaches to Boston**

Sub-Locality: **4.5 miles East of Pt. Allerton**

Scale: **1:20,000** Date of Survey: **08/19/03 to 10 /27/03**

Instructions Dated: **07/17/03** Project Number: **OPR-A397-03**

Vessel: **NOAA Ship Thomas Jefferson, S-222**

Chief of Party: **LCDR Donald W. Haines, NOAA**

Surveyed by: **Thomas Jefferson Personnel**

Soundings by: **Kongsberg Simrad EM1002 Multibeam sonar**  
**Reson SeaBat 8101 multibeam sonar**  
**Reson SeaBat 8125 multibeam sonar**

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

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

Protracted by: **N/A** Automated Plot: **N/A**  
**Hewlett Packard Design Jet 2500 CP (office)**

Verification by: **Atlantic Hydrographic Branch *Personnel***

Soundings in: ***Feet* ~~Meters~~ at MLLW**

Remarks: ***Red, bold, italic notes in descriptive report were made during office processing.***

***1) All Times are UTC.***

***2) This is a navigable area Hydrographic Survey.***

***3) Projection is UTM Zone 19.***

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# **DESCRIPTIVE REPORT**

to accompany  
HYDROGRAPHIC SURVEY H10993

Scale of Survey: 1:20,000

Year of Survey: 2003

NOAA Ship Thomas Jefferson  
LCDR Donald W. Haines, Commanding Officer

## **A. AREA SURVEYED**

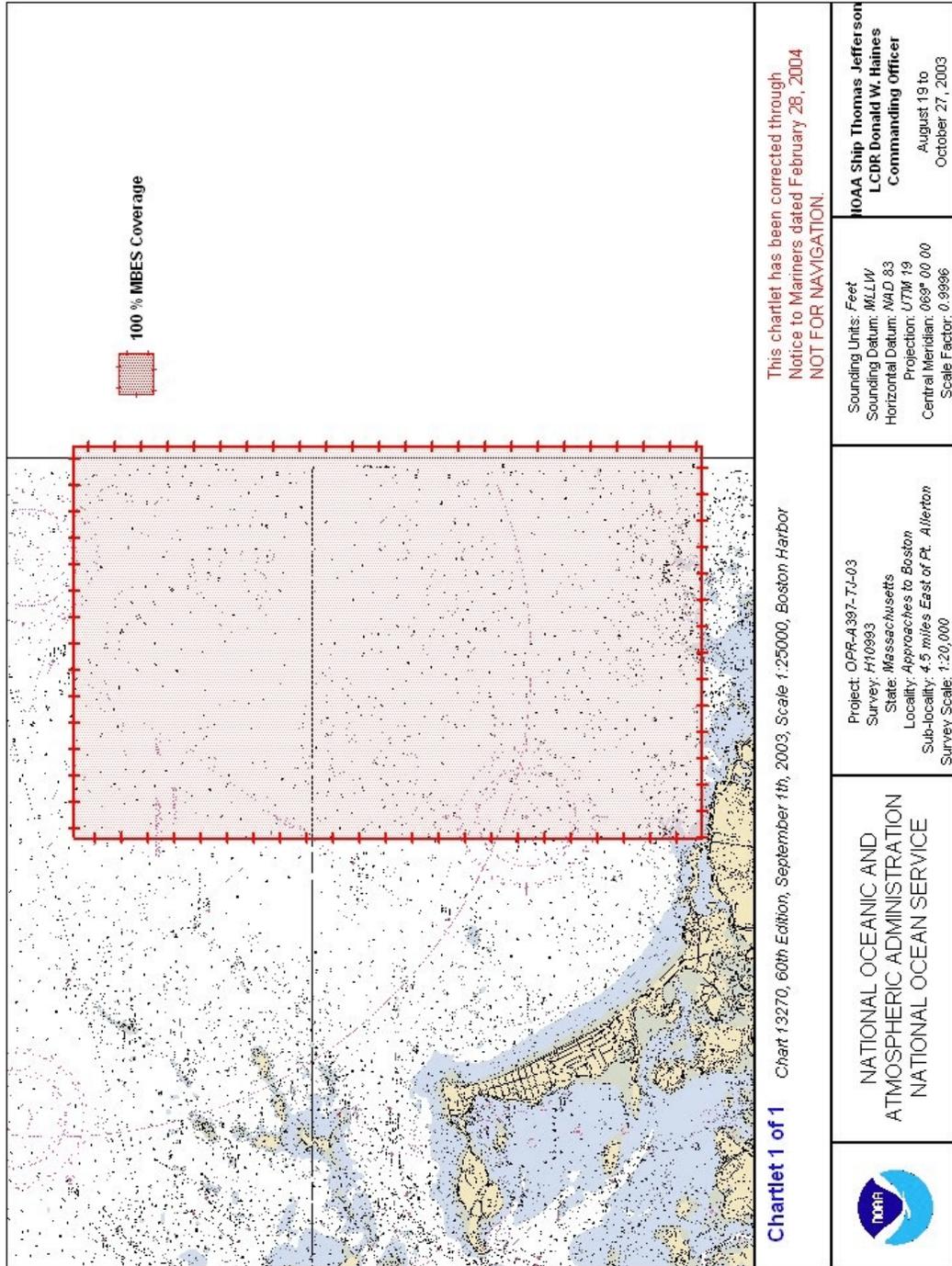
This hydrographic survey was conducted in accordance with Hydrographic Survey Letter Instructions for project OPR-A397-03, Approaches to Boston, Massachusetts. The original instructions are dated July 17, 2003.

This Descriptive Report pertains to sheet "D" of project OPR-A397-03. The assigned registry number for this sheet is H10993, as prescribed in the Letter Instruction.

This project is being conducted to provide contemporary hydrography with full bottom multibeam coverage in the approaches to Boston Harbor. This project responds to requests from the Massachusetts Port Authority (MASSPORT), Boston Pilots, the First U.S. Coast Guard District, Massachusetts Coastal Zone Management (Boston, MA), and the U.S. Geological Survey (Woods Hole, MA).

This project will also contribute valuable bathymetric data to the Stellwagen Bank Marine Sanctuary program in conjunction with the U.S. Geological Survey (USGS), Woods Hole Oceanographic Institution (WHOI), and the Canadian Hydrographic Service (CHS). Multibeam tracklines will be run in order to validate Outside Source Data (OSD) from the USGS and the University of New Hampshire (UNH). For complete survey limits, see the chartlet on the following page.

### B. DATA ACQUISITION AND PROCESSING



**EQUIPMENT** *See also the Evaluation Report.*

Data were acquired by NOAA Ship Thomas Jefferson, Launch 1005 and Launch 1014. The ship is a 208' (63.4m) ship with a mean draft of 14' (4.2m). Both launches are NOAA's standard 8.5-meter aluminum Jensen vessel with a typical 1.6' (0.5 m) mean draft.

USGS multibeam data was delivered to NOAA as UNB "Swathed" merge data and was assembled and converted to Caris HIPS format at University of New Hampshire (UNH) Joint Hydrographic Center (JHC) as part of the preparation of this project

NOAA Ship Thomas Jefferson acquired multibeam echo sounder (MBES) data. A Simrad EM 1002 Multibeam system was used for this type of hydrography. Positioning and attitude were determined with a TSS POS/MV 320 (version 3) GPS-aided inertial navigation system and sound velocity casts were conducted with a Sea Bird 19 profiler.

Launch 1005 acquired MBES data using a Reson SeaBat 8101 multibeam system. All positioning and attitude were determined with a TSS POS/MV 320 (version 2) GPS aided inertial navigation system.

Launch 1014 acquired MBES data using a Reson SeaBat 8125 multibeam system. For continuous refraction correctors at the transducer, a Digibar Pro was used for the surface sound velocity and all positioning and attitudes were determined with a TSS POS/MV 320 (version 3) GPS-aided inertial navigation system.

Refer to the Fall Data Acquisition and Processing Report (DAPR\*), dated January 20, 2004, and the Horizontal and Vertical Control Report, for detailed equipment, vessel configuration and setting information.

*\* Filed at Atlantic Hydrographic Branch (AHB).*

**QUALITY CONTROL** *See also the Evaluation Report.***Multibeam Echo Sounder Quality Control**

Launch 1014 had some outer beam sound velocity problems, that got resolved by filtering these outer beams, clearly visible on day numbers 235 and 237. Launch 1005 had some heave value problems on day number 235, which got resolved the same day, by changing the heave filter values. Even though these problems arose, data was still within specifications. Refer to this project's DAPR for detailed discussion of MBES system calibrations, data acquisition, and data processing.

**Crosslines**

Over 69.5 linear nautical miles (lnm) of MBES crossline data were acquired, an equivalent to 9.14 % of all MBES data. Although crosslines were inspected visually against the main scheme data for this survey, new quality controls are being incorporated into the depths and uncertainty models produced by CARIS 5.4.

**Junctions**

Hydrographic survey H10992, Sheet C of Project OPR-A397-TJ-04, was conducted by NOAA Ship WHITING in 2001. H10992 overlaps 3.7 nm<sup>2</sup> or 13.7 % of the area covered in the current survey. The soundings from the two data sets agree with less than 1% variance.

Other surveys that adjoined this survey were NOAA surveys H10994 (Sheet E), H10995 (Sheet F), W00039 (Sheet I), and W00044 (Sheet N) which are all part of the project OPR-A397-TJ-04.

Data acquired for this project were acquired in accordance with survey limits provided by HSD.

**CORRECTIONS TO ECHO SOUNDING**

All methods or instruments used were as described in the project DAPR. A table detailing all sound velocity casts is located in Separate III\*.

*\* Filed with original field records.*

## C. VERTICAL AND HORIZONTAL CONTROL

### VERTICAL CONTROL

The tidal datum for this project is Mean Lower Low Water (MLLW). The operating tide station at Boston, MA(844-3970) served as control for datum determination.

Tidal zoning for this survey is consistent with the Letter Instructions. The zones used for this survey are as follows:

ZONE	CORRECTOR (min)	RATIO	REFERENCE
NA173	0	x0.96	844-3970
NA174	-6	x0.94	844-3970
NA175	-6	x0.92	844-3970

A Request for Approved Tides letter was sent to N/OPS1 on October 16, 2003 (Appendix IV)\*. Observed tide files were e-mailed by TideBot daily during acquisition and applied to all sounding data using preliminary zoning. Final zoning was received and applied with observed water levels. The verified water level data was received and was compared to the observed data. No difference between these verified and observed water level data were noticed. Verified water levels were not applied to these data.

*Verified tides using final tide zoning were re-applied by AHB.*

### HORIZONTAL CONTROL

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

Sounding positional control was determined using the Global Positioning System (GPS) corrected by U.S. Coast Guard differential GPS (DGPS) beacon stations. The primary and only DGPS beacon used for this survey was Portsmouth Harbor, NH (Beacon # 771). No horizontal control stations were established for this survey.

A Vertical and Horizontal Control Report\* was submitted for this survey. This report dated January 24, 2004 was submitted on March 20, 2004.

*\* Filed with original field records.*

**D. RESULTS AND RECOMMENDATIONS** *See also the Evaluation Report.***CHART COMPARISON** *See also the Evaluation Report.*

There are nine charts affected by this survey:

**13269:** 9th Ed., 01/10/98, 1:10000  
**13270:** 59th Ed., 07/14/01, 1:25000  
**13267:** 30th Ed., 12/01/01, 1:80000  
**13260:** 38th Ed., 04/27/02, 1:378838  
**13200:** 33rd Ed., 01/19/02, 1:400000  
**13009:** 30th Ed., 08/01/02, 1:500000  
**13006:** 30th Ed., 07/01/02, 1:675000  
**5161:** 12th Ed., 02/15/92, 1:1058400  
**13003:** 46th Ed., 01/01/03, 1:1200000

**General Agreement with Charted soundings**

Sounding data agreed well with charted depths in most of the areas, with the exception of some contour lines that are not properly charted. For example, about 600 m NE of Black Rocks, on chart 13270, the 30ft contour line is charted differently from where survey soundings would indicate. The southern area of the sheet is used mainly by recreational boats and some shallow draft fast ferries and doesn't seem to be a heavily utilized anchorage for large vessels. A few key dangers to navigation were chosen, however, the majority of the area needs to be revised with the digital data which is adequate to supersede charted soundings.

*Concur.*

Other discrete differences are addressed in the "AWOIS Item Investigations" and Dangers to Navigation, below.

**AWOIS Items and Significant Contacts**

There were two AWOIS items assigned within the survey limits. These items were fully investigated and are addressed in Appendix I. *Appended to this report.*

Three unassigned AWOIS items were within the survey limits and no evidence was found in the USGS data that supports the existence of these features. *See AWOIS Listings 1.1 to 1.3 appended to this report.*

**Dangers to Navigation (Dtons) *See also the Evaluation Report.***

A total of ~~five~~ **six** Dangers to Navigation (Dton) were reported by the Hydrographer to MCD. For the complete Dton report (sent December 12, 2003), see Appendix I. *Appended to this Report..*

**Charted Features**

All items are addressed in other sections of this report.

**Charting Recommendations**

Survey is adequate to supersede all soundings on all charts in the survey area. *Concur.*

**ADDITIONAL RESULTS****Aids to Navigation and Other Detached Positions**

All of the aids to navigation positioned during this survey are on location, with the exception of R N "2" bouy located on the north side of "The Grampuses". The chart has this item positioned approximately 80 meters to the NE from its true location. *Concur. These Aids appear adequate to serve their intended purposes. Defer to Marine Chart Division (MCD) Update Services Branch for charting recommendations for Aids to Navigation.*

**Bridges and Overhead Cables**

There were no bridges or overhead cables within the survey limits. *Concur.*

**Submarine Cables and Pipelines**

There were no submarine cables or pipelines charted within the survey limits. *Concur.*

**Ferry Routes**

Boston to Providence ferry routes, as well as other routes, exist within sheet H10993. The hydrographer recommends that Atlantic Hydrographic Branch or Marine Charting Division work with the Northeast Navigation Manager to ensure that they are properly charted. *Defer to MCD Update Services Branch for charting recommendations for ferry routes.*

**E. APPROVAL SHEET****OPR-A397-TJ-03  
Approaches to Boston  
Massachusetts****4.5 nm East of Pt Allerton  
Survey Registry No. H10993**

Field operations for this navigable area 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, including:

- Separates accompanying project **OPR-A397-TJ-03, H10993.**
- Data Acquisition and Processing Report (DAPR), dated August-September 2004. Submitted March 20, 2004
- Horizontal and Vertical Report dated January 20, 2004. Submitted March 4, 2004

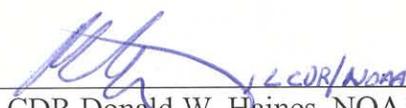
This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.

Respectfully,  
Submitted:

  
\_\_\_\_\_  
ENS Héctor L. Casanova, NOAA  
Junior Officer/Hydrographer

Approved and Forwarded:

  
\_\_\_\_\_  
LT Shepard M. Smith, NOAA  
Field Operations Officer/Hydrographer

  
\_\_\_\_\_  
LCDR Donald W. Haines, NOAA  
Commanding Officer/Lead Hydrographer

## **APPENDIX I**

### **DtoN, AWOIS, and Item Investigation REPORT**

Following are item investigation reports detailing four groups of features:

- 1) Dangers to Navigation (DtoN's)
- 2) AWOIS Items
- 3) Significant Uncharted Features
- 4) Non-AWOIS Charted Features and Depths

# DTONs

**Registry Number:** H10993  
**State:** MA  
**Locality:** Massachusettes Bay  
**Sub-locality:** Boston Approaches  
**Project Number:** OPR-A397-TJ  
**Survey Dates:** 08/26/2003 - 09/05/2003

## Charts Affected

Number	Version	Date	Scale
13269	9th Ed.	01/10/98	1:10000
13270	59th Ed.	07/14/01	1:25000
13267	30th Ed.	12/01/01	1:80000
13260	38th Ed.	04/27/02	1:378838
13200	33rd Ed.	01/19/02	1:400000
13009	30th Ed.	08/01/02	1:500000
13006	30th Ed.	07/01/02	1:675000
5161	12th Ed.	02/15/92	1:1058400
13003	46th Ed.	01/01/03	1:1200000

## Features

Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
Rock	5.42 m	42.26853599° N	70.77870382° W	---
Sounding	6.09 m	42.27576500° N	70.81338805° W	---
Sounding	7.16 m	42.29332638° N	70.80200075° W	---
Rock	8.78 m	42.26898811° N	70.78489675° W	---
Sounding	10.85 m	42.29857628° N	70.81074414° W	---

**1.1) Profile/Beam - 3928/85 from a397\_03\_h10993d / 1005\_mb / 2003-248 / 478\_1704**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 42.26853599° N, 70.77870382° W  
**Least Depth:** 5.42 m  
**Timestamp:** 2003-248.17:10:49.639 (09/05/2003)  
**Survey Line:** a397\_03\_h10993d / 1005\_mb / 2003-248 / 478\_1704  
**Profile/Beam:** 3928/85  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% MBES was aquired over the area and a rock was found having a least depth as above.

**Feature Correlation**

Line	Feature	Range	Azimuth	Status
h:/hdcs_data/a397_03_h10993d/1005_mb/2003-248/478_1704	3928/85	0.00	000.0	Primary

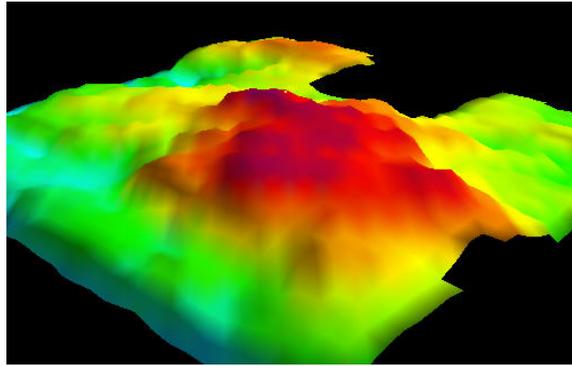
**Hydrographer Recommendations**

Hydrographer recommends to chart as per digital data.

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

18ft (13269\_1, 13270\_1, 13267\_1)  
 3fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**Feature Images**



*Figure 1.1.1*

**1.1) Profile/Beam - 3928/85 from h10993 / 1005\_mb / 2003-248 / 478\_1704**

**Office Notes**

*See Evaluation and Analysis (E&A) Report Dangers to Navigation section 1.1)*

**1.2) Profile/Beam - 1671/9 from a397\_03\_h10993d / 1014\_mb / 2003-240 / 473\_1926**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 42.27576500° N, 70.81338805° W  
**Least Depth:** 6.09 m  
**Timestamp:** 2003-240.19:32:31.031 (08/28/2003)  
**Survey Line:** a397\_03\_h10993d / 1014\_mb / 2003-240 / 473\_1926  
**Profile/Beam:** 1671/9  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% MBES was aquired over the area and a sounding was found having a least depth as above.

**Feature Correlation**

Line	Feature	Range	Azimuth	Status
h:/hdcs_data/a397_03_h10993d/1014_mb/2003-240/473_1926	1671/9	0.00	000.0	Primary

**Hydrographer Recommendations**

Hydrographer recommends to chart as per digital data.

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

20ft (13270\_1, 13267\_1)

3 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**1.2) Profile/Beam - 1672/4 from h10993 / 1014\_mb / 2003-240 / 473\_1926**

**Office Notes**

*See E&A Report Dangers to Navigation section 1.2)*

**1.3) Profile/Beam - 1338/239 from a397\_03\_h10993d / 1014\_mb / 2003-238 / 358\_1923**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 42.29332638° N, 70.80200075° W  
**Least Depth:** 7.16 m  
**Timestamp:** 2003-238.19:28:22.483 (08/26/2003)  
**Survey Line:** a397\_03\_h10993d / 1014\_mb / 2003-238 / 358\_1923  
**Profile/Beam:** 1338/239  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% MBES was aquired over the area and a sounding was found having a least depth as above.

**Feature Correlation**

Line	Feature	Range	Azimuth	Status
h:/hdcs_data/a397_03_h10993d/1014_mb/2003-238/358_1923	1338/239	0.00	000.0	Primary

**Hydrographer Recommendations**

Hydrographer recommends to chart as per digital data.

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

23ft (13270\_1, 13267\_1)

3 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**1.3) Profile/Beam - 1338/239 from h10993 / 1014\_mb / 2003-238 / 358\_1923**

**Office Notes**

*See E&A Report Dangers to Navigation section 1.3)*

**1.4) Profile/Beam - 3932/12 from a397\_03\_h10993d / 1005\_mb / 2003-248 / 480\_1636**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 42.26898811° N, 70.78489675° W  
**Least Depth:** 8.78 m  
**Timestamp:** 2003-248.16:42:56.535 (09/05/2003)  
**Survey Line:** a397\_03\_h10993d / 1005\_mb / 2003-248 / 480\_1636  
**Profile/Beam:** 3932/12  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% MBES was aquired over the area and a rock was found having a least depth as above.

**Feature Correlation**

Line	Feature	Range	Azimuth	Status
h:/hdcs_data/a397_03_h10993d/1005_mb/2003-248/480_1636	3932/12	0.00	000.0	Primary

**Hydrographer Recommendations**

Hydrographer recommends to chart as per digital data.

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

29ft (13269\_1, 13270\_1, 13267\_1)

4 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**1.4) Profile/Beam - 3662/2 from h10993 / 1005\_mb / 2003-248 / 479\_1649**

**Office Notes**

*See E&A Report Dangers to Navigation section 1.4)*

**1.5) Profile/Beam - 2139/111 from a397\_03\_h10993d / 1014\_mb / 2003-238 / 279\_1447**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 42.29857628° N, 70.81074414° W  
**Least Depth:** 10.85 m  
**Timestamp:** 2003-238.14:55:03.303 (08/26/2003)  
**Survey Line:** a397\_03\_h10993d / 1014\_mb / 2003-238 / 279\_1447  
**Profile/Beam:** 2139/111  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% MBES was aquired over the area and a sounding was found having a least depth as above.

**Feature Correlation**

Line	Feature	Range	Azimuth	Status
h:/hdcs_data/a397_03_h10993d/1014_mb/2003-238/279_1447	2139/111	0.00	000.0	Primary

**Hydrographer Recommendations**

Hydrographer recommends to chart as per digital data.

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

35ft (13270\_1, 13267\_1)

5 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**1.5) Profile/Beam - 2139/111 from h10993 / 1014\_mb / 2003-238 / 279\_1447**

**Office Notes**

*See E&A Report Dangers to Navigation section 1.5)*

**1.6) Profile/Beam - 1167/29 from a397\_03\_h10993d / 1014\_mb / 2003-247 / 451\_1658**

**DANGER TO NAVIGATION**

**Survey Summary**

**Survey Position:** 42.27202983° N, 70.80788897° W  
**Least Depth:** 4.97 m  
**Timestamp:** 2003-247.17:02:01.388 (09/04/2003)  
**Survey Line:** a397\_03\_h10993d / 1014\_mb / 2003-247 / 451\_1658  
**Profile/Beam:** 1167/29  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% SWMB was aquired over the area and a feature was found having a least depth as above. Submitted on 12/11/03

**Feature Correlation**

Line	Feature	Range	Azimuth	Status
h:/hdcs_data/a397_03_h10993d/1014_mb/2003-247/451_1658	1167/29	0.00	000.0	Primary

**Hydrographer Recommendations**

Hydrographer recommends to chart as per digital data.

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

16ft (13270\_1, 13267\_1)  
 2 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**1.6) Profile/Beam - 1167/29 from a397\_03\_h10993d / 1014\_mb / 2003-247 / 451\_1658**

**Office Notes**

*Concur. Retain the dangerous 16 Rk as charted.*

# AWOIS Features

**Registry Number:** H10993  
**State:** MA  
**Locality:** Massachusettes Bay  
**Sub-locality:** Boston Approaches  
**Project Number:** OPR-A397-TJ  
**Survey Date:** 09/04/2003

## Charts Affected

Number	Version	Date	Scale
13269	9th Ed.	01/10/98	1:10000
13270	59th Ed.	07/14/01	1:25000
13275	27th Ed.	07/24/99	1:25000
13267	30th Ed.	12/01/01	1:80000
13260	38th Ed.	04/27/02	1:378838
13200	33rd Ed.	01/19/02	1:400000
13009	30th Ed.	08/01/02	1:500000
13006	30th Ed.	07/01/02	1:675000
5161	12th Ed.	02/15/92	1:1058400
13003	46th Ed.	01/01/03	1:1200000

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	W.A.MARSHALL	AWOIS	[no data]	[no data]	[no data]	---
1.2	SHAG	AWOIS	[no data]	[no data]	[no data]	---
1.3	JAMES M. HUDSON	AWOIS	[no data]	[no data]	[no data]	---
1.4	ANNA ROSA	AWOIS	[no data]	[no data]	[no data]	---
1.5	1059/86	Rock	7.37 m	042° 16' 24.562" N	70° 47' 45.635" W	2044

## 1.1) AWOIS #2083 - W.A.MARSHALL

**Search Position:** 042° 22' 00.350" N, 70° 44' 18.150" W

**Historical Depth:** [None]

**Search Radius:** 0

**Search Technique:** [None]

**Technique Notes:** [None]

### History Notes:

DESCRIPTION 24 NO.232; BARGE SUNK 1/8/22; POSITION ACCURACY WITHIN 1 MILE. 27 NO.556; BARGE; SUNK 1/8/22; REPORTED THROUGH 1ST NAVAL DISTRICT, WRECK LIST OF 9/20/42

## Survey Summary

**Charts Affected:** 13270\_1, 13275\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

### Remarks:

Partial MBES coverage was attained over AWOIS item. No feature was detected in the area surveyed.

## Feature Correlation

Address	Feature	Range	Azimuth	Status
A397_03_TJ	AWOIS # 2083	0.00	000.0	Primary

## Hydrographer Recommendations

[None]

## S-57 Data

[None]

## Office Notes

*See Evaluation and Analysis (E&A) Report AWOIS Item 1.1)*

## 1.2) AWOIS #2084 - SHAG

**Search Position:** 042° 22' 00.350" N, 70° 49' 25.160" W

**Historical Depth:** [None]

**Search Radius:** 1000

**Search Technique:** SD, S2, SWMB

**Technique Notes:** [None]

### History Notes:

HISTORY NM38/1955(4256)--9/17/55; SCHOONER SHAG (35FT LONG), LIES SUNK IN LAT42/22/00N, LONG 70/49/27N (PA) (NAD27). F00206WD/1966-- WRECK NOT ADDRESSED, HOWEVER THE GENERAL AREA OF APPROXIMATLY 800 METERS WAS CLEARED BY SWEEPS OF 42 AND 61 FT. CHART WAS REVISED TO NON-DANGEROUS. NOTE: POSSIBLY COMPLETED BY WHITING. DESCRIPTION 24 NO.1629; SCHOONER; SUNK 1955; POSITION ACCURACY WITHIN 1 MILE 230 NO. 37039 (UPDATED 5/1999 RWD)

## Survey Summary

**Charts Affected:** 13270\_1, 13275\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

### Remarks:

Partial MBES coverage was attained over AWOIS item. No feature was detected in the area surveyed.

## Feature Correlation

Address	Feature	Range	Azimuth	Status
A397_03_TJ	AWOIS # 2084	0.00	000.0	Primary
h10993/creed/1994_315/sewer_315_0030	966/41	385.65	226.8	Secondary
h10993/creed/1994_315/sewer_315_0029	2568/45	405.00	194.9	Secondary
h10993/creed/1994_315/sewer_315_0025	2595/16	898.69	167.8	Secondary
h10993/creed/1994_316/sewer_316_0036	1042/35	928.56	266.6	Secondary

## Hydrographer Recommendations

[None]

## S-57 Data

[None]

## Office Notes

*Concur. Not presently charted, no change in charting is recommended.*

### 1.3) AWOIS #2097 - JAMES M. HUDSON

**Search Position:** 042° 22' 24.350" N, 70° 45' 13.150" W  
**Historical Depth:** [None]  
**Search Radius:** 0  
**Search Technique:** [None]  
**Technique Notes:** [None]

**History Notes:**

DESCRIPTION 24 NO.231; BARGE; SUNK 3/1/25; POSITION ACCURACY WITHIN 1 MILE; REPORTED THROUGH 1ST NAVAL DISTRICT WRECK LIST 9/20/42. 27 NO.555; BARGE SUNK 3/1/25. (NOT PRESENTLY CHARTED).

### Survey Summary

**Charts Affected:** 13270\_1, 13275\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

Partial MBES coverage was attained over AWOIS item. No feature was detected in the area surveyed.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
A397_03_TJ	AWOIS # 2097	0.00	000.0	Primary

### Hydrographer Recommendations

#### S-57 Data

[None]

#### Office Notes

*A discussion and charting recommendations for AWOIS Item #2097 can be found in the Descriptive Report for survey H10995. (Delete the Wreck symbol).*

## 1.4) AWOIS #7561 - ANNA ROSA

**Search Position:** 042° 22' 24.350" N, 70° 47' 04.150" W

**Historical Depth:** [None]

**Search Radius:** 1000

**Search Technique:** SD, S2, SWMB, DI

**Technique Notes:** [None]

### History Notes:

HISTORY LNM23/70--THE F/V ANNA ROSA HAS BEEN REPORTED SUNK IN APPROX. POS. LAT.42-22.4N, LONG.70-47.1W. (ENTERED 3/90 MCR)

## Survey Summary

**Charts Affected:** 13270\_1, 13275\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

### Remarks:

No MBES evidence of this wreck was found on the AWOIS location and its radius. A contact resembling a wreck was found 1570m away, bearing 104° from the AWOIS item position. The wreck has an approximate LOA of 33 meters long and beam of 7 meters with a least depth as per digital data.

## Feature Correlation

Address	Feature	Range	Azimuth	Status
A397_03_TJ	AWOIS # 7561	0.00	000.0	Primary
h10993/creed/1994_316/sewer_316_0043	1628/7	669.66	065.5	Secondary

## Hydrographer Recommendations

Delete the PA wreck symbol. Chart wreck as per digital data.

## S-57 Data

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

**Attributes:** CATWRK - 1:non-dangerous wreck

INFORM - No MBES evidence of this wreck was found on the AWOIS location and its radius. A contact resembling a wreck was found 1570m away, bearing 104° from the AWOIS item position. The wreck has an approximate LOA of 33 meters long and beam of 7 meters with a least depth as per digital data.

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

*A discussion and charting recommendations for AWOIS Item #7561 can be found in the Descriptive Report for survey H10995.*

## 1.5) Profile/Beam - 1059/86 from h10993 / 1005\_mb / 2003-247 / 493\_2036

### Primary Feature for AWOIS Item #2044

**Search Position:** 042° 16' 24.360" N, 70° 47' 46.150" W

**Historical Depth:** [None]

**Search Radius:** 1000

**Search Technique:** S2, SWMB, DI

**Technique Notes:** [None]

#### History Notes:

DESCRIPTION 24 NO.1276; POSITION ACCURACY WITHIN 1 MILE; WD CLEARED TO 21 FT. (SOURCE UNK); REPORTED THROUGH H.O. CHART RECORDS, DATED 1953

### Survey Summary

**Survey Position:** 042° 16' 24.562" N, 70° 47' 45.635" W

**Least Depth:** 7.37 m

**Timestamp:** 2003-247.20:38:11.060 (09/04/2003)

**Survey Line:** h10993 / 1005\_mb / 2003-247 / 493\_2036

**Profile/Beam:** 1059/86

**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES coverage was acquired within the navigable waters of the AWOIS radius. A rock was found in the area with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-247/493_2036	1059/86	0.00	000.0	Primary
A397_03_TJ	AWOIS # 2044	13.39	062.2	Secondary

## Hydrographer Recommendations

Delete the 20ft. wire drag clear depth. Chart as per digital data. *Concur.*

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

24ft (13269\_1, 13270\_1, 13267\_1)

4fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

## S-57 Data

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

**Attributes:** INFORM - 100% MBES coverage was acquired within the navigable waters of the AWOIS radius. A rock was found in the area with a least depth as above.

QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 7.37 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

*Delete AWOIS Item #2044 20 ft. wire drag clearance depth and danger curve. Chart a dangerous 24 Rk as shown on the present survey.*

# H10993 AHB Updated Features

**Registry Number:** H10993  
**State:** MA  
**Locality:** Massachusettes Bay  
**Sub-locality:** Boston Approaches  
**Project Number:** OPR-A397-TJ  
**Survey Dates:** 08/21/2003 - 09/16/2003

## Charts Affected

Number	Version	Date	Scale
13269	9th Ed.	01/10/98	1:10000
13270	59th Ed.	07/14/01	1:25000
13267	30th Ed.	12/01/01	1:80000
13260	38th Ed.	04/27/02	1:378838
13200	33rd Ed.	01/19/02	1:400000
13009	30th Ed.	08/01/02	1:500000
13006	30th Ed.	07/01/02	1:675000
5161	12th Ed.	02/15/92	1:1058400
13003	46th Ed.	01/01/03	1:1200000

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	1769/2	Rock	3.21 m	042° 16' 08.789" N	70° 49' 04.602" W	---
1.2	2151/79	Rock	12.40 m	042° 16' 03.623" N	70° 47' 19.364" W	---
1.3	2552/100	Rock	13.47 m	042° 18' 26.277" N	70° 46' 25.642" W	---
1.4	1958/94	Rock	18.66 m	042° 18' 01.362" N	70° 46' 37.492" W	---
1.5	226/69	Rock	3.09 m	042° 16' 01.016" N	70° 46' 31.680" W	---
1.6	2153/14	Rock	14.43 m	042° 17' 52.927" N	70° 46' 40.225" W	---
1.7	1068/18	Shoal	15.09 m	042° 17' 34.209" N	70° 46' 33.283" W	---
1.8	1102/21	Shoal	10.86 m	042° 16' 58.447" N	70° 44' 16.307" W	---
1.9	5115/59	Shoal	18.44 m	042° 16' 48.837" N	70° 44' 59.887" W	---

1.10	4165/25	Rock	11.66 m	042° 16' 23.470" N	70° 46' 52.467" W	---
1.11	6760/29	Rock	11.19 m	042° 16' 24.159" N	70° 46' 10.341" W	---
1.12	2172/42	Rock	14.33 m	042° 16' 22.171" N	70° 46' 26.036" W	---
1.13	497/89	Shoal	16.51 m	042° 16' 01.418" N	70° 44' 03.896" W	---
1.14	397/44	Shoal	4.32 m	042° 15' 58.073" N	70° 45' 30.706" W	---
1.15	4/23	Rock	14.28 m	042° 15' 55.929" N	70° 43' 53.232" W	---
1.16	4469/181	Rock	10.24 m	042° 16' 40.361" N	70° 46' 48.689" W	---
1.17	2280/239	Shoal	8.90 m	042° 16' 34.855" N	70° 45' 12.028" W	---
1.18	787/49	Shoal	16.00 m	042° 18' 05.115" N	70° 49' 01.254" W	---
1.19	1623/124	Shoal	15.86 m	042° 18' 05.105" N	70° 48' 32.586" W	---
1.20	3315/9	Shoal	10.28 m	042° 17' 27.038" N	70° 47' 40.828" W	---
1.21	1872/27	Shoal	8.83 m	042° 17' 28.630" N	70° 48' 26.104" W	---
1.22	2232/156	Shoal	10.44 m	042° 17' 34.862" N	70° 48' 35.174" W	---
1.23	2296/191	Rock	9.44 m	042° 17' 37.541" N	70° 48' 38.806" W	---
1.24	3523/221	Shoal	12.32 m	042° 17' 40.244" N	70° 49' 17.852" W	---
1.25	3112/233	Shoal	10.54 m	042° 17' 43.635" N	70° 48' 46.806" W	---
1.26	3358/175	Rock	10.29 m	042° 17' 45.365" N	70° 47' 48.592" W	---
1.27	3237/31	Shoal	15.36 m	042° 17' 57.697" N	70° 47' 52.487" W	---
1.28	2901/31	Shoal	16.04 m	042° 18' 00.247" N	70° 48' 04.582" W	---
1.29	1836/100	Rock	8.36 m	042° 17' 32.578" N	70° 48' 26.183" W	---
1.30	3525/183	Rock	8.53 m	042° 17' 31.650" N	70° 49' 20.888" W	---
1.31	5957/59	Rock	16.74 m	042° 17' 04.665" N	70° 44' 31.111" W	---
1.32	2372/49	Shoal	10.46 m	042° 17' 12.050" N	70° 48' 08.908" W	---
1.33	944/29	Shoal	9.03 m	042° 16' 32.622" N	70° 49' 03.274" W	---
1.34	736/225	Rock	7.76 m	042° 16' 37.152" N	70° 46' 19.019" W	---
1.35	493/106	Shoal	8.37 m	042° 16' 04.342" N	70° 48' 17.838" W	---
1.36	887/223	Rock	7.47 m	042° 16' 12.407" N	70° 48' 32.464" W	---
1.37	1167/29	Rock	5.02 m	042° 16' 19.307" N	70° 48' 28.400" W	---
1.38	1172/21	Rock	6.27 m	042° 16' 19.391" N	70° 48' 42.750" W	---
1.39	4214/177	Rock	12.55 m	042° 16' 37.743" N	70° 47' 02.467" W	---
1.40	3448/49	Rock	14.66 m	042° 18' 08.896" N	70° 46' 12.857" W	---
1.41	4190/131	Rock	17.45 m	042° 19' 26.005" N	70° 47' 18.595" W	---
1.42	2129/58	Rock	7.07 m	042° 15' 54.867" N	70° 47' 27.788" W	---
1.43	540/3	Rock	3.46 m	042° 15' 58.291" N	70° 46' 21.614" W	---
1.44	663/1	Rock	3.75 m	042° 15' 58.014" N	70° 46' 24.883" W	---

## 1.1) Profile/Beam - 1769/2 from h10993 / 1014\_mb / 2003-247 / 436\_1853

### Survey Summary

**Survey Position:** 042° 16' 08.789" N, 70° 49' 04.602" W  
**Least Depth:** 3.21 m  
**Timestamp:** 2003-247.18:59:24.346 (09/04/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-247 / 436\_1853  
**Profile/Beam:** 1769/2  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-247/436_1853	1769/2	0.00	000.0	Primary
h10993/1014_mb/2003-247/435_1900	158/99	44.65	059.2	Secondary
h10993/1014_mb/2003-247/439_1832	74/219	68.12	143.2	Secondary (grouped)
h10993/1014_mb/2003-247/436_1853	1849/1	69.42	083.7	Secondary (grouped)
h10993/1014_mb/2003-259/861_1752	448/1	71.04	136.9	Secondary (grouped)

### Hydrographer Recommendations

[None]

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

10ft (13270\_1, 13267\_1)

1 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

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

**Attributes:** INFORM -

QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 3.21 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## **Office Notes**

*During office processing, a dangerous 10 rock was noted at this location. Chart a dangerous 10 Rk.*

## 1.2) Profile/Beam - 2151/79 from h10993 / 1005\_mb / 2003-250 / 503\_1249

### Survey Summary

**Survey Position:** 042° 16' 03.623" N, 70° 47' 19.364" W  
**Least Depth:** 12.40 m  
**Timestamp:** 2003-250.12:53:40.999 (09/07/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-250 / 503\_1249  
**Profile/Beam:** 2151/79  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-250/503_1249	2151/79	0.00	000.0	Primary
h10993/1005_mb/2003-250/503_1249	2130/68	7.44	310.9	Secondary (grouped)

### Hydrographer Recommendations

[None]

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

40ft (13269\_1, 13270\_1, 13267\_1)

6 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

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

**Attributes:** INFORM -

QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 12.40 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

*During office processing, a dangerous 40 rock was noted at this location. Chart a dangerous 40 Rk.*

### 1.3) Profile/Beam - 2339/67 from a397\_03\_h10993d / 1005\_mb / 2003-235 / 320\_1824

#### Survey Summary

**Survey Position:** 042° 18' 26.25" N, 70° 46' 25.69" W  
**Least Depth:** 13.75 m  
**Timestamp:** 2003-235.18:29:35.426 (08/23/2003)  
**Survey Line:** a397\_03\_h10993d / 1005\_mb / 2003-235 / 320\_1824  
**Profile/Beam:** 2339/67  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-234/318_1859	2552/100	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart as per digital data.

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

45ft (13270\_1, 13267\_1)

7 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

#### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 13.47 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Do not concur. During office processing a shoaler depth was noted in Latitude 42°18'26.28"N, Longitude 70°46'25.64"W. Chart a dangerous 44 Rk.*

## 1.4) Profile/Beam - 1958/94 from h10993 / 1005\_mb / 2003-238 / 288\_1602

### Survey Summary

**Survey Position:** 042° 18' 01.362" N, 70° 46' 37.492" W  
**Least Depth:** 18.66 m  
**Timestamp:** 2003-238.16:08:00.268 (08/26/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-238 / 288\_1602  
**Profile/Beam:** 1958/94  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-238/288_1602	1958/94	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

61ft (13270\_1, 13267\_1)

10 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 61 ft. depth.*

## 1.5) Profile/Beam - 226/69 from h10993 / 1005\_mb / 2003-239 / 268\_1513

### Survey Summary

**Survey Position:** 042° 16' 01.016" N, 70° 46' 31.680" W  
**Least Depth:** 3.09 m  
**Timestamp:** 2003-239.15:14:02.985 (08/27/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-239 / 268\_1513  
**Profile/Beam:** 226/69  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-239/268_1513	226/69	0.00	000.0	Primary
h10993/1005_mb/2003-258/579_1747	1238/84	11.19	194.7	Secondary

### Hydrographer Recommendations

Retain as charted.

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

10ft (13269\_1, 13270\_1, 13267\_1)

1 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

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

**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.

QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 3.09 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

*Concur, revise the charted dangerous 10 Rk to surveyed position.*

## 1.6) Profile/Beam - 2153/14 from h10993 / 1005\_mb / 2003-239 / 274\_1744

### Survey Summary

**Survey Position:** 042° 17' 52.927" N, 70° 46' 40.225" W  
**Least Depth:** 14.43 m  
**Timestamp:** 2003-239.17:49:45.020 (08/27/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-239 / 274\_1744  
**Profile/Beam:** 2153/14  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was aquired over the area and a feature was found having a least depth of 47.48ft(14.47m).

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-239/274_1744	2153/14	0.00	000.0	Primary

### Hydrographer Recommendations

Hydrographer recommends to display surveyed soundings.

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

47ft (13270\_1, 13267\_1)

7 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was aquired over the area and a feature was found having a least depth of 47.48ft(14.47m).  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 14.43 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a dangerous 47 Rk.*

## 1.7) Profile/Beam - 1068/18 from h10993 / 1005\_mb / 2003-240 / 250\_1333

### Survey Summary

**Survey Position:** 042° 17' 34.209" N, 70° 46' 33.283" W  
**Least Depth:** 15.09 m  
**Timestamp:** 2003-240.13:36:15.679 (08/28/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-240 / 250\_1333  
**Profile/Beam:** 1068/18  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-240/250_1333	1068/18	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

49ft (13270\_1, 13267\_1)

8 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 49 ft. depth.*

## 1.8) Profile/Beam - 1102/21 from h10993 / 1005\_mb / 2003-246 / 381\_1759

### Survey Summary

**Survey Position:** 042° 16' 58.447" N, 70° 44' 16.307" W  
**Least Depth:** 10.86 m  
**Timestamp:** 2003-246.18:02:06.019 (09/03/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-246 / 381\_1759  
**Profile/Beam:** 1102/21  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was aquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-246/381_1759	1102/21	0.00	000.0	Primary

### Hydrographer Recommendations

Delete 31 ft wire drag clear depth. Chart as per digital data.

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

35ft (13270\_1, 13267\_1)

6fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was aquired over the area and a rock was found having a least depth as above.  
 OBJNAM - Jason Shoal  
 QUASOU - 6:least depth known  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Delete the 31 ft. wire drag clearance depth and chart a 35 ft. depth.*

## 1.9) Profile/Beam - 5115/59 from h10993 / 1005\_mb / 2003-246 / 399\_2007

### Survey Summary

**Survey Position:** 042° 16' 48.837" N, 70° 44' 59.887" W  
**Least Depth:** 18.44 m  
**Timestamp:** 2003-246.20:18:58.409 (09/03/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-246 / 399\_2007  
**Profile/Beam:** 5115/59  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-246/399_2007	5115/59	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

60ft (13270\_1, 13267\_1)

10fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur w/clarification. Chart a 60 ft. depth.*

## 1.10) Profile/Beam - 4165/25 from h10993 / 1005\_mb / 2003-247 / 491\_2123

### Survey Summary

**Survey Position:** 042° 16' 23.470" N, 70° 46' 52.467" W  
**Least Depth:** 11.66 m  
**Timestamp:** 2003-247.21:31:07.318 (09/04/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-247 / 491\_2123  
**Profile/Beam:** 4165/25  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-247/491_2123	4165/25	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

38ft (13269\_1, 13270\_1, 13267\_1)

6 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 11.66 m  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a dangerous 38 Rk.*

## 1.11) Profile/Beam - 6760/29 from h10993 / 1005\_mb / 2003-247 / 491\_2123

### Survey Summary

**Survey Position:** 042° 16' 24.159" N, 70° 46' 10.341" W  
**Least Depth:** 11.19 m  
**Timestamp:** 2003-247.21:35:36.327 (09/04/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-247 / 491\_2123  
**Profile/Beam:** 6760/29  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-247/491_2123	6760/29	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

36ft (13269\_1, 13270\_1, 13267\_1)

6fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 11.19 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*During office processing a dangerous 36 Rk was noted in Latitude 42°16'24.16"N, Longitude 70°46'10.34"W.  
Chart a dangerous 36 Rk.*

## 1.12) Profile/Beam - 2172/42 from h10993 / 1005\_mb / 2003-248 / 490\_1355

### Survey Summary

**Survey Position:** 042° 16' 22.171" N, 70° 46' 26.036" W  
**Least Depth:** 14.33 m  
**Timestamp:** 2003-248.13:59:00.627 (09/05/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-248 / 490\_1355  
**Profile/Beam:** 2172/42  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-248/490_1355	2172/42	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

47ft (13269\_1, 13270\_1, 13267\_1)

7 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 14.33 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a dangerous 47 Rk.*

## 1.13) Profile/Beam - 497/89 from h10993 / 1005\_mb / 2003-258 / 549\_1520

### Survey Summary

**Survey Position:** 042° 16' 01.418" N, 70° 44' 03.896" W  
**Least Depth:** 16.51 m  
**Timestamp:** 2003-258.15:22:01.905 (09/15/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-258 / 549\_1520  
**Profile/Beam:** 497/89  
**Charts Affected:** 13269\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-258/549_1520	497/89	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data. - designated sounding

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

54ft (13269\_1, 13267\_1)

9fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur w/clarification. Chart a 54 ft. depth.*

## 1.14) Profile/Beam - 397/44 from h10993 / 1005\_mb / 2003-258 / 550\_1506

### Survey Summary

**Survey Position:** 042° 15' 58.073" N, 70° 45' 30.706" W  
**Least Depth:** 4.32 m  
**Timestamp:** 2003-258.15:07:23.656 (09/15/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-258 / 550\_1506  
**Profile/Beam:** 397/44  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-258/550_1506	397/44	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

14ft (13269\_1, 13270\_1, 13267\_1)

2 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*No rock was identified during office processing. A rock ledge exists and is already charted. Chart the present survey soundings in the common area.*

## 1.15) Profile/Beam - 4/23 from h10993 / 1005\_mb / 2003-258 / 553\_1416

### Survey Summary

**Survey Position:** 042° 15' 55.929" N, 70° 43' 53.232" W  
**Least Depth:** 14.28 m  
**Timestamp:** 2003-258.14:16:10.530 (09/15/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-258 / 553\_1416  
**Profile/Beam:** 4/23  
**Charts Affected:** 13269\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Partial MBES was acquired over the area and a shoaler area was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-258/553_1416	4/23	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

47ft (13269\_1, 13267\_1)

7 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - Partial MBES was acquired over the area and a shoaler area was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur w/clarification. Chart a 47 ft. sounding and add the notation rky in the vicinity of Latitude 42°15'59.29"N, Longitude 70°43'59.46"W.*

## 1.16) Profile/Beam - 4469/181 from h10993 / 1014\_mb / 2003-246 / 396\_1929

### Survey Summary

**Survey Position:** 042° 16' 40.361" N, 70° 46' 48.689" W  
**Least Depth:** 10.24 m  
**Timestamp:** 2003-246.19:44:10.405 (09/03/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-246 / 396\_1929  
**Profile/Beam:** 4469/181  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-246/396_1929	4469/181	0.00	000.0	Primary
h10993/1014_mb/2003-246/386_1946	267/236	2.81	023.2	Secondary (grouped)
h10993/1014_mb/2003-246/364_1913	169/31	93.08	244.8	Secondary (grouped)
1014_232to259_D.svp	39	120.92	329.3	Secondary (grouped)

### Hydrographer Recommendations

[None]

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

33ft (13269\_1, 13270\_1, 13267\_1)

5 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

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

**Attributes:** INFORM -

QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 10.24 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

*During office processing a dangerous 33 Rk was noted in Latitude 42°16'40.36"N, Longitude 70°46'48.69"W.  
Chart a dangerous 33 Rk.*

## 1.17) Profile/Beam - 2280/239 from h10993 / 1014\_mb / 2003-248 / 528\_1544

### Survey Summary

**Survey Position:** 042° 16' 34.855" N, 70° 45' 12.028" W  
**Least Depth:** 8.90 m  
**Timestamp:** 2003-248.15:52:36.129 (09/05/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-248 / 528\_1544  
**Profile/Beam:** 2280/239  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was aquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-248/528_1544	2280/239	0.00	000.0	Primary
1005_234to276.svp	29	182.93	061.1	Secondary (grouped)

### Hydrographer Recommendations

Chart as per digital data.

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

29ft (13269\_1, 13270\_1, 13267\_1)

4 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)

**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area

INFORM - 100% MBES was aquired over the area and a rock was found having a least depth as above.

QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VERDAT - 12:Mean lower low water

## Office Notes

*Concur w/clarification. Chart a 29 ft. depth.*

## 1.18) Profile/Beam - 787/49 from h10993 / 1014\_mb / 2003-237 / 293\_1808

### Survey Summary

**Survey Position:** 042° 18' 05.115" N, 70° 49' 01.254" W  
**Least Depth:** 16.00 m  
**Timestamp:** 2003-237.18:11:19.847 (08/25/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-237 / 293\_1808  
**Profile/Beam:** 787/49  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-237/293_1808	787/49	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

52ft (13270\_1, 13267\_1)

8 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSON - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 52 ft. depth.*

## 1.19) Profile/Beam - 1623/124 from h10993 / 1014\_mb / 2003-237 / 293\_1808

### Survey Summary

**Survey Position:** 042° 18' 05.105" N, 70° 48' 32.586" W  
**Least Depth:** 15.86 m  
**Timestamp:** 2003-237.18:14:12.532 (08/25/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-237 / 293\_1808  
**Profile/Beam:** 1623/124  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-237/293_1808	1623/124	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

52ft (13270\_1, 13267\_1)

8 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 52 ft. depth.*

## 1.20) Profile/Beam - 3315/9 from h10993 / 1014\_mb / 2003-238 / 239\_2131

### Survey Summary

**Survey Position:** 042° 17' 27.038" N, 70° 47' 40.828" W  
**Least Depth:** 10.28 m  
**Timestamp:** 2003-238.21:42:11.112 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 239\_2131  
**Profile/Beam:** 3315/9  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/239_2131	3315/9	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

33ft (13270\_1, 13267\_1)

5 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSON - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 33 ft. depth.*

## 1.21) Profile/Beam - 1872/27 from h10993 / 1014\_mb / 2003-238 / 243\_2047

### Survey Summary

**Survey Position:** 042° 17' 28.630" N, 70° 48' 26.104" W  
**Least Depth:** 8.83 m  
**Timestamp:** 2003-238.20:53:17.897 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 243\_2047  
**Profile/Beam:** 1872/27  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/243_2047	1872/27	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

29ft (13270\_1, 13267\_1)

4 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Do not concur. Chart a 31 ft. depth.*

**1.22) Profile/Beam - 2232/156 from h10993 / 1014\_mb / 2003-238 / 251\_1827**

**Survey Summary**

**Survey Position:** 042° 17' 34.862" N, 70° 48' 35.174" W  
**Least Depth:** 10.44 m  
**Timestamp:** 2003-238.18:35:11.782 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 251\_1827  
**Profile/Beam:** 2232/156  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% MBES was aquired over the area and a rock was found with a least depth as above.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/251_1827	2232/156	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart as per digital data.

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

34ft (13270\_1, 13267\_1)  
 5 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**S-57 Data**

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was aquired over the area and a rock was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur w/clarification. Chart a 34 ft. depth.*

## 1.23) Profile/Beam - 2296/191 from h10993 / 1014\_mb / 2003-238 / 255\_1759

### Survey Summary

**Survey Position:** 042° 17' 37.541" N, 70° 48' 38.806" W  
**Least Depth:** 9.44 m  
**Timestamp:** 2003-238.18:07:38.539 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 255\_1759  
**Profile/Beam:** 2296/191  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found wiht a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/255_1759	2296/191	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

31ft (13270\_1, 13267\_1)

5fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a sounding was found wiht a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 9.44 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur w/clarification. Chart a dangerous 31 Rk.*

## 1.24) Profile/Beam - 3523/221 from h10993 / 1014\_mb / 2003-238 / 259\_1732

### Survey Summary

**Survey Position:** 042° 17' 40.244" N, 70° 49' 17.852" W  
**Least Depth:** 12.32 m  
**Timestamp:** 2003-238.17:43:50.581 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 259\_1732  
**Profile/Beam:** 3523/221  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/259_1732	3523/221	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

40ft (13270\_1, 13267\_1)

6 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur, chart present survey soundings in the common area.*

## 1.25) Profile/Beam - 3112/233 from h10993 / 1014\_mb / 2003-238 / 263\_1657

### Survey Summary

**Survey Position:** 042° 17' 43.635" N, 70° 48' 46.806" W  
**Least Depth:** 10.54 m  
**Timestamp:** 2003-238.17:08:11.253 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 263\_1657  
**Profile/Beam:** 3112/233  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/263_1657	3112/233	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

34ft (13270\_1, 13267\_1)

5 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 34 ft. depth in the present location.*

## 1.26) Profile/Beam - 3358/175 from h10993 / 1014\_mb / 2003-238 / 265\_1627

### Survey Summary

**Survey Position:** 042° 17' 45.365" N, 70° 47' 48.592" W  
**Least Depth:** 10.29 m  
**Timestamp:** 2003-238.16:38:41.707 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 265\_1627  
**Profile/Beam:** 3358/175  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/265_1627	3358/175	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

34ft (13270\_1, 13267\_1)

5 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 34 ft. depth and add the notation rky.*

## 1.27) Profile/Beam - 3237/31 from h10993 / 1014\_mb / 2003-238 / 281\_1433

### Survey Summary

**Survey Position:** 042° 17' 57.697" N, 70° 47' 52.487" W  
**Least Depth:** 15.36 m  
**Timestamp:** 2003-238.14:44:05.470 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 281\_1433  
**Profile/Beam:** 3237/31  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/281_1433	3237/31	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

50ft (13270\_1, 13267\_1)

8 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 50 ft. depth.*

## 1.28) Profile/Beam - 2901/31 from h10993 / 1014\_mb / 2003-238 / 285\_1403

### Survey Summary

**Survey Position:** 042° 18' 00.247" N, 70° 48' 04.582" W  
**Least Depth:** 16.04 m  
**Timestamp:** 2003-238.14:12:52.685 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 285\_1403  
**Profile/Beam:** 2901/31  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was aquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/285_1403	2901/31	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

52ft (13270\_1, 13267\_1)

8 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was aquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 52 ft. depth.*

## 1.29) Profile/Beam - 1836/100 from h10993 / 1014\_mb / 2003-238 / 360\_1951

### Survey Summary

**Survey Position:** 042° 17' 32.578" N, 70° 48' 26.183" W  
**Least Depth:** 8.36 m  
**Timestamp:** 2003-238.19:57:45.791 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 360\_1951  
**Profile/Beam:** 1836/100  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/360_1951	1836/100	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

27ft (13270\_1, 13267\_1)

4 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 8.36 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a 27 ft. depth and add the notation rky.*

## 1.30) Profile/Beam - 3525/183 from h10993 / 1014\_mb / 2003-238 / 360\_1951

### Survey Summary

**Survey Position:** 042° 17' 31.650" N, 70° 49' 20.888" W  
**Least Depth:** 8.53 m  
**Timestamp:** 2003-238.20:03:22.985 (08/26/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-238 / 360\_1951  
**Profile/Beam:** 3525/183  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-238/360_1951	3525/183	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

28ft (13270\_1, 13267\_1)

4 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 8.53 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a 28 ft. depth and add the notation rky.*

## 1.31) Profile/Beam - 5957/59 from h10993 / 1005\_mb / 2003-246 / 383\_1603

### Survey Summary

**Survey Position:** 042° 17' 04.665" N, 70° 44' 31.111" W  
**Least Depth:** 16.74 m  
**Timestamp:** 2003-246.16:16:52.933 (09/03/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-246 / 383\_1603  
**Profile/Beam:** 5957/59  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-246/383_1603	5957/59	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

55ft (13270\_1, 13267\_1)

9fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 16.74 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*During office processing a rock outcrop was noted in Latitude 42°17'04.66"N, Longitude 70°44'31.11"W.  
Chart a 55 ft. depth be charted in this location and add the notation rky.*

## 1.32) Profile/Beam - 2372/49 from h10993 / 1014\_mb / 2003-239 / 219\_1931

### Survey Summary

**Survey Position:** 042° 17' 12.050" N, 70° 48' 08.908" W  
**Least Depth:** 10.46 m  
**Timestamp:** 2003-239.19:39:00.487 (08/27/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-239 / 219\_1931  
**Profile/Beam:** 2372/49  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-239/219_1931	2372/49	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

34ft (13270\_1, 13267\_1)

5 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 34 ft. depth.*

### 1.33) Profile/Beam - 944/29 from h10993 / 1014\_mb / 2003-240 / 472\_1938

#### Survey Summary

**Survey Position:** 042° 16' 32.622" N, 70° 49' 03.274" W  
**Least Depth:** 9.03 m  
**Timestamp:** 2003-240.19:41:13.758 (08/28/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-240 / 472\_1938  
**Profile/Beam:** 944/29  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-240/472_1938	944/29	0.00	000.0	Primary
h10993/1014_mb/2003-240/473_1926	2163/82	0.68	223.3	Secondary

#### Hydrographer Recommendations

Chart as per digital data.

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

29ft (13270\_1, 13267\_1)

5fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

#### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSON - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 29 ft. depth.*

## 1.34) Profile/Beam - 736/225 from h10993 / 1014\_mb / 2003-240 / 501\_1844

### Survey Summary

**Survey Position:** 042° 16' 37.152" N, 70° 46' 19.019" W  
**Least Depth:** 7.76 m  
**Timestamp:** 2003-240.18:47:15.221 (08/28/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-240 / 501\_1844  
**Profile/Beam:** 736/225  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-240/501_1844	736/225	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

25ft (13269\_1, 13270\_1, 13267\_1)

4 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 7.76 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a dangerous 25 Rk.*

## 1.35) Profile/Beam - 493/106 from h10993 / 1014\_mb / 2003-247 / 428\_1958

### Survey Summary

**Survey Position:** 042° 16' 04.342" N, 70° 48' 17.838" W  
**Least Depth:** 8.37 m  
**Timestamp:** 2003-247.20:00:15.689 (09/04/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-247 / 428\_1958  
**Profile/Beam:** 493/106  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a sounding was found with a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-247/428_1958	493/106	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

27ft (13270\_1, 13267\_1)

4 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Sounding (SOUNDG)  
**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 INFORM - 100% MBES was acquired over the area and a sounding was found with a least depth as above.  
 QUASOU - 1:depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VERDAT - 12:Mean lower low water

## Office Notes

*Concur. Chart a 27 ft. depth.*

**1.36) Profile/Beam - 887/223 from h10993 / 1014\_mb / 2003-247 / 440\_1826**

**Survey Summary**

**Survey Position:** 042° 16' 12.407" N, 70° 48' 32.464" W  
**Least Depth:** 7.47 m  
**Timestamp:** 2003-247.18:29:15.375 (09/04/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-247 / 440\_1826  
**Profile/Beam:** 887/223  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

100% MBES was acquired over the area and a rock was found having a least depth as above.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-247/440_1826	887/223	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart as per digital data.

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

24ft (13270\_1, 13267\_1)  
 4fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

**S-57 Data**

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 7.47 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a 24 Rk.*

## 1.37) Profile/Beam - 1167/29 from h10993 / 1014\_mb / 2003-247 / 451\_1658

### Survey Summary

**Survey Position:** 042° 16' 19.307" N, 70° 48' 28.400" W  
**Least Depth:** 5.02 m  
**Timestamp:** 2003-247.17:02:02.388 (09/04/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-247 / 451\_1658  
**Profile/Beam:** 1167/29  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-247/451_1658	1167/29	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

16ft (13270\_1, 13267\_1)

2 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 5.02 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*See DR - DTON Item 1.6)*

## 1.38) Profile/Beam - 1172/21 from h10993 / 1014\_mb / 2003-247 / 452\_1651

### Survey Summary

**Survey Position:** 042° 16' 19.391" N, 70° 48' 42.750" W  
**Least Depth:** 6.27 m  
**Timestamp:** 2003-247.16:55:14.349 (09/04/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-247 / 452\_1651  
**Profile/Beam:** 1172/21  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-247/452_1651	1172/21	0.00	000.0	Primary
h10993/1014_mb/2003-247/450_1705	1255/141	38.93	013.8	Secondary

### Hydrographer Recommendations

Chart as per digital data.

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

20ft (13270\_1, 13267\_1)

3 ¼fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 6.27 m  
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## **Office Notes**

*Concur. Chart a dangerous 20 Rk.*

## 1.39) Profile/Beam - 4214/177 from h10993 / 1014\_mb / 2003-246 / 374\_2001

### Survey Summary

**Survey Position:** 042° 16' 37.743" N, 70° 47' 02.467" W  
**Least Depth:** 12.55 m  
**Timestamp:** 2003-246.20:16:00.567 (09/03/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-246 / 374\_2001  
**Profile/Beam:** 4214/177  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

100% MBES was acquired over the area and a rock was found having a least depth as above.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-246/374_2001	4214/177	0.00	000.0	Primary

### Hydrographer Recommendations

Chart as per digital data.

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

41ft (13269\_1, 13270\_1, 13267\_1)

6 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM - 100% MBES was acquired over the area and a rock was found having a least depth as above.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 12.55 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*Concur. Chart a dangerous 41 Rk.*

## 1.40) Profile/Beam - 3448/49 from h10993 / 1005\_mb / 2003-238 / 296\_1505

### Survey Summary

**Survey Position:** 042° 18' 08.896" N, 70° 46' 12.857" W  
**Least Depth:** 14.66 m  
**Timestamp:** 2003-238.15:13:21.594 (08/26/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-238 / 296\_1505  
**Profile/Beam:** 3448/49  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-238/296_1505	3448/49	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

48ft (13270\_1, 13267\_1)

8fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 14.66 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*During office processing a dangerous 48 Rk was noted in Latitude 42°18'08.90"N, Longitude 70°46'12.86"W.  
Chart a dangerous 48 Rk.*

## 1.41) Profile/Beam - 4190/131 from h10993 / 1014\_mb / 2003-233 / 161\_1935

### Survey Summary

**Survey Position:** 042° 19' 26.005" N, 70° 47' 18.595" W  
**Least Depth:** 17.45 m  
**Timestamp:** 2003-233.19:49:41.730 (08/21/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-233 / 161\_1935  
**Profile/Beam:** 4190/131  
**Charts Affected:** 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-233/161_1935	4190/131	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

57ft (13270\_1, 13267\_1)

9 ½fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 17.45 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*During office processing a rocky area was noted in the vicinity of Latitude 42°19'26.00"N, Longitude 70°47'18.59W. Chart a 57 ft. depth and add the notation rky.*

## 1.42) Profile/Beam - 2129/58 from h10993 / 1005\_mb / 2003-250 / 516\_1450

### Survey Summary

**Survey Position:** 042° 15' 54.867" N, 70° 47' 27.788" W  
**Least Depth:** 7.07 m  
**Timestamp:** 2003-250.14:53:40.876 (09/07/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-250 / 516\_1450  
**Profile/Beam:** 2129/58  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-250/516_1450	2129/58	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

23ft (13269\_1, 13270\_1, 13267\_1)

3 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 7.07 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*The present survey shows a 23 Rk in Latitude 42°15'54.87N, Longitude 70°47'27.79W, in agreement with a charted 23 Rk. Revise the charted 23 Rk to the present survey location.*

## 1.43) Profile/Beam - 540/3 from h10993 / 1014\_mb / 2003-259 / 583\_1908

### Survey Summary

**Survey Position:** 042° 15' 58.291" N, 70° 46' 21.614" W  
**Least Depth:** 3.46 m  
**Timestamp:** 2003-259.19:10:57.132 (09/16/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-259 / 583\_1908  
**Profile/Beam:** 540/3  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-259/583_1908	540/3	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

11ft (13269\_1, 13270\_1, 13267\_1)

1 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 3.46 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*During office processing a dangerous 11 Rk was noted in Latitude 42°15'58.29"N, Longitude, 70°46'21.61"W.  
Chart a dangerous 11 Rk in this location should the scale of the chart allow.*

## 1.44) Profile/Beam - 663/1 from h10993 / 1014\_mb / 2003-259 / 583\_1908

### Survey Summary

**Survey Position:** 042° 15' 58.014" N, 70° 46' 24.883" W  
**Least Depth:** 3.75 m  
**Timestamp:** 2003-259.19:11:21.668 (09/16/2003)  
**Survey Line:** h10993 / 1014\_mb / 2003-259 / 583\_1908  
**Profile/Beam:** 663/1  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1014_mb/2003-259/583_1908	663/1	0.00	000.0	Primary

### Hydrographer Recommendations

[None]

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

12ft (13269\_1, 13270\_1, 13267\_1)

2fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

### S-57 Data

**Geo object 1:** Underwater rock / awash rock (UWTROC)  
**Attributes:** INFORM -  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 3.75 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

*During office processing a dangerous 12 Rk was noted in Latitude 42°15'58.014"N, Longitude 70°46'24.883"W.  
Chart a dangerous 12 Rk in this location should the scale of the chart allow.*

**1.1) Profile/Beam - 4/1 from A397\_03\_H10993D / 1005\_VB / 2003-239 / 08272003**

**Survey Summary**

**Survey Position:** 42° 16' 04.386" N, 70° 46' 00.157" W  
**Least Depth:** [None]  
**Timestamp:** 2003-239.13:41:23.000 (08/27/2003)  
**DP Dataset:** A397\_03\_H10993D / 1005\_VB / 2003-239 / 08272003  
**Profile/Beam:** 4/1  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

Position was aquired by POS/MV and Trimble differential system.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
A397_03_H10993D/1005_VB/2003-239/08272003	4/1	0.00	000.0	Primary

**Hydrographer Recommendations**

Remain as charted. (QUA: GPSmode=2, SVs=9, HDOP=1.00)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** NATCON - 4:hard surfaced  
 QUASOU - 7:least depth unknown, safe clearance at value shown  
 STATUS - 1:permanent  
 WATLEV - 4:covers and uncovers

**Office Notes**

*Concur, retain Hogshead Rock as charted (east end of Hogshead Rock).*

## 1.2) Profile/Beam - 5/1 from A397\_03\_H10993D / 1005\_VB / 2003-239 / 08272003

### Survey Summary

**Survey Position:** 42° 16' 05.137" N, 70° 46' 01.872" W  
**Least Depth:** [None]  
**Timestamp:** 2003-239.13:56:10.000 (08/27/2003)  
**DP Dataset:** A397\_03\_H10993D / 1005\_VB / 2003-239 / 08272003  
**Profile/Beam:** 5/1  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Position was aquired by POSMV and Trimble differential system. Photo was taken by a SONY Mavica digital camera. Magnetic azimuth of photo is 142°. Photo file is "Hogshead2.JPG".

### Feature Correlation

Address	Feature	Range	Azimuth	Status
A397_03_H10993D/1005_VB/2003-239/08272003	5/1	0.00	000.0	Primary

### Hydrographer Recommendations

Remain as charted. (QUA: GPSmode=2, SVs=9, HDOP=1.00)

### S-57 Data

[None]

### Office Notes

*Concur, retain Hogshead Rock as charted (west end of Hogshead Rock).*

### Feature Images



*Figure 1.27.1 Hogshead Rock*



*Figure 1.27.2*

### 1.3) Profile/Beam - 6/1 from A397\_03\_H10993D / 1005\_VB / 2003-239 / 08272003

#### Survey Summary

**Survey Position:** 42° 16' 06.725" N, 70° 46' 10.241" W  
**Least Depth:** [None]  
**Timestamp:** 2003-239.14:14:29.000 (08/27/2003)  
**DP Dataset:** A397\_03\_H10993D / 1005\_VB / 2003-239 / 08272003  
**Profile/Beam:** 6/1  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Position was aquired by POS/MV and Trimble differential system and the photo was taken by a SONY Mavica digital camera. Photo file name is "Hogshead.JPG" and "Hogshead3.JPG". Magnetic azimuth of photo is 180°. Approximate size is 20x15 m.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
A397_03_H10993D/1005_VB/2003-239/08272003	6/1	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart as per digital data. (QUA: GPSmode=2, SVs=9, HDOP=0.90)

#### S-57 Data

[None]

#### Office Notes

*Concur, retain Hogshead Rock as charted (third Hogshead Rock further to the west).*

#### Feature Images



*Figure 1.26.1 Hogshead Rock*



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: January 6, 2004

HYDROGRAPHIC BRANCH: Atlantic  
HYDROGRAPHIC PROJECT: OPR-A397-TJ-2003  
HYDROGRAPHIC SHEET: H10993

LOCALITY: Approaches to Boston, MA  
TIME PERIOD: August 19 - October 3, 2003

TIDE STATION USED: 844-4162 Boston Light, MA  
Lat. 42° 19.7'N Lon. 70° 53.5'W  
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters  
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 2.858 meters

REMARKS: RECOMMENDED ZONING  
Use zone(s) identified as: NA173, NA174, NA175

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. Mero 1/9/04*  
-----  
CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION



Printed on Recycled Paper



**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT FOR H10993 (2003)**

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. AUTOMATED DATA ACQUISITION AND PROCESSING**

**EQUIPMENT**

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

MapInfo, version 6.5  
MicroStation J, version 07.01.04.16  
IRAS B, version 07.01.000.18  
CARIS HIPS/SIPS version 5.4  
PYDRO, version 5.3.3

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

**QUALITY CONTROL**

**Junctions**

H10995 (2003) to the north  
H10992 (2001) to the west

A standard junction was not effected between the present survey and H10995(2003)to the north and H10992(2001)to the west. The smooth sheet is annotated with "adjoins" in the junctional areas. There are no junctional surveys to the south or east.

**D. RESULTS AND RECOMMENDATIONS**

**CHART COMPARISONS**

13269 (9<sup>th</sup> Edition, Jan 10/98)

13270 (61<sup>st</sup> Edition, Nov/04)

Corrected through NM Nov 06/04

Corrected through LNM Oct 26/04

13267 (32<sup>nd</sup> Edition, Dec /04)

Corrected through NM Dec 25/04

Corrected through LNM Dec 07/04

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

1. A charted rock with a depth of 18 feet in Latitude 42°16'28.53"N, Longitude 70°49'27.31"W originates with survey H10992. No change in charting status is recommended. It is presently shown on the latest editions of the charts.

#### **Automated Wreck and Obstruction Information System (AWOIS) Items**

1.1) #2083 is a sunken wreck in Latitude 42°22'00.350"N, Longitude 70°44'18.150"W. Office processing of the survey data concluded that this feature is considered disproved. It is recommended that the feature be deleted from chart 13267.

#### **Dangers to Navigation (Dtons)**

Six Danger to Navigation (Dton) Reports were submitted by the hydrographer to the Marine Chart Division, N/CS3x1, Silver Spring, Maryland. Copies of these reports are appended to the Descriptive Report. The following should be noted:

1.1) One Dton, a dangerous rock with a depth of 17 feet in Latitude 42°16'06.729"N, Longitude 70°46'43.334"W was submitted by the hydrographer. During office processing approved tides were applied to the survey data and the depth was recomputed to 18 feet. It is recommended the feature on chart 13270 be revised to a dangerous rock with a depth of 18 feet. It is recommended the feature on chart 13267 be revised to an 18 foot depth to avoid chart clutter.

1.2) One Dton, a dangerous rock with a depth of 20 feet in Latitude 42°16'32.754"N, Longitude 70°48'48.197"W was submitted by the hydrographer and is shown as a dangerous rock with a depth of 19 feet. During office processing approved tides were applied to the survey data and the depth recomputed to 20 feet. It is recommended the feature on chart 13270 be revised to a dangerous rock with a depth of 20 feet. It is recommended the feature on chart 13267 be revised to a 20 foot depth.

1.3) One Dton, a dangerous rock with a depth of 23 feet in Latitude 42°17'35.975"N, Longitude 70°48'07.203"W was submitted by the hydrographer. It is presently shown on the

latest editions of the charts. No change in charting is recommended.

1.4) One DtoN, a rock with a depth of 29 feet in Latitude 42°16'08.357"N, Longitude 70°47'05.628"W was submitted by the hydrographer. During office processing a shoaler depth of 28 feet was identified. This DTON was updated by the Atlantic Hydrographic Branch and a revised DTON Report submitted. It is recommended a dangerous rock with a depth of 28 feet be charted in Latitude 42°16'08.329"N, Longitude 70°47'05.720"W on chart 13269. This feature is presently shown on the latest editions of charts 13267 and 13270. No change in charting is recommended for these two charts. A copy of the revised DtoN report is appended to this report.

1.5) One DtoN, a dangerous rock with a depth of 35 feet in Latitude 42°17'54.875"N, Longitude 70°48'38.679"W was submitted by the hydrographer. It is presently shown on the latest editions of the charts. No change in charting is recommended.

### **Charted Features**

1. The charted depths around Hogshead Rock in Latitude 42°16'05.65"N, Longitude 70°46'09.75"W, and East Hogshead Rock in Latitude 42°16'04.20"N, Longitude 70°46'01.35"W are not considered disproved by the hydrographer. It is recommended that these depths be retained as charted.

2. The charted depths around Minots Ledge in the vicinity of Latitude 42°16'04.90"N, Longitude 70°45'36.25"W are not considered disproved by the hydrographer. It is recommended that these depths be retained as charted.

The present survey is adequate to supersede the prior surveys in the common area.

### **ADEQUACY OF SURVEY**

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

**MISCELLANEOUS**

Chart compilation was done by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. All S-57 attributes were attributed to survey features by branch personnel during office processing. During compilation of chart 13267 the many rocks in the survey area were charted as rocky areas to avoid chart clutter. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland. The following NOS charts were used for compilation of the present survey:

13269 (9<sup>th</sup> Edition, Jan 10/98)  
13270 (61<sup>st</sup> Edition, Nov/04)  
    Corrected through NM Nov 06/04  
    Corrected through LNM Oct 26/04  
13267 (32<sup>nd</sup> Edition, Dec /04)  
    Corrected through NM Dec 25/04  
    Corrected through LNM Dec 07/04

Bryan Chauveau  
Bryan Chauveau  
Physical Scientist  
Verification of Data  
Evaluation and Analysis

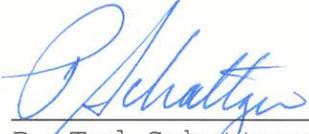
APPROVAL SHEET  
H10993 (2003)

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproof 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.

  
\_\_\_\_\_  
Richard H. Whitfield, Cartographer,  
Atlantic Hydrographic Branch

Date: 5/17/05

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:   
\_\_\_\_\_  
P. Tod Schattgen  
Commander, NOAA  
Chief, Atlantic Hydrographic Branch

Date: 11/29/2005

# DTON revision

**Registry Number:** H10993  
**State:** MA  
**Locality:** Massachusettes Bay  
**Sub-locality:** Boston Approaches  
**Project Number:** OPR-A397-TJ  
**Survey Date:** 09/05/2003

Shoalest sounding was identified in office QC, rejecting former DTON 3923/12 from a397\_03\_h10993d/1005\_mb/2003-248/480\_1636. New DTON feature is 3662/2 from h10993/1005\_mb/2003-248/479\_1649. Chart a dangerous 28 Rk in present position.

## Charts Affected

Number	Version	Date	Scale
13269	9th Ed.	01/10/98	1:10000
13270	59th Ed.	07/14/01	1:25000
13267	30th Ed.	12/01/01	1:80000
13260	38th Ed.	04/27/02	1:378838
13200	33rd Ed.	01/19/02	1:400000
13009	30th Ed.	08/01/02	1:500000
13006	30th Ed.	07/01/02	1:675000
5161	12th Ed.	02/15/92	1:1058400
13003	46th Ed.	01/01/03	1:1200000

## Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Rock	8.75 m	42.26898015° N	70.78492236° W	---

## 1.1) Profile/Beam - 3662/2 from h10993 / 1005\_mb / 2003-248 / 479\_1649

### DANGER TO NAVIGATION REVISION

#### Survey Summary

**Survey Position:** 42°16'08.329" N, 70°47'05.720" W  
**Least Depth:** 8.75 m  
**Timestamp:** 2003-248.16:55:47.349 (09/05/2003)  
**Survey Line:** h10993 / 1005\_mb / 2003-248 / 479\_1649  
**Profile/Beam:** 3662/2  
**Charts Affected:** 13269\_1, 13270\_1, 13267\_1, 13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

Previously reported DTON dangerous 29 Rk was updated during office processing upon application of final tides.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h10993/1005_mb/2003-248/479_1649	3662/2	0.00	000.0	Primary

#### Hydrographer Recommendations

Chart a dangerous 28 Rk.

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

28ft (13269\_1, 13270\_1, 13267\_1)

4 ¾fm (13260\_1, 13200\_1, 13009\_1, 13006\_1, 5161\_1, 13003\_1)

#### S-57 Data

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

**Attributes:** INFORM - 100% MBES was aquired over the area and a rock was found having a least depth as above.

QUASOU - 6:least depth known

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 8.752 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

